103D CONGRESS
1st Session

SENATE

REPT. 103-40
Volume 2

DEVELOPMENTS IN AGING: 1992
VOLUME 2—APPENDIXES

A REPORT

OF THE

SPECIAL COMMITTEE ON AGING
UNITED STATES SENATE

PURSUANT TO

S. RES. 71, SEC. 19(b), FEBRUARY 25, 1992

Resolution Authorizing a Study of the Problems of the Aged and Aging

APRIL 20 (legislative day, APRIL 19), 1993.—Ordered to be printed

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LETTER OF TRANSMITTAL

U.S. SENATE,
SPECIAL COMMITTEE ON AGING,
Washington, DC, March 8, 1993.

Hon. ALBERT A. GORE, Jr.,
President, U.S. Senate,
Washington, DC.

DEAR MR. PRESIDENT: Under authority of Senate Resolution 71, agreed to February 25, 1992, I am submitting to you the annual report of the U.S. Senate Special Committee on Aging, Developments in Aging: 1992, volume 2.

Senate Resolution 4, the Committee Systems Reorganization Amendments of 1977, authorizes the Special Committee on Aging "to conduct a continuing study of any and all matters pertaining to problems and opportunities of older people, including but not limited to, problems and opportunities of maintaining health, of assuring adequate income, of finding employment, of engaging in productive and rewarding activity, of securing proper housing and, when necessary, of obtaining care and assistance." Senate Resolution 4 also requires that the results of these studies and recommendations be reported to the Senate annually.

This report describes actions taken during 1992 by the Congress, the administration, and the U.S. Senate Special Committee on Aging, which are significant to our Nation's older citizens. It also summarizes and analyzes the Federal policies and programs that are of the most continuing importance for older persons and their families.

On behalf of the members of the committee and its staff, I am pleased to transmit this report to you.

Sincerely,

DAVID PRYOR, *Chairman.*

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DEVELOPMENTS IN AGING: 1992

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APRIL 20 (legislative day, APRIL 19), 1993.—Ordered to be printed

Mr. PRYOR, from the Special Committee on Aging, submitted the following

REPORT

APPENDIXES

APPENDIX 1

ANNUAL REPORT OF THE FEDERAL COUNCIL ON THE AGING

DECEMBER 18, 1992.

DEAR MR. CHAIRMAN: On behalf of the Federal Council on the Aging, I am pleased to submit a preliminary summary of the 1992 annual report.

This document examines the history and present membership of the Council. It also highlights the various positions taken by the Council on a number of legislative and other issues concerning the well-being of the elderly. We are hopeful that the Council's views will be considered as the One Hundred and Third Congress convenes.

We appreciate the continuing interest of the Special Committee on Aging and look forward to another year of cooperative efforts with committee members and staff toward our mutual goal of service to older Americans.

Sincerely,

MAX L. FRIEDERSDORF, *Chairman.*

SUMMARY OF THE 1992 ANNUAL REPORT

I. INTRODUCTION

A. BACKGROUND

The Federal Council on the Aging (FCoA) is the functional successor to the earlier and smaller Advisory Council on Older Americans, which was created by the Older Americans Act of 1965. In 1973, when the FCoA was created, Congress was concerned about Federal responsibility for the interests of older Americans, and the breadth of vision that such responsibility would reflect. Having decided to upgrade the existing advisory committee, Congress patterned the legislative language authorizing the FCoA after the charter of the U.S. Commission on Civil Rights.

The FCoA is authorized by Section 204 of the Older Americans Act, as amended. The Council is composed of 15 members appointed five members each by the President, the House of Representatives, and the Senate. Council members, who are appointed for 3-year terms, represent a cross-section of rural and urban older Americans, national organizations with an interest in aging, business and labor, minorities, Indian tribes, and the general public. According to statute, at least nine members must themselves be older individuals.

The President selects the Chairperson of the Council from the appointed members. The FCoA is mandated to meet at least quarterly, and at the call of the Chairperson.

Functions of the Council include:

Continually reviewing and evaluating Federal policies and programs affecting the aging for the purpose of appraising their value and their impact on the lives of older Americans;

Serving as spokesperson on behalf of older Americans by making recommendations about Federal policies regarding the aging and federally conducted or assisted programs and other activities relating to or affecting them;

Informing the public about problems and needs of the aging by collecting and disseminating information, conducting or commissioning studies and publishing their results, and by issuing reports; and

Providing public forums to discuss and publicize the problems and needs of the aging and obtaining information relating to those needs by holding public hearings and by conducting or sponsoring conferences, workshops, and other such meetings.

The Council is required by law to prepare an annual report for the President by March 31 of the ensuing year. Copies are distributed to Members of Congress, governmental and private agencies, institutions of higher education and individual citizens interested in FCoA activities.

Funds appropriated for the Council are included in the overall appropriation of the Department of Health and Human Services (DHHS). These funds are used to underwrite meetings of the Council, to support staff, and publish information tracts authorized by the Council.

The results of its public meetings and activities concerning issues and policies affecting older Americans are shared with the President, Congress, the Secretary of DHHS, the Commissioner of the Administration on Aging (AoA), National and State Aging organizations, and others interested in the well-being of older Americans.

B. MEMBERS OF THE FEDERAL COUNCIL ON THE AGING

June Allyson, Los Angeles, CA.—Appointed to a 3-year term ending in January 1992 by President Reagan, Ms. Allyson has been an actress working through the Jerico Group in Los Angeles since 1944.

Ingrid C. Azvedo, Elk Grove, CA.—Appointed to a 3-year term ending in January 1992, Mrs. Azvedo was appointed to her second term as Council Chairman by President Reagan in 1989. Mrs. Azvedo has been advocating for senior programs with the California legislature and Governor's office for many years. She maintains an active schedule of speaking engagements throughout the State of California, discussing senior issues and programs both in the private and public sectors. She also served on the Governor's Task Force on Long-Term Care and as a Commissioner on the California Commission on Aging. Currently, she serves as an Associate Justice on the California Unemployment Insurance Appeals Board.

Bernard M. Barrett, Jr., M.D., Houston, TX.—Appointed by President Bush to a 3-year term ending in November 1994, Dr. Barrett is Chairman of the Texas Institute of Plastic Surgery and Associate Chief of Plastic and Reconstructive Surgery and attending surgeon at St. Luke's Episcopal Hospital in Houston. Dr.

Barrett is also Associate Clinical Professor of Plastic Surgery at Baylor College of Medicine, The Texas Medical Center, in Houston.

Virgil S. Boucher, Peoria, IL.—Appointed to a 3-year term ending in July 1993 by Speaker of the House Thomas Foley on the recommendation of House Minority Leader Robert Michel, Mr. Boucher is an active advocate for programs dealing with crimes against the elderly.

Eugene S. Callender, New York City, NY.—Appointed by House Speaker Foley to a 3-year term ending in June 1994, Dr. Callender is a clergyman and an attorney. He served as Director of the New York State Office on Aging from 1983 to 1989. He is a vice-chairperson of the National Council and Center for the Black Aged and is the President of the S.Y.D.A. Foundation.

Robert L. Goldman, Oklahoma City, OK.—Appointed to a 3-year term ending in October 1993 by the President Pro-Tempore of the Senate upon the recommendation of Minority Leader Robert Dole. Since retirement from the Bell System in 1979, Mr. Goldman has been an active advocate for improving the quality of life for older Americans. He is a member of the boards of numerous senior advocacy and service organizations, and maintains an intergenerational interest by working with handicapped school children. Currently, Mr. Goldman serves on the Oklahoma State Council on Aging, Vice President of the Oklahoma State Board of Nursing Homes, and as a member of the Oklahoma State Commission on Health Care.

Connie Hadley, Kansas City, KS.—Appointed by the President Pro-Tempore of the Senate upon the recommendation of Minority Leader Robert Dole to serve the remainder of the term of Mary Majors, which expires in February 1992. Mrs. Majors passed away in April 1991. Mrs. Hadley is an active senior with a long involvement in community programs. A respected and influential voice in the community, she is especially active in promoting programs to help the low-income and minority elderly. She is a former Executive Director of the Economic Opportunity Foundation, Inc., in Kansas City, and is a member of Senior Organized Citizens of Kansas. She also serves on the board for Foster Grandparents in Wyandotte County, and was the first County Senior Citizens Coordinator.

Tessa Macaulay, Deerfield Beach, FL.—Appointed by House Speaker Foley to a second 3-year term ending in August 1992, Ms. Macaulay is Coordinator of Gerontological Programs at Florida Power & Light Company.

Josephine K. Oblinger, Springfield, IL.—Appointed by Speaker of the House Thomas Foley on the recommendation of House Minority Leader Robert Michel to a second 3-year term ending in March 1992, Mrs. Oblinger has had an extensive career as a State Legislator. Currently, she is Director of Senior Involvement in the Office of Governor James Edgar.

Kathleen L. Osborne, Los Angeles, CA.—Appointed by President Reagan to a 3-year term ending in January 1992. Ms. Osborne served as executive assistant to and office manager for President Reagan until June 1991. She is currently an agent with Coldwell Banker Real Estate Co. in Sacramento, California.

Raymond Raschko, Spokane, WA.—Mr. Raschko was appointed on August 11, 1989, by House Speaker Foley to serve the remainder of a 3-year term ending in July 1990, and was appointed to serve a full 3-year term ending in July 1993. Mr. Raschko serves as Director of Elderly Services with the Spokane Community Mental Health agency, and as a member of the Washington State Long-Term Care Commission. He also serves as Director of the Greater Spokane Chapter of the Alzheimer's Association.

Patricia A. Riley, Brunswick, ME.—Appointed by the President Pro-Tempore of the Senate upon the recommendation of Senate Majority Leader George Mitchell to a 3-year term ending in May 1992. Ms. Riley is President of the nonprofit Center for Health Policy Development and executive director of its affiliate, the National Academy for State Health Policy. She previously served as Director of the Bureau of Maine's Elderly and its Bureau of Medical Services. She has served as a member of the American Bar Association's Commission on Legal Problems of the Elderly, and is currently on the Kaiser Commission on Medicaid Reform.

Norman E. Wymbs, Boca Raton, FL.—Appointed to a 3-year term ending in January 1992 by President Reagan. Mr. Wymbs is a former Mayor of the City of Boca Raton. He has been Chairman of a District Mental Health Board and of the Boca Raton Housing Authority. An elected official of the Florida Republican Party for 14 years, Mr. Wymbs is the author of "A Place to Go Back To", a biography of Ronald Reagan's boyhood, and "Sold to the Highest Bidder", a

treatise on Washington political financing. He currently serves as Chairman of the nonprofit Ronald Reagan Home Foundation, Inc.

E. Don Yoak, Spencer, WV.—A native of West Virginia, Mr. Yoak was appointed by the President Pro-Tempore of the Senate upon the recommendation of Senate Majority Leader Robert C. Byrd to a 3-year term ending in July 1992, and reappointed by House Speaker Foley to a 3-year term ending in October 1995. He is retired from the West Virginia Department of Highways and has been active in West Virginia Legislatures for the last 50 years. Mr. Yoak currently serves as Doorkeeper of the West Virginia House of Delegates, on the Board of Directors of the West Virginia State College Metro Area Agency on Aging, and as State Coordinator for the AARP Citizen Representation Program, which is designed to coordinate governmental agencies with seniors to serve on councils, commissions, boards, and advisory panels.

Virginia Zachert, Augusta, GA.—Appointed to a 3-year term ending in March 1993 by the President Pro-Tempore of the Senate upon the recommendation of Senate Majority Leader George Mitchell. Dr. Zachert holds a Ph.D. in industrial psychology. She currently serves with the Georgia Silver Haired Legislature as President of the Senate and Chairman of the Board of Directors, and is a member of the Georgia Council on Aging. Dr. Zachert has published numerous articles in the fields of medical teaching and aging. She is a former Federal employee and Professor Emerita of the Department of OB-GYN of the Medical College of Georgia.

During 1992 four members were newly appointed to the Council:

Max L. Friedersdorf, Sanibel, FL.—Chairman—Appointed by President Bush to a 3-year term ending in June 1995. Mr. Friedersdorf has been designated by the President as Chairman of the Council. His nearly 28 years of experience in high level positions in the Federal Government include 8 years in the White House as Assistant to the President for Congressional Liaison under Presidents Nixon, Ford and Reagan. He is Senior Vice President with Neill and Company in Washington, D.C., and serves as Chairman of the Advisory Board for the Association of Retired Americans. A native of Indiana, he attended Franklin College, where he was awarded a B.A. in Journalism and an Honorary Doctorate of Laws. He has also earned an M.A. in Communications from American University in Washington, D.C.

Rudolph Cleghorn, El Reno, OK.—Appointed by the President Pro-Tempore of the Senate upon the recommendation of Senate Majority Leader George Mitchell to a 3-year term ending in October 1995. Following his retirement as a case manager with the U.S. Department of Justice, Mr. Cleghorn served for 10 years as program manager of a Title VI program, and was instrumental in the formation of the National Association of Title VI Directors. He was a staff member of Three Feathers Associates which administered a grant to train Title VI directors. In 1984, he was appointed to AARP's ad-hoc Committee on Minority Affairs, and in 1988 to the Minority Concerns Committee of the National Council on the Aging. He is a member of numerous aging and Indian organizations, and is a member of the Otoe-Missouri and Cherokee-Delaware Indian Tribes.

Stephen Farnham, Presque Isle, ME.—Appointed by the President Pro-Tempore of the Senate upon the recommendation of Senate Majority Leader George Mitchell to a 3-year term ending in October 1995. Mr. Farnham is the executive director of the Aroostook Area Agency on Aging, Inc., serves as President of the Aroostook Regional Transportation System, Inc., and voluntarily directs the operation of the Caribou Congregate Housing Development Corporation. He is a strong advocate for the needs of vulnerable older people in Maine and has served 3 years as a board member with the National Association of Area Agencies on Aging (NAAAA).

Charles W. Kane, Stuart, FL.—Appointed by President Bush to serve a 3-year term ending in June 1995. Mr. Kane is retired from an extensive Federal Government career in security and law enforcement. A native of Illinois, Mr. Kane received a B.A. degree from the University of Illinois, and a Juris Doctor Degree from American University. He has been active in local councils on aging and served as a member of Florida's Pepper Commission. He currently serves as a member of the Advisory Council of the Florida Department of Elder Affairs.

C. CALENDAR 1992 MEETING DATES

The Council met four times during 1992, as required by the Older Americans Act. The meeting dates were February 27-28, May 13-14, September 23-24, and December 7-8. The meetings were held in Washington, D.C.

All FCoA meetings were announced in the Federal Register and notices of the meetings sent to representatives of national organizations, staff of various Federal agencies, and to Congressional members and committees interested in or responsible for aging. Minutes are distributed to individuals who attended the meetings and to any interested parties who request them. Publications and documents pertinent to official actions are maintained in the Office of the Federal Council on the Aging and are available to the general public. The FCoA mailing address is: Room 4280, Wilbur J. Cohen Federal Building, 330 Independence Avenue, S.W., Washington, D.C. 20201-0001.

D. COUNCIL MEETINGS SCHEDULED FOR CALENDAR 1993

Current plans call for the Council to meet in 1993 as follows: February 23-24, May 13-14, September 23-24, and December 7-8.

II. Action of the Federal Council on the Aging During Calendar Year 1992

A. REAUTHORIZATION OF THE OLDER AMERICANS ACT

The Council closely monitored developments in the debate over the Reauthorization of the Older Americans Act of 1965 and the related discussion of the proposed revisions of the Social Security Earnings Test. Regular briefings were provided by the Commissioner on Aging summarizing the implications of the legislation and the delay of its passage on programs under the Act, including the White House Conference on Aging.

B. MENTAL HEALTH AND THE ELDERLY

To continue with their focus on mental health issues confronting the elderly which began with their November 1990 symposium on the issues, the Council continued development of a comprehensive study of Mental Health and the Elderly, with the assistance of the National Institute on Mental Health (NIMH). The Council's 1980 publication, Mental Health and the Elderly: Recommendations for Action, serves as a starting point for the new study. The study, which is intended to increase awareness of the mental health needs of the elderly throughout both the mental health and aging networks, is slated for completion in 1993.

Also, the Council recommended revisions in the text of H. Con. Res. 296, which called for mental health treatment to be included in any health care reform proposals considered by Congress. The resolution as proposed failed to highlight the importance of mental health to the well being of older persons. The Council recommended additional language, and endorsed the resolution as amended.

C. OLDER PERSONS LIVING ALONE

Issues of particular concern to older persons who live alone were examined by the Council throughout 1992. Briefings included a presentation by the staff of the Center on Elderly People Living Alone during the February meeting. The Council has determined that better information is needed to describe and define this cohort of the older population.

D. OUTREACH AND BARRIERS TO ACCESS TO SERVICES

The Council focused effort on the identification and elimination of obstacles encountered by older persons in need of existing services, and programs available to assist in accessing them. Provisions of the Americans with Disabilities Act (ADA) were closely examined, including briefings provided by the National Council on Disability and the National Eldercare Institute on Transportation. Barriers encountered by Indian Elders and older persons who live alone were also explored.

E. OLDER PERSONS AND THE MEDIA

The Council continued to compile and analyze information related to the portrayal of older persons in the entertainment, news media, and advertising industries. Of particular interest was a survey conducted by the University of California at Los Angeles (UCLA) under a grant from the Administration on Aging.

F. ISSUES FACING INDIAN ELDERS

Throughout 1992, the Council has closely examined issues of concern to older Indians. An Indian Task Force has been established to serve as a liaison for the Council with the Indian Health Service, the National Indian Council on Aging (NICOA), the

Associate Commissioner for Title VI at the Administration on Aging, and other government, congressional, and nonprofit entities involved with older Indians. Briefings were provided by officials of NICOA, the Indian Health Service, and by the Associate Commissioner. The Executive Director participated in the White House Conference on Indian Aging in September. Also, Council members participated in Congressional hearings and briefings focusing on Indian Elders.

G. THE NATIONAL ELDERCARE CAMPAIGN

The Federal Council on the Aging has taken an active role in the National Eldercare Campaign, being conducted by the U.S. Administration on Aging. The Council has met regularly with the organizers of the initiative, closely monitored its progress, and advised the Commissioner on Aging on key issues in the Campaign strategy. Members of the Council were participants in several forums and planning sessions regarding the Campaign, and received regular briefings from the U.S. Commissioner on Aging on its progress.

H. THE LOS ANGELES RIOTS AND HURRICANE ANDREW

Council Members closely monitored efforts to assist older persons directly affected by these crises. Members gave first hand reports following onsite visits, and the Council was regularly briefed by the U.S. Commissioner on Aging regarding Federal efforts to assist the elderly.

I. FETAL TISSUE RESEARCH

The Council closely monitored the ongoing debate over government support of the use of fetal tissue in research at the National Institutes of Health. A temporary committee was established to gather information and to inform the Council Members on the issue. After considerable discussion, the Council voted to postpone formal action on fetal tissue research.

J. MEMBERSHIP ACTIVITIES

In anticipation of the 20th Anniversary of the creation of the Federal Council on the Aging in 1993, the Council has been active in locating and communicating with former members of the Council. Also, the Council has worked to strengthen the orientation procedures for newly appointed members.

K. WHITE HOUSE CONFERENCE ON THE AGING

Throughout 1992, the Council closely monitored legislative and other developments regarding the White House Conference on the Aging. Council Members anticipate playing a leadership role in planning for the Conference.

L. AGING AMERICA: TRENDS AND PROJECTIONS

The FCoA participated for the third time in the development, printing, and distribution of the demographic report—Aging America: Trends and Projections, 1991 Edition. The publication is a cooperative effort with the Administration on Aging, the Senate Special Committee on Aging and the American Association of Retired Persons (AARP).

M. LEGISLATIVE BRIEFINGS AND ACTIVITIES

The Council has closely monitored congressional hearings and briefings on issues affecting the elderly, as well as resulting legislative activity. During their February Meeting, the Council participated in a training session conducted by Congressional Quarterly, Inc., entitled "Understanding Congress."

III. Future Developments

A. PREPARATIONS FOR THE WHITE HOUSE CONFERENCE ON AGING

The Council will continue to closely monitor legislative and other developments regarding the White House Conference on Aging, now mandated by the Older Americans Act. The Federal Council on the Aging will continue to play a major leadership role in planning for the Conference, and call for swift Administration action on the requirements of the Act.

B. MENTAL HEALTH AND THE ELDERLY

The Council will continue work on the publication of a report on Mental Health Issues affecting the Elderly, which seeks to identify and encourage ways to improve coordination between the Aging and Mental Health Networks in improving access for the elderly to services provided by both networks.

C. HEALTH CARE REFORM

The Council will review and evaluate proposals put forth to reform the Nation's health care delivery system, assess the potential impact on the elderly, and issue recommendations to the President, the Congress, and others as appropriate.

D. LONG-TERM CARE

The Council will continue to closely monitor progress in addressing the growing long-term care needs of the Nation's ever-increasing older population, and advocate for provisions which will support the efforts of older individuals to remain in their homes leading lives of independence and dignity for as long as possible.

E. OLDER PERSONS LIVING ALONE

The Council will continue to investigate the unique issues and challenges facing older persons who live alone in their communities, with special emphasis on mental health issues which may arise in such situations.

F. BARRIERS TO ACCESS

The Council will identify and investigate various barriers which inhibit the access of older persons to supportive programs and services for which they may qualify, with particular emphasis on special populations including minorities, persons with low income, and persons with mental health problems. Included will be a review of various programs in place to eliminate such barriers.

G. OLDER PERSONS IN THE MEDIA

The Council will assess the nature and impact of the portrayal of older persons in the entertainment industry and other media, and the degree to which negative stereotypes of the elderly are perpetuated.

H. NATIVE AMERICAN ELDERS

The Council will continue to review the status of issues facing Native American Elders, and to advocate for improvements in the quality of life for older Indians.

APPENDIX 2

REPORT FROM FEDERAL DEPARTMENTS AND AGENCIES

ITEM 1. DEPARTMENT OF AGRICULTURE

JANUARY 7, 1993.

DEAR MR. CHAIRMAN: Enclosed is the information you requested on the Department's activities or initiatives on behalf of older Americans and their families. If we can be of any further assistance, please feel free to call.

Sincerely,

EDWARD MADIGAN,
Secretary.

Enclosure.

AGRICULTURAL RESEARCH SERVICE—RESEARCH RELATED TO THE ELDERLY

Studies are conducted at the USDA Human Nutrition Research Center on Aging (HNRCA) at Tufts University, Boston, Massachusetts, which address the following problems of the aging:

1. What are nutrient requirements to insure optimal function and well being for a maturing population.
2. How does nutrition influence the progressive loss of tissue function associated with aging?
3. What is the role of nutrition in the genesis of major chronic, degenerative conditions associated with the aging process?

In addition, studies are performed at the Beltsville Human Nutrition Research Center (BHNRC), the Grand Forks Human Nutrition Research Center (GFHNRC), and the Western Human Nutrition Research Center (WHNRC) on the role of nutrition in the maintenance of health and prevention of age-related conditions, including cancer, coronary heart disease, hypertension, diabetes, neurological disorders, osteoporosis, and immunocompetence. Summaries of agricultural research progress and a list of projects related to nutrition and the elderly are attached.

HIGHLIGHTS OF RESEARCH FINDINGS RELATED TO NUTRITION AND PREVENTION OF DISORDERS ASSOCIATED WITH AGING

VITAMIN C INTAKE AND BLOOD PRESSURE IN THE ELDERLY

Elevated blood pressure (BP) is a powerful determinant of cerebrovascular and coronary heart disease. The importance of nutrition in the control of blood pressure is well documented, with obesity, dietary sodium, and alcohol being associated with higher BP, and increased intakes of potassium and calcium associated with lower BP. Since inverse associations between BP and vitamin C have also been reported, scientists at the Human Nutrition Research Center on Aging at Tufts University in Boston, MA, undertook an analysis of data from a large cross-sectional study of health and nutrition in a group of noninstitutionalized elderly subjects. They found half as many cases of elevated BP in subjects consuming 240 milligrams or more per day of vitamin C than they did in those consuming less than 60 milligrams per day. This finding lends support to the hypothesis that diets low in vitamin C are related to increased BP. However, further research is required to test whether the vitamin C itself—or some other component of a low vitamin C diet—is responsible for the elevated BP.

EFFECTS OF EXERCISE AND VITAMIN E ON HOST DEFENCE RESPONSES

Interleukin-1 (IL-1), tumor necrosis factor (TNF), and interleukin-6 (IL-6) are proteins that induce host defence responses to trauma and disease. Scientists at the ARS Human Nutrition Research Center on Aging, have been studying the production of these proteins and their plasma levels in subjects subjected to downhill running on a treadmill, and supplemented with vitamin E.

The day after exercise, IL-1 production increased in cells from subjects taking a placebo, but did not increase in cells from subjects taking vitamin E capsules. TNF production also increased the day after exercise, although the response was not blocked by vitamin E. IL-6 production was unchanged after exercise, but vitamin E reduced the secretion of IL-6 at all times. Thus, immune factors seem to be related to changes in muscle protein, and vitamin E which can affect these immune factors.

WHAT ARE THE DIETARY ENERGY NEEDS OF ADULTS?

Accurate recommendations on dietary energy (calorie) requirements form the basis for determining the amounts of food aid given to poor families, and also for assessing whether the food supply of different communities is adequate. Current Recommended Dietary Allowances (RDA) on energy needs are based on theoretical calculations because it was not previously possible to measure actual energy needs directly in individuals leading normal lives.

Now, scientists at the ARS Human Nutrition Center on Aging have successfully used the doubly-labeled water technique to make direct measurement of the energy requirements of young and old men. Findings indicate that energy recommendations have substantially underestimated usual energy needs and suggest that current RDA's may significantly underestimate usual energy requirements for physical activity. These new data contribute to a growing realization of the need to reevaluate energy intake recommendations and analysis of food consumption data.

EFFECTS OF UNDERFEEDING ON ENERGY EXPENDITURE AND SUBSEQUENT NUTRIENT INTAKES

The mechanisms of body weight regulation are not well understood. Scientists at the ARS Human Nutrition Research Center on Aging, recently observed the effects of intentional underfeeding—by 800 kilocalories each day, for 20 days—upon normal-weight young men with high levels of energy expenditures and leading unrestricted lives. Researchers found that energy expenditure did not fall significantly with reduced energy intake. They also found the subjects' voluntary energy intake following the dietary restriction to increase initially above the basic amount required for body weight maintenance, to be proportional to the weight loss during underfeeding, and to rapidly restore the weight lost during underfeeding. Results indicate that (1) appetite—rather than adaptive variations in energy expenditure—plays the dominant role in day-to-day regulation of body weight, (2) energy balance is regulated primarily by adaptive variations in energy (food) intake, and (3) the hypothesis that energy-wasting mechanisms contribute substantially to body energy regulation is not confirmed.

HIGH DIETARY FRUCTOSE AFFECTS PLASMA CHOLESTEROL CONCENTRATIONS AND SIGNS OF SHORT-TERM COPPER DEPRIVATION IN MEN

Animal experiments, epidemiologic studies, and findings with humans suggest that copper is more important in nutrition than currently recognized. One reason that copper has not been well-accepted as a nutritional concern is that attempts to produce signs of copper deprivation in adult humans have not yielded consistent findings. Thus, a study was performed at the ARS Grand Forks Human Nutrition Research Center to see if cornstarch and fructose affected the response of men to short-term copper deprivation. Fructose can enhance the formation of active molecules known as free radicals which cause damage to tissues. Copper is part of the defense mechanism against this damage known as oxidant damage. When compared to cornstarch, fructose increased serum cholesterol (this increase was mostly in the "bad" or LDL-cholesterol fraction) altered the copper deprivation signs associated with oxidative metabolism. This suggests that high consumption of dietary substances that increase the formation of free radicals could make copper nutriture of concern.

CONTINUING BONE EXPANSION AND INCREASING BONE LOSS OVER A TWO-DECADE PERIOD IN MEN AND WOMEN FROM A TOTAL COMMUNITY SAMPLE

Bone measurements and dietary data were obtained for an anthropometric study at the Human Nutrition Research Center on Aging in a sample of 744 men and women from one community. Bone lose was found to begin by the fifth decade and increased thereafter. The smaller gain at the outer bone surfaces are independent of the larger loss at the endosteal (inner) bone surface. Although net bone loss was nearly as great in men as in women, bone loss over two decades constituted a larger percentage of the initially smaller bone mass in females. Trends in two-decade bone changes were not affected by smoking behavior, alcohol, antihypertensive medication or early menopause. Long-term bone change were independent of energy and mineral intake. Though dietary intake does not predict long-term bone changes, the amount of initial bone tissue was highly correlated with tissue bone 21.4 years later in life for both sexes.

IMMUNOLOGICAL EFFECTS OF NATIONAL CHOLESTEROL EDUCATION PANEL (NCEP) STEP-2 DIET WITH AND WITHOUT FISH-DERIVED N-3 FATTY ACID ENRICHMENT

Reduction in dietary fat, saturated fat and cholesterol (chol) has been recommended by public health organizations to reduce the risk of heart disease. However, very few studies have looked at the effects of those changes in the diet with regards to the modifications of human cytokine production and immune responsiveness. Twenty-two volunteers (11 female, 11 male) over the age of 40 participated at the ARS Human Nutrition Research Center on Aging, in a thirty week study which was divided into two phases. During the first phase (6 wks), the volunteers ate diets based on average American diets. During the second phase (24 wks) volunteers ate either a lowfat and low cholesterol diet which followed the NCEP recommendations (NCEP Step 2) with polyunsaturated fatty acids (PUFA) derived from fish or a diet following NCEP Step 2 recommendations—low in fish-derived PUFA but high in plant-derived PUFA. The results show that the fish diet have significant effects on inflammatory and immune responses. These changes can adversely affect host defenses and impact on the antiatherogenic effects of these diets. Thus changes in immune response should be taken into consideration when such diets are recommended for the prevention of chronic diseases.

INTERACTION OF DIETARY PHYTATE AND CALCIUM ON UTILIZATION OF CALCIUM, ZINC, AND MAGNESIUM

Phytic acid is an organic phosphorus compound present in cereals and legumes. Both animal and human studies have shown that amounts of phytic acid greater than the amount consumed by most U.S. citizens will impair utilization of these elements, particularly zinc, when each was studied alone. Interactions between phytate and several elements are often much more difficult to ascertain. Scientists at the ARS Beltsville Human Nutrition Research Center investigated the effect of dietary calcium level on the impairment of zinc utilization by phytate. Eight men consumed foods usually consumed by omnivorous Americans, each meal having two bran muffins each of which contained 5g of wheat bran to provide a phytic acid intake slightly greater than consumed by most vegetarians in the U.S. Three calcium intakes were studied, each for 21 days, equivalent to about 70 percent, 130 percent and 200 percent of the RDA (recommended daily allowance). The RDA for adult men is 800 mg daily. Metabolic parameters such as increased fecal excretion and lower urinary excretion indicated that dietary calcium utilization was impaired when the low calcium diet was eaten. However, these indices indicated zinc utilization was lower when the high calcium diet was consumed. In vitro (test tube) solubility measurements indicated that solubility differences were greater than the observed physiological differences.

APPARENT MINERAL BALANCE AFTER A HIGH-FAT/LOW-FIBER DIET AND A LOW-FAT/HIGH-FIBER DIET

Recommendations have been made for the U.S. population to decrease fat and increase fiber intake as a means of reducing their risk of coronary heart disease and bowel cancer. Beneficial effects from increasing fiber consumption include decreased transit time, reduced symptoms of diverticular disease and with some fibers lowered cholesterol levels of glycemic response.

However, high intakes of some dietary fibers have been implicated with reducing apparent mineral retention. Forty-two men consumed a 20 percent fat/54 g fiber/2800 kcal diet (HFibD) and a 40 percent fat/29 g fiber/2800 kcal diet (LFibD) for two

10 week periods to investigate the effects of consuming a high fiber diet on apparent mineral balance. Fiber was added to the diet as legumes, cereals, fruits and vegetables rather than a single added source. No significant difference due to the diet was observed in mineral parameters tested in the blood. Calcium, iron, zinc, copper, magnesium and manganese intake and fecal excretion were significantly higher on the HFibD compared to the LFibD. Calcium, zinc, copper, and magnesium showed significant positive apparent retention while manganese and iron were not significantly different from zero balance when the HFibD was consumed. The data indicated that a high fiber diet containing mineral levels at or above the recommended dietary allowance can be consumed for its potential beneficial effects without mineral loss.

PLASMA HIGH DENSITY LIPOPROTEIN CHOLESTEROL AND APOLIPOPROTEIN AI LEVELS IN THE FRAMINGHAM OFFSPRING STUDY: ASSOCIATIONS WITH AGE, GENDER, LIPID LEVELS, AND LIFESTYLE FACTORS

Cholesterol is carried in the bloodstream by different particles. High density lipoprotein (HDL) particles carry the so called "good cholesterol", and also contain a protein, called apolipoprotein A-I (apo A-I). It has been shown that subjects with low levels of HDL cholesterol and apo A-I in their plasma have an increased risk of heart disease. Scientists at the Human Nutrition Research Center on Aging have measured plasma levels of HDL cholesterol and apo A-I in 1,344 men and 1,337 women participating in the Framingham Offspring Study. They found that women have higher plasma levels of both HDL cholesterol and apo A-I. In addition, subjects with very low levels of HDL cholesterol and apo A-I had a markedly higher body weight and significantly higher plasma triglycerides than subjects with very high levels of HDL cholesterol and apo A-I. Furthermore, plasma levels of HDL cholesterol and apo A-I were higher in those subjects who were having one or more alcohol-containing drinks per week (beer, wine, or liquor) than in those who abstained from alcohol consumption. Our results indicate that subjects that are lean and that have a mild consumption of alcohol have higher levels of "good cholesterol."

EFFECTS OF AGE, GENDER, AND MENOPAUSE STATUS ON PLASMA LIPOPROTEIN (A) LEVELS: THE FRAMINGHAM OFFSPRING STUDY

Lipoproteins are spherical particles found in the blood. A particular particle, known as lipoprotein (a) [Lp(a)] is gaining acceptance as an independent risk factor for coronary artery disease. Scientists at the Human Nutrition Research Center on Aging measured Lp(a) concentrations in 1284 men and 1394 women in the 3rd cycle of the Framingham Offspring Study to establish normal ranges of this lipoprotein particles in a population free of heart disease. The average level of this particle in both men and women was approximately 15 mg/dl. These levels were found to be higher in postmenopausal women than in premenopausal women. Alcohol consumption and cigarette smoking were not found to be associated with Lp(a) levels.

REMOTE RECALL OF CHILDHOOD WEIGHT, HEIGHT, AND BODY BUILD BY ELDERLY SUBJECTS

The long-term recall of weight, height and body build was examined as part of a follow-up study by the Human Nutrition Research Center on Aging of an early Harvard growth study. Half of the persons contacted had been overweight in adolescence and half had been lean. The 181 elderly interviewed subjects were asked to recall their high school weight and height and to select outline drawings that best reflected their body size at ages 5, 10, 15, and 20. Their reports were compared to measurements obtained during school. High school weight was overestimated by adolescent lean males and underestimated by adolescent obese females. Adolescent weight status influenced height recall for females but not for males. Overall, actual and recalled high school weight were well correlated for both males and females. For height, recalled and measured values were very highly correlated. Correlations between recalled body build and weight/height (BMI) measured at approximately the same ages were moderate for all ages studied except for males at age 5. The association between adolescent BMI and recalled build was only slightly reduced when the influence of adult BMI or elderly BMI was accounted for. These results indicate that the remote recall of height, weight and body size is reasonably valid and demonstrate that recalled body build can contribute useful information independent of current weight status.

BODY MASS INDEX FROM CHILDHOOD TO MIDDLE-AGE: A 50 YEAR FOLLOW-UP

Obesity in middle age is associated with various morbidities including cardiovascular disease, adult-onset diabetes, and some types of cancer. Childhood obesity has been implicated as a possible risk factor for obesity in adulthood. Previous studies have shown that childhood body size is a good predictor of body size in adolescence and early adulthood, but the degree to which weight status in childhood predicts that in middle-age has not been established. Studies at the Human Nutrition Research Center on Aging used historical height and weight data from a longitudinal study that has been ongoing for 50 years to investigate the relationship of body size in childhood to that of adolescence, young adulthood, and middle-age. As expected, childhood body size was a good predictor of body size up to 18 years of age. However, there were sex differences when measures in childhood were compared to those in middle-age. The stability of body size was better in males—with measures in childhood and adolescence being good predictors of body size and that in middle-age. In females, there was no relationship between childhood body size and that in middle-age. The lack of association of body size early in life with that in middle-age for females was a finding of interest. The sex difference in fatness trends may be explained by the dramatic increase in fatness that girls experience during their adolescence period—which boys do not. Another explanation for the lack of association in females is that adult women are far more likely than adult men to consciously alter their weight by dieting thus experiencing greater weight fluctuations.

HEALTH CARE TRENDS

The future direction of health care in the United States was reviewed by the ARS Family Economics Research Group at Hyattsville, Maryland. Out-of-pocket costs to individuals and families, as well as costs paid from public funds, were found to continue to increase rapidly. Although sophisticated medical computer technology can be used to help diagnose, prognosticate, and evaluate treatments, its widespread use has added significantly to health care costs.

Despite the large amount of money allocated to health care, the needs of many Americans are not being met: the elderly who need long-term care, AIDS patients who have both financial and emotional costs from their disease, the uninsured, and the underinsured. Recent developments that can help Americans with their health care needs include the establishment of State and community ombudsmen to assist families with nursing home problems, the advent of long-term care insurance, and the creation of Older Americans Independence Centers. Policymakers and legislators, the insurance industry, and health care professionals need to continue their efforts to meet the health care needs of the Nation.

MEETING BASIC NEEDS: FOOD, HOUSING, AND CLOTHING CONCERNS OF RURAL SOUTHERN ELDERS

The ability to meet food, housing, and clothing needs may be influenced by the resources elders have available to them. Also, the ability to meet those needs shapes elders' level of concern. Data from the regional research project, "Quality of Well-Being of the Rural Southern Elderly: Food, Clothing, and Housing," were used by the Family Economics Research Group to describe the characteristics of elders who said these basic needs were concerns. Results show that higher percentages of study participants in all socioeconomic categories said food (61 percent to 43 percent) and housing (41 percent to 26 percent) were great concerns than said clothing was a great concern (less than 11 percent). Those that had a great concern for food were more likely to be married, have less than 8 years of education, live with family or others, receive food stamps, and consider food costs a serious issue. Elders that had a great concern for housing were more likely to be never marrieds, black, have less than 8 years of education, and live alone. They believe their home needs major repairs, and housing costs are a moderate concern. They spend less than $100 annually on home maintenance. Elders that had a great concern for clothing were more likely to believe clothing costs, style, a fit were a serious issue; they spend more than $200 annually on clothing; and they do not add or update their wardrobe by making over old clothing. Findings regarding the concerns of rural Southern elders will be useful to family caregivers, community organizations, and social service agencies that assist elders.

Agricultural Research Service—Research projects related to nutrition and the elderly: Funding level

	Fiscal year 1992
Effect of fiber or amylose on metabolic parameters—BHNRC, 05/01/90 to 04/30/95:	$200,964
Objective: To determine the effects of high amylose foods or purified versus food fiber on blood parameters associated with chronic diseases and mineral bioavailability.	
Relation between nutrition and aging: Cholesterol, bile acid and sterol metabolism and fecal mutagenicity—BHNRC, 11/13/89 to 11/12/93:	546,488
Objective: To investigate the relationship of fat and other nutrients or components of the human diet to age-related disorders, such as cancer, and coronary heart disease, as reflected by changes in bile acid metabolism, fecal mutagens, hormones, serum cholesterol, platelet aggregation and other parameters affected by diet and suspected of involvement in aging disorders.	
Human requirements for selenium and vitamin E—BHNRC, 05/08/87 to 05/07/92:	299,224
Objective: Investigate selenium metabolism at elevated dietary intakes; develop methods for assessing selenium status; determine feasibility of mathematical models for predicting desirable dietary selenium intakes; clarify effects of food components on selenium bioavailability; evaluated effect of various stresses on the nutritional need for selenium. To better define the physiological role of dietary antioxidant nutrients in immune response.	
Newly available carbohydrates in the development of diet for control of risk for disease—BHNRC, 02/03/92 to 02/02/97:	644,363
Objective: To examine use of carbohydrate to maximize physical performance in humans. To examine effects of soluble fibers on cholesterol metabolism and disease risk in humans and animals. To examine long-term effects of carbohydrate intake on disease development or prevention.	
Dietary carbohydrates and etiology or prevention of degenerative diseases and their complication—BHNRC, 04/01/91 to 03/31/96:	402,808
Objective: To investigate the underlying mechanisms of how dietary carbohydrates induce biochemical, cellular, molecular and structural changes that either increase or decrease the risk of degenerative diseases that occur during the aging process.	
Nutritional and biochemical role of chromium in health and disease—BHNRC, 01/23/90 to 01/22/93:	315,006
Objective: Determine effects of low Cr intakes of humans on variables associated with sugar and fat metabolism. Determine the effects of physical performance on trace metal metabolism. Develop sensitive methods to detect marginal signs of chromium deficiency. Determine and define the role of chromium in selected abnormalities in glucose metabolism. Determine the bioavailability of various forms of chromium.	
Diet and antioxidant status—WHNRC, 10/01/89 to 09/30/94:	638,829
Objective: Determine the effects of dietary fat and micronutrients on in vivo oxidative damage and antioxidant defense status. Determine if tests of oxidative damage or antioxidant defense status can be used as functional markers of human nutritional status and as sensitive measures for determining human requirements for fats and certain micronutrients.	
Dietary fats, nutrition and health—WHNRC, 03/01/90 to 02/28/95:	944,074
Objective: Evaluate the nutrient composition of the diet with emphasis on the quantity and quality of fats in healthy individuals and population groups. To study the metabolism of dietary fats in relation to health and absence of chronic degenerative diseases.	

Fiscal year 1992

Effects of copper deficiency and its modifiers on cardiovascular metabolism and function—GFHNRC, 03/04/91 to 03/03/96: 353,316

Objective: Copper deficiency produces a host of adverse anatomical, chemical and physiological changes in the cardiovascular system in several species including man. Chemical factors that affect blood coagulation and clot lysis and neuroendocrine mechanisms that affect blood pressure will be studied. Modifying factors such as commonly eaten chemicals or foods will be studied occasionally. These studies will provide information useful in definition of copper requirements.

Economic status of older Americans—FERG, 01/23/90 to 01/22/93: 144,961

Objective: Determine income and expenditure patterns of older Americans.

Human mineral element requirements and their modification by stressors—GFNRC, 05/13/91 to 05/12/96: 1,319,489

Objective: Determine the dietary requirements of humans for magnesium, copper, and boron, and whether these requirements are affected by nutritional, physiological, hormonal or metabolic stressors. Specifically, for humans, to demonstrate that copper is of nutritional concern and that its nutritional need is enhanced by oxidant stress; to demonstrate that inadequate dietary magnesium can have pathological consequences; and to confirm that dietary boron affects measures of macromineral metabolism, metabolic recycling of vitamin K will be identified, isolated, purified and characterized.

Bioavailability of nutrients in the elderly—HNRCA, 12/11/89 to 12/10/94: 1,487,272

Objective: (1) To determine the bioavailability of food folate and the impact of aging on this process. (2) To define the mechanism of body folate conservation and effect of aging. (3) To assess the folate/vitamin B12 status in the elderly with respect to cardiovascular and neuropsychiatric functions. (4) To define the mechanism of age related decreases in intestinal absorption of calcium. (5) To study the factors that influence the bioavailability of zinc and magnesium.

Cell programming and regulation during aging regulation by iron—HNRCA, 10/01/89 to 09/30/92: 323,804

Objective: Body stores of iron increase with age and may cause tissue damage. To restrict this, excess iron is taken up by ferritin. Using recent information about control of ferritin synthesis, the effect of aging on efficiency of the ferritin response will be explored and the relationship of this to tissue damage by iron will be examined.

Role of nutritional factors in maintaining bone health in the elderly—HNRCA, 12/11/89 to 12/10/94: 1,568,055

Objective: The objective of this lab is to improve the scientific basis for understanding and setting the intake requirements of calcium and vitamin D in aging adults. Specifically, we will define the intake of calcium and vitamin D above which skeletal mineral is maximally spared. This requires an understanding of how demographic, edocrine, and physical factors (e.g. race, sex, age, years since menopause, weight, activity level, and the ability to absorb calcium) affect the requirement of these nutrients.

Fiscal year 1992

Relationships between aging, functional capacity, body composition and substrate metabolism and need—HNRCA, 12/11/89 to 12/10/94: 1,827,190

Objective: To examine the effects of increased physical activity, body composition and diet on the following: (1) Peripheral insulin sensitivity and glucose metabolism. (2) Functional capacity and nutritional status of the frail, institutionalized elderly. (3) Cytokine production and whole body and skeletal muscle protein metabolism. (4) Total energy expenditure and its relationship to protein metabolism and requirements.

Nutrition and aging in skin derived cells—HNRCA, 12/11/89 to 12/10/94: 624,554

Objective: The overall objective is first to understand cutaneous aging and the impact of nutritional intake or other modifiable environmental factors on this aging process and second to devise dietary or other strategies for reducing the negative impact of such factors on the completely defined culture systems for all skin derived cells; and analysis of the effect of various dietary antioxidants on UV-mediated cellular damage (photoaging).

Lipoproteins nutrition and aging—HNRCA, 12/11/89 to 12/10/94: 1,645,697

Objective: Our research objectives are: (1) to test the efficiency of a low saturated fat low cholesterol diet in lowering density lipoprotein (LDL) cholesterol levels in elderly normal and hyperlowlipidemic subjects; (2) to study effects of dietary fatty acids on the production of liver lipoproteins in monkeys. (3) to study the interrelationships of diet and lipoproteins in the population; and (4) to study the regulation of intestinal lipoprotein production by fatty acids and cholesterol in vitro in Caco-2 cells.

Effect of nutrition and aging on eye lens proteins, proteases, and cataract—HNRCA, 12/11/89 to 12/11/94: 869,083

Objective: One-half of the eye lens cataract operations and savings of over $1 billion would be realized if we could delay cataract by 10 years. We are attempting to use enhancement of dietary antioxidants, such as vitamin C, and other nutrients such as carotones and folacin to delay damage to lens proteins and proteases and to maintain visual function in elderly populations. This should delay (1) cataract-like lesions in eye lens preparations and (2) cataracts in vivo.

Epidemiology applied to problems of aging and nutrition—HNRCA, 12/11/89 to 12/10/94: 1,377,917

Objective: To define diet and nutritional needs of older Americans. (2) To advance methods in nutritional epidemiology. (3) To relate nutrition to cataract formation and to the function of the aging kidney, skeletal system, and cardiovascular system. (4) To define the changes in body composition associated with aging. (5) To interrelate physical activity and diet with the aging process. (6) To relate low levels of vitamin B12 with neurobehavioral and cognitive function.

Trace element nutrition, neuropsychological function and behavior—GFNRC, 03/15/91 to 03/14/96: 607,218

Objective: Identify and characterize the effects of marginal or subclinical deficiencies of biologically essential trace elements (e.g., copper, iron, zinc) on neuropsychological function and behavior relevant to the performance demands placed on adults in the United States. Provide information regarding trace element requirements for optimal mental function and emotional adjustment to promote the general psychological well-being of adults in our society.

ECONOMIC RESEARCH SERVICE (ERS)

Title and purpose of each program or activity which affects older Americans

The Economic Research Service identifies research and policy issues relevant to the elderly population from the perspective of rural development. Several projects

investigate the importance of residential location on the elderly's health and use of health care services. We actively participate in the Interagency Forum on Aging-Related Statistics at the National Institutes of Health. We represent IRS on the Forum's Work Group on Older Americans in Rural Areas, a work group which presented data on commonly-held beliefs about the rural elderly population in a briefing to the Senate Special Committee on Aging and staff. This presentation will also be presented at the annual meeting of the Gerontological Society of America in November of 1992. We have also served on several Census Bureau advisory committees and reviewed tables for the forthcoming 1990 Census Subject Reports on the Elderly Population, and Housing of the Elderly Population.

Brief description of accomplishments

The following reports on the rural elderly have been prepared by our staff in the past year:

Rogers, Carolyn C., "Health and Social Characteristics of the Nonmetro Elderly," in Proceedings OUTLOOK '92 and Agricultural Outlook '92 Chartbook (February 1992).

Rogers, Carolyn C., et. al., "Common Beliefs About the Rural Elderly: Myth or Fact?" A Staff Report to the Special Committee on Aging, United States Senate, Serial No. 102-N (July 1992).

Rogers, Carolyn C., et. al., "The Elderly in Rural America," a forthcoming report in the Vital and Health Statistics series from the National Center for Health Statistics (NCHS), Fall 1992.

Rogers, Carolyn C., "Health Status and Use of Health Care Services by the Older Population in Nonmetro Areas: A Residential Comparison," a forthcoming RDRR, and "Health Status of the Older Population in Nonmetro Areas," a forthcoming article in Rural Development Perspectives.

The following presentations on the rural elderly have been prepared by our staff in the past year:

Rogers, Carolyn C., "Health and Social Characteristics of the Nonmetro Elderly," annual USDA Outlook Conference, December 4, 1991.

Rogers, Carolyn C., et. al., "Ten Common Beliefs About Older Americans in Rural Areas: What Do National Data Tell Us?" a briefing for the Senate Special Committee on Aging and staff, as part of the Work Group on Older Americans in Rural Areas, August 7, 1992.

Rogers, Carolyn C., "Transitions in Health Status and Living Arrangements of the Elderly, by Residential Location: 1984 to 1990", Southern Demographic Association annual meeting in October 1992.

COOPERATIVE EXTENSION SYSTEM PROGRAM INITIATIVES WITH SENIOR CITIZENS, THEIR FAMILIES, CAREGIVERS AND THE AGING NETWORK

During the past year, members of the 74 State, territorial, and trust Land Grant University network, and Extension Service, U.S. Department of Agriculture, have been engaged in the Senior Series, a national educational program initiative which has the following objectives:

Provide information to help senior adults improve the quality of their physical and mental health, strengthen their independence, and provide opportunities that allow them to continue living in their home communities.

Help build meaningful, long-range educational programs for senior adults and establish working relationships with appropriate agencies.

Encourage use of the knowledge, talents and skills of senior adults through public service volunteer activities.

Funding support has been provided by the W.K. Kellogg Foundation, Farm Foundation, and the U.S. Office of the Administration on Aging (AoA). The project is headquartered at the Center on Rural Elderly, University Extension, University of Missouri System, Columbia, Missouri, with the following Land Grant University entities serving as dissemination partners: Northeast Regional Center for Rural Development, Pennsylvania State University, Western Rural Development Center, Oregon State University, North Central Regional Center for Rural Development, Iowa State University, and the Southern Rural Development Center, Mississippi State University. Gerontological educational resource materials have been created; staff have been trained; and the following community-based action programs are underway.

NORTHEAST REGION

Delaware

Senior Series Volume 1, Caregiving, was shared with hospital instructors. Four Senior Series nutrition education workshops were held with 35 participants attending each workshop. Fifteen hundred nutrition education newsletters were distributed through various civic groups, Elderhostel and during the Nutrition Education workshops.

Working in collaboration with Delaware Health and Social Services, the Kent County Home Economist is serving on a Continence Coalition project. Delaware Health and Social Services applied for a Division of Aging grant to initiate and evaluate a demonstration project on urinary incontinence. Plans are being made to utilize the Senior Series module, "Managing Incontinence for Healthy Aging-Bladder" in senior centers and other community organizations to accomplish the public education portion of the project. This demonstration project will benefit the citizens of Delaware and also may serve as an intervention model for other states to develop.

Senior Series nutrition education information was shared with the area agency on aging and the development and distribution of a nutrition series is planned. Senior Series materials also were used as a resource for an existing television program. At the Delaware State Health Fair, Extension worked with the area agency on aging using Senior Series resources. An intergenerational program also is in the planning stage.

Maryland

Current senior mailing lists were updated using information from senior citizen centers, the area agencies on aging, local churches, civic groups, senior housing complexes, meals on wheels, and health care professionals. Approximately 1,255 nutrition newsletters were directly distributed to seniors. Various agencies reproduced the newsletters and distributed an additional 200 copies.

Fifty-five nutrition education workshops were held with a total of 1,063 participants. Working with the area agency on aging, nutrition programming was planned. The programming was publicized with an Elderhostel and an adult day care center. The Somerset County home economist, served in an advisory role as a nutrition instructor. Additionally, she incorporated Senior Series programming into twelve radio broadcasts of her existing ½ hour weekly program, "Nutrition and Health." This program has a listening audience of approximately 200,000.

On August 13, 1992, the official ceremonial signing of the Memorandum of Understanding between the Maryland Cooperative Extension Service (MCES) and the Maryland Office on Aging (MOA) was followed by a press conference to announce the Maryland Nutrition Screening Initiative. During FY 1993, MCES and MOA have teamed up for the Maryland Nutrition Screening Initiative. This is a national initiative which is a special project of American Academy of Family Physicians; the American Dietetic Association and the National Council on the Aging, Inc. Two University of Maryland specialists will provide major direction for this health initiative.

New Jersey

Five Enhancing Self-Care workshops were held, and 206 seniors participated. An Eldercare project in two counties resulted as a spin-off from the workshops.

Using Senior Series materials and additional resources, a county home economist developed the curriculum, "It's Your Choice: Living Wills," which continues to be taught to groups in New Jersey. The area agency on aging publicized the Living Wills workshops.

In five counties, the Nutrition Notions newsletters are being distributed to approximately 300 people. Information from the Age Pages and the Food Safety and Nutrition sections of volume 2 are being used in the newsletters.

In Warren County, a 6 week series, "Aging: Issues for Those Who Care," was recently completed. Twenty family caregivers and paid caregiver staff from two agencies were educated on a variety of topics.

A Bergen County extension home economist used the Senior Series materials in the following ways: 10 families participated in the Grandletters program and an in-service workshop on stress reduction was conducted for 31 directors of nutrition centers.

New York

Thirty seniors attended various mini-workshops: Fat & Fiber in the Diet; Improving Communication Skills; Understanding the Changes Aging Brings. One Enhanc-

ing Self-Care workshop was held; twenty-four participants attended. Materials on topics such as Walking Programs, I Have a Right to Decide, and Medications have also been shared with elderly coalition members. An intergenerational project, Project E.A.S.E. (Exploring Aging Through Service Experiences), with 4-H clubs is being piloted in Washington County.

In March 1992 Cornell Cooperative Extension of Nassau County began a unique working relationship with the Department of Senior Citizen Affairs through their seniormobile program. The seniormobile is a traveling information office that provides professional staff and agency representatives to assist the elderly population of Nassau County in the communities in which they live. The seniormobile visits libraries, senior centers, parks and beaches. Senior Appreciation Days in cooperation with local banks provide an "open house" atmosphere while seniors can obtain information from staff and representatives. Since March, Extension staff and volunteers have been a part of the seniormobile at 22 sites and have reached over 2,000 consumers with information about extension resources and specific programs. Trained Cornell Cooperative Extension water volunteer educators have been present to discuss programs available and to share methods of home water conservation.

Pennsylvania

In the southeast region of Pennsylvania, several extension agents are using the Senior Series materials in the following ways: one agent reached approximately 65 adults using the Volume 2 materials "Strategies for Successful Health" and "Targeting A Healthier Diet" and approximately 200 Nutrition newsletters were distributed with the local meals on wheels; one extension home economist's newsletter includes nutritional information, and she has been working with a personal care home supervisor in the areas of Nutrition for the Elderly and Special Diet Concerns, Understanding the Elderly (Sensory Loss, Dementia, etc.), Fire Safety for the Elderly, and Food Safety for the Elderly; twenty-five women participated in a workshop, highlighting the Food Safety module of "Enhancing Self-Care Among the Elderly." Two nutrition education workshops were held for civic groups, senior housing complexes, and health care professionals; a total of 57 participants attended. Also, working with the area agency on aging, a Lebanon County extension agent, formed a Senior Series advisory committee, planned a Senior Series in-service day, and planned the recruitment and education of volunteers; the Elk county home economist, worked with the director of a personal care home to help her improve her residence and develop a better understanding of the special needs (physical, dietary, etc.) of older residents. For example, Sensory Losses and How to Cope with Them were addressed. Previously, the entrance hall to the home was extremely dark due to the dark woodwork, wallpaper and curtains covering the door window. For increased safety, the curtains were taken down to let the sunlight in. Also bedspreads that color contrast with the carpeting in the bedrooms have been purchased; this enables the older residents to distinguish the edge of the bed from the carpeting thereby helping to reduce the risk of falling. Safety rails and open shelving have been installed throughout the home, as well as emergency lighting in case of a power failure.

Thiry-nine Cooperative Extension family living agents are now prepared to provide training for administrators and staff of personal care homes throughout the commonwealth. These extension agents have been certified as approved trainers by the Pennsylvania Department of Public Welfare, which now requires forty hours of initial training and six additional hours of continuing education for administrators annually. Extension educators have been certified to provide eight hours of training in gerontology and mental health (the latter in collaboration with local mental health agencies) and four hours in nutrition, food handling, and sanitation. They are also prepared to offer training in a number of related areas to help administrators fulfill the continuing education requirements. Materials for trainers and participants were adapted for use in Pennsylvania from manuals entitled "Ensuring Quality Care for Residents and Caregivers," developed by an AOA funded project (#10AT0026) for adult foster care providers in Oregon.

West Virginia

West Virginia utilized the Enhancing Self Care and Nutrition Education resources in a senior health promotion program, Preventicare, which is being conducted in nine counties.

Five SOS, Seniors Outreaching Seniors, training sessions were held and reached 75 participants.

SOUTHERN REGION

Alabama

An Elder Camp program in Calhoun County attracted 400 campers from 50 to 95 years of age for its sixteenth anniversary 3-day event. Workshop presenters included the chairman of the Alabama Commission on Aging in the State's Silver Haired Legislature, the Director of the Auburn University Center on Aging and Center on Governmental Services. A county Extension home economist coordinated the camp.

Extension faculty at Tuskeegee University planned and implemented a community-based Senior Olympics project, which in addition to competitive events, including activities designed to assess food intake, clothing choices, and simple exercises.

Arkansas

Senior Series activities were held throughout the state in order to achieve rapid dissemination of the geronotological educational resources to county extension staff. A series of four 1-day regional in-service training workshops (one in each of the four corners of the State) were held. The average attendance at each workshop was 30 county staff members.

The Senior Series manuals are being used extensively throughout the State with strong senior volunteer involvement and active co-sponsorship with aging-related organizational and agency officials.

Florida

Faculty at the University of Florida and Florida A&M State University have created a faculty committee entitled the "Successful Aging Design Team" and this team has conducted a series of regional workshops throughout the state for county extension agents. The training sessions focused upon the usage of Volumes 1 (SOS for Caregivers); 2 (Enhancing Self Care); and 3 (Nutrition Education). Samples of the progress being made include: the county home economist in Homestead provided a 3-hour bilingual training workshop to 50 adult volunteers, focusing on special nutritional concerns of the elderly. These volunteers were being trained by the Dade County Community Action Agency to become "Senior Companions," who assist homebound elderly with everyday activities in the home and assist at congregate meal sites. Senior Series information was used to provide information on factors affecting the nutritional needs of older adults; taking medications safely; nutritious and enjoyable meal preparation in single servings; as well as basic food and kitchen safety for the elderly. These volunteers, seniors themselves, were given a total of 8 full days of training sessions on such topics as coping with Alzheimer's, AIDS, depression, elderly abuse, personal hygiene, and handling emergency situations. Half of the 50 volunteers were hispanic, 10 black and 4 males.

The community action agency congregate meal sites are also reproducing the Senior Series nutrition newsletter, with over 650 copies distributed monthly to the homebound and to congregate nutrition sites throughout Dade County. The program directors found the newsletter especially effective when delivered with meals to the homebound elderly, and a suggestion was made that the newsletter be made available in Spanish in order to reach over 175,000 Hispanic seniors. This resource arrived at a time when finances permitting senior centers to contract with dietitians were being eliminated, so the Senior Series Nutrition Module has been a very useful resource to many elderly nutrition program coordinators: eight meal site managers were trained to use the nutrition units and the newsletter; the newsletter (Volume 3) has been mailed to 2,800 residents—and this is only in three counties; and in one county, thirteen employees of Community Care for the Elderly enrolled in training sessions for homemakers' services received information taken from the Senior Series on demographics of aging (Volume 5) and the Aging Process (Volume 1).

The Extension home economist in Brevard County coordinated a "Caregivers Festival" that was planned and conducted by 15 social service agencies. Over 150 caregivers participated.

Georgia

Following the Senior Series workshop at Fort Valley State College, three additional 1-day area training sessions were conducted across Georgia. Eight of the Extension home economists who participated in the Fort Valley workshop acted as trainers in these follow-up sessions, providing training for an additional 74 county home economists. Agents of this core group are now serving as area resource persons to other Extension personnel, cooperating groups and agencies. Plans are to expand the nutrition newsletter series and to begin statewide distribution in October, 1992 through the 159 county Extension offices in the State.

Faculty at Fort Valley State College planned and conducted a volunteer training program for senior citizen volunteer leaders related to proper usage of medications and these volunteers are in the process of disseminating this information among the senior population in middle Georgia. Extension staff also conducted a Senior Citizens Day program on the campus of Fort Valley State College with proper use of medications as the program theme. Over 300 seniors from the mid-Georgia region participated in the programs.

Kentucky

In October 1990, the Senior Series was introduced to Kentucky through a statewide "Challenges of Aging" workshop. Following this workshop, $5,000 of seed money was distributed by a competitive mini-grant process to 12 sites in Kentucky. The purpose of the seed money was to encourage implementation of projects taken from the Senior Series manuals or directly inspired by the Senior Series. During 1991-92, local communities carried out the following projects:

Senior Citizen's Horticulture Project—The County Extension Agent for Agriculture and the Senior Citizen's Center Director, along with a variety of community groups purchased and then constructed a 10×24' greenhouse. After construction was completed on the grounds of the Martin County Senior Citizen's Center, 50 seniors planted their own trays of vegetables and flowers. By early summer, the plants were transplanted into a donated plot of ground near the Senior Center. The flowers were subsequently replanted in front of the Senior Center and the bountiful harvest of vegetables were sold with the proceeds invested in the Senior Center program and services.

Women's Financial Information—The Daviess County Extension Agent for Home Economics, was inspired by the Seniors Outreaching Seniors volume of the Senior Series. Based upon local needs, she decided to focus her educational outreach efforts on financial information for midlife and elderly women. Cooperators were groups such as the Daviess County Extension Homemakers and the Owensboro-Daviess County Committee on Aging. A series of four workshops were conducted to inform older women of their financial options and to empower them with the skills and self-confidence to make decisions on their own. Thirty-three older women participated in the series of four in-depth workshops.

Carter County Telephone Reassurance Program—The County Extension Agent for Home Economics established a volunteer task force to implement a telephone relay system to reach senior shut-ins on a daily basis. Cooperating individuals and organizations include Northeast Area Development Council, Department for Social Services, Bethany House Christian Service Center, the area agency on aging, home health agencies from three hospitals, Carter County Health Department, Senior Volunteer representatives, the Carter County Homemakers Association, the Department of Social Insurance, and the Kentucky State Police.

The Owsley County Junior-Senior Olympics—The County Extension Agent for 4-H Youth Development, worked with a wide variety of local groups to establish Kentucky's first Junior-Senior Olympics. Senior citizens acted as organizers, encouragers, scorekeepers, and judges for the 15 events. The day ended with an awards ceremony. Both the seniors and the youth were enriched by the intergenerational understanding and sharing that took place.

Older Adults and Kids Sharing—The Taylor County Extension Agent for Home Economics, worked in cooperation with the Lake Cumberland Health Promotion Program for Older Adults in establishing an intergenerational educational opportunity for senior adults and school-age children. The goal was two-fold: to enhance self-esteem and feelings of usefulness among senior adults as they share their knowledge, skills, and experiences with youngsters; and to enrich young children and give them positive experiences with senior adults. A large number of organizations cooperated in offering a positive experiences with senior adults. A large number of organizations cooperated in offering a summer enrichment program that consisted of a series of one-day sessions at a variety of sites to acquaint children grades 4 through 6 with senior adults. The seniors provided the curriculum of heritage skills, storytelling, cooking, farm visits, hobbies, crafts, and more. The youth enjoyed these educational experiences and developed positive and respectful attitudes toward older community members.

Seniors Reaching Seniors—County Extension agents from ten counties in the Mammoth Cave area cooperated with numerous groups and individuals to offer a full day workshop in which senior volunteers served as facilitators and in some cases, workshop presenters. The workshop was designed as a general area-wide introduction to the Senior Series. Specific topics included intergenerational relationships, nutrition in later years, caring for the caregiver, and health fraud. The key-

note address focused on myths and facts about aging. Throughout the program, participants could visit fifteen exhibit booths which provided a wide array of educational information.

Clark County Intergenerational Project—A total of 80 Head Start children and 190 Senior Citizens were involved in a series of programs designed to encourage shared experiences and growth in intergenerational understanding and communication. Children visited local nursing homes and Senior Citizens Centers four times each. Together they made Valentines for the Middle East troops, colored Easter eggs, had an Easter bonnet parade, made baskets for delivery to 70 homebound patients, and planted a tree and tulip bulbs at the new Generation Center. Seniors and children were able to interact positively through these activities.

Perry County Senior Community Garden—The Agricultural Agent and the Home Economics Agent worked together with senior citizens and community groups in accomplishing the following objectives with their Community Garden Project: provided a money-saving endeavor; provided wholesome, health vegetables to eat; provided wholesome exercise experiences; learned about profit and loss; learned the value of vegetables grown and the importance of nutrition; and learned the latest planting, fertilizing, watering, insect disease, and harvesting techniques.

Intergenerational Sharing through Puppetry—The Jefferson County Extension Agent for 4-H Youth Development and a veteran behavior disorders teacher worked together to launch this program. Its purpose is to support a group of students who are behavior-disordered by enabling them to develop puppetry skills which they in turn use to share with local elderly persons in nursing homes, hospitals, and VA center. After undergoing approximately 2 months of preparation, the students took their puppetry show to a total of 40–50 nursing home residents that have been visited thus far four times by the student group. the program is ongoing and will expand as need and resources dictate.

Mississippi

Work being done has these goals: (1) Seniors in Stone County to develop newsletter for distribution to seniors throughout the county, expanding to other counties served by AARP and AoA; (2) Seniors in the county to develop local history video library; (3) Seniors to develop weekly 15-minute radio program providing information to seniors and the general public; and (4) Seniors enlist the community to plan a Senior Fun Day in Stone County involving seniors from a four-county area, coordinated with AARP chapters. All of the projects are being coordinated and facilitated by senior adult volunteers. Interest remains high participation of seniors is strong and all organizational and agency co-sponsors are pleased with the progress.

Oklahoma

Extension specialists at Oklahoma State University have implemented a portion of Volume 1 (Health and Legal Decisions Facing Older Adults). County Home Economists in four counties have trained volunteer Extension Homemakers Club leaders to deliver a four-part series: (1) Medicare Round-Up and Patients Medical Rights; (2) Power of Attorney and Guardianships; (3) Will and Estate Planning, and (4) The Living Will.

Langston University extension specialists have conducted training session on Volumes 1, 2, 3, and 4 at a workshop attended by 157 persons. Workshop participants included coworkers in the Youth at Risk Program, Area Nutrition Centers, Elder Care Staff (an agency of the County Health Department), Church Mission Society Group, Alpha Kappa Sorority, Retired Teacher's Group, and Wellness Center Staff.

Tennessee

A pilot project has been conducted in seven middle Tennessee counties. Trained elderly persons implemented a reading program designed to enhance literacy skills in preschool and kindergarten-age children. Elderly persons read to young children; used story telling and games and activities to encourage a desire to read and learn.

WESTERN REGION

Alaska

The Extension home economists in Nome adapted nutrition materials from Senior Series Volume 3 for use in newsletters and 1,150 families were reached in 12 Eskimo villages. The Extension home economist in Palmer shared information from Volume 1, SOS about Caregiver Legal Concerns with local Extension Homemaker Clubs and ten persons were reached. Four workshops were conducted using the Nutrition and Diet module from Volume 2, Enhancing Self Care and 60 persons attended. The Extension home economist in Anchorage presented 8 monthly workshops

from Volume 2. The Extension home economist in Juneau shared Volume 3, Nutrition Newsletters with Senior Center participants. The first edition of the newsletter has been mailed from the Extension office and additional newsletters will follow.

Arizona

Enhancing Self Care materials are being used for in-home caregiving classes. Nutrition sites are using the Nutrition newsletters with over 500 seniors being reached. A home economist has begun a program utilizing Volume 4, Intergenerational Relationships and the Kingman library is sponsoring a Senior utilizing Volume 4, Intergenerational Relationships and the Kingman library is sponsoring a Senior Listening to After-School Children's Program in which senior volunteers listen to children read books.

Colorado

A week-long for-credit course for Cooperative Extension professionals was conducted at Colorado the University. The course was co-sponsored by Colorado State University Cooperative Extension and the Colorado and Wyoming Associations of Extension Home Economists. Nationally recognized professors from Colorado State University and Oregon State University taught about geriatric nutrition; Alzhemier's disease and caregiving; financial planning for later life; age-related changes in vision, hearing, thinking and memory; considerations in teaching older adults and families, and the aging network.

Idaho

Idaho Extension Home Economists are currently developing an agreement with the Department of Health and Welfare to conduct required training for Adult Foster Care personnel. Concepts from Volume 1, SOS, will be incorporated into the training. Information from Volumes 1, 2, 3, and 4 was used in newsletters; four SOS training sessions were held, reaching approximately 65 caregivers; six workshops on nutrition were held, reaching 71 persons.

Montana

Senior volunteers were recruited for planning and implementing Volume 2, Enhancing Self Care; and a newsletter committee was formed for Volume 3, Nutrition. The following advisory groups have been formed: Ministerial Association for Volume 1, SOS; Local nursing home—Volume 2, Enhancing Self Care; and Senior Volunteers for Volume 3 will develop a newsletter. Information was shared from all Senior Series manuals with health care professionals, area agencies on aging, aging-related services, community professionals and with Extension co-workers at area Extension agents meetings.

Five workshops have been conducted (1 per month) at a retirement home using materials in Volume 2, Enhancing Self Care manual.

Two nutrition newsletters were adapted and distributed through senior citizen centers and the newsletter goes to everyone in the county who is 55 and older.

Nevada

Four workshops were conducted: 2 SOS; 1 Enhancing Self Care (reached 29); 1 Intergenerational (reached 14). Five news articles were written using information in the Enhancing Self Care manual. Manuals were shared with area agency on aging officials, health care professionals, aging-related services, and community professionals.

New Mexico

Information from Volumes 2 and 3 were used as a resource for newsletters. Information from Volume 1 SOS, was shared with 38 people. Three workshops were held using Volume 2, Enhancing Self Care and a total of 262 people attended the workshops. Volume 4—Intergenerational Relations: two youth-initiated programs were held with 2 seniors and 26 youth participating. Volume 5—Opportunities for Extension, was shared with area agency on aging representative, who will use materials to train Senior Companions. Information from the Senior Series was presented to an RSVP and Senior Companion Group of both sexes and three ethnicities.

Wyoming

A 3-day statewide training workshop for 45 extension staff and professionals in the aging network was held in February in Casper, Wyoming. Twenty of Wyoming's 23 counties were represented at the workshops. Exercises from the cultural diversity workshop on Native Americans was used to help resolve a conflict. Twenty-eight women were reached, and the conflict has been reduced. Fourteen workshops were conducted using Volume 2, Enhancing Self Care and 183 people were reached. Spin-

offs included a health lecture series and food safety program. Four Nutrition newsletters from Volume 3 were distributed to senior citizen centers and through the Extension Homemakers newsletter. A Visits to Remember training workshop was held for the community. Thirty-one persons learned how to improve their visits with nursing home residents and shut-ins. Stepping into the Past and Grandletters are being used with Extension Homemakers and 4-H Junior Leaders to promote intergenerational activities.

NORTH CENTRAL REGION

Illinois

After the Senior Series regional training workshop, the following program development tasks are underway: A state Senior Series advisory team has been created to provide leadership to the project. Team members include extension county and state home economists and representatives from the state unit on aging, area agencies on aging, and the American Association of Retired Persons; An extension representative has been serving on a State Fair planning committee under the leadership of the state unit on aging organized for developing plans for activities for older adults at this summer's state fair. A committee of extension professionals is involved in planning and carrying out two primary projects: a large window display and a series of 15 minute presentations over a 10-day period. Senior Series materials will be used. An extension specialist is a member of the program committee planning for the 1992 Illinois Governor's Conference. Senior Series has been the vehicle to increase the linkage of extension with the Illinois Department on Aging and; Nine fact sheets and two audio-cassette programs have been completed on caring for caregivers. Two new fact sheets are being initiated with a reorganized committee. This committee is also developing a new focus aimed at helping communities evaluate local responses and services for meeting the needs of older adults and caregivers.

Indiana

Working with the Indiana Higher Education Television System Purdue University Extension Specialists broadcast throughout the state, two 4-hour training programs. The training sessions featured Volumes 1 and 2 of the Senior Series. Thirty county home economics agents participated in the training. As a follow-up to the training assignment, each county home economics agent agreed to conduct two community-based action programs utilizing the information provided in the training workshops.

Iowa

Community-based projects which are underway include: pet therapy in nursing homes by youth; Senior citizen involvement in radio and TV; senior citizen preparation of nutrition newsletters; meal site presentations of Volume 2 material; and Volume 1 information delivered to assisted care facility and an Indian settlement. Networking is occurring with AAA's, parish nurses, Senior Housing Project staff, congregate meal site coordinators, and volunteers.

Minnesota

Dakota County—Agent is working with a community committee (including senior representatives, senior center, public health, and extension) to develop a senior nutrition newsletter. They expect the monthly newsletter to have 2,000 subscriptions. Former SNAP (Senior Nutrition Adult Program) volunteers will do the marketing and presenting demonstrations at various sites throughout the county.

Missouri

Using funds received from a grant from the Missouri Division of Aging, University Extension has contracted with each AAA to work collaboratively with the parallel regional extension specialist to implement Senior Series in at least two localities in each of the 10 AAA regions. Presently, regional extension specialists and directors of the AAA's are conducting a wide range of community-based and problem-focused projects in communities throughout the state.

The Missouri Gerontology Institute conducted the 1992 Missouri Extension Institute on Aging during the period May 31–June 5 on the campus of the University of Missouri-Columbia. The institute was co-sponsored with the W.K. Kellogg Foundation and the Farm Foundation. The academic curriculum focused upon aging processes; nutrition, physical health and mental health issues; multi-cultural perspectives on aging; caregiving and intergenerational program opportunities; and public policy and community development issues, perspectives, and processes. Twenty extension State and county specialists from eight different States, Puerto Rico and the

Virgin Islands participated in this 1-week residential gerontology graduate credit learning experience.

Nebraska

The program title for the Senior Series has been entitled "Senior Issues in Nebraska." Each member of the team is conducting at least one Senior Series project in their Extension Program Planning Unit. Plans have been finalized for five district training and Senior Issues conferences involving local and regional agencies on aging, state health department, department of public institutions, department of gerontology at University of Nebraska at Omaha and the department of geriatrics at the University of Nebraska Medical Center. These conferences are emphasizing three tracks: training and information, one for extension staff and one for invited group of agencies; and a track for consumers.

A monthly newsletter PRIME TIME is being circulated. A Senior Series letterhead has been developed and will be used to focus information to Extension staff monthly. The April Update inservice for all agents included four areas of training: an overview of Senior Series; an open house PENpages and Nebraska Resource Directory training; a resource room; and distribution of a set of twenty ideas for core programming through Extension.

North Dakota

The project approach being used is multi-agency. The extension service, health department and state agency on aging are working together to coordinate the project. A primary target audience is county commissioners. Four regional workshops were conducted which involved extension, county commissioners and county agencies, introducing them to Senior Series Volumes 1, 2, 3, and 4. Various members of the team served as trainers for the workshops as well as other qualified individuals.

Ohio

A major result of the Senior Series project is that it has fostered stronger working relationships between the Ohio Cooperative Extension Service, the Ohio Department of Aging, and the Area Agencies on Aging. This project is a truly cooperative effort with all three organizations contributing staff/faculty and financial resources to the project.

South Dakota

Team members are piloting Volumes 1 through 4. The extension home economist team member is working to involve local Office of Adult Services and Aging social workers. The Volunteer Time Bank concept is being piloted in one area of the state under the leadership of a team member from the State Office of Adult Services and Aging. Planning for this effort is hoped to extend statewide.

A two-day training workshop was conducted in two sites in June, 1992. Team members assisted in presenting programming ideas for Volumes 1 through 4 plus the Volunteer Time bank project. Coalition building, characteristics of the senior volunteer/learner, and PENpages were also a part of the training curriculum. Each county in the State was invited to send a team comprised of extension staff; ASA social worker; and volunteer. Team members had an opportunity to develop action plans and submit proposals for start-up minigrants. A total of 18 minigrant projects are currently underway throughout the state. Funding for the project has come through AoA Eldercare Volunteer Corps and Community CARES grants. The Senior Series project is being used as a catalyst for expanded collaboration of services and broadening senior volunteer involvement throughout the state.

Wisconsin

The Senior Series materials were introduced by the training team to county-based and State faculty in February via the Education Television Network.

The current goal of the team is to build coalitions with agency personnel, volunteers and county-based faculty, ultimately seeing that materials get the broadest possible usage.

Extension Service/National Association of County Officials (NACo) National Video conference.

On July 9, 1992, the Extension Service/U.S. Department of Agriculture and the Land Grant University Cooperative Extension Services co-sponsored with NACo, the U.S. Department of Transportation; IBM; and the U.S. Administration on Aging (AoA), a 6-hour national videoconference which originated from NACo's annual conference in Minneapolis, Minnesota where 2,000 attendees participated.

The goal of the national videoconference was to assist county governments meeting the challenges and opportunities resulting from America's rapidly increasing

aging population and deteriorating infrastructures. The specific objectives for the viewers/participants which were county commissioners, local aging-related organization/agency staff; community leaders; and senior citizens included: increase awareness of the challenges and opportunities resulting from America's aging population and aging infrastructure; begin to plan and implement effective strategies, policies; and programs that respond to these critical issues; and be motivated to act—to begin now to invest in the future by developing and implementing programs that will address priority aging population and infrastructure concerns of their communities.

The videoconference was transmitted to 200 downlink locations in 26 States and the U.S. Department of Agriculture involving 1,000 participants.

Submitted by Leo L. Cram, Ph.D., Director Special Projects, CES, University of Missouri and Jeanne M. Priester, National Program Leader, Extension Service, U.S. Department of Agriculture.

FARMERS HOME ADMINISTRATION

Title and purpose statement of each program or activity which affects older Americans

Currently FmHA has two programs that directly affect older Americans:

Federal Domestic Assistant (FCA) catalog number 10.415 Rural Rental Housing (RRH) Loans empower the agency authorized under the Housing Act of 1949 as amended, Section 515 and 521, Public Law 89-117, 42 U.S.C. 1485, 1490a to make RRH loans. The objectives of this program are to provide and construct rental and cooperative housing and related facilities suited for dependent living for rural residents. Occupants must be low-to-moderate income families, elderly (62 years or older) or disabled.

During fiscal year 1990, OBPA records show $571,903,000 was obligated to this program, and fiscal year 1991, $571,334,000; $573,900,000 was allocated for fiscal year 1992 and 1993 for the 515 program.

The second program, FDA 10.417 Very Low-Income Housing Repair Loans and Grants (Section 504, Rural Housing Loans and Grants) is also authorized under the Housing act of 1949, its particular title is Title V, Section 504, as amended, Public Law 89-117, 89-754, and 92-310, 42 U.S.C. 1474. The objectives are to give very low-income rural homeowners an opportunity to make essential repairs to their homes to make them safe and to remove health hazards to the family or to the community. Applicants must own and occupy a home in a rural area and be without sufficient income to qualify for a section 502 loan under the FmHA regular housing program. To be a grant recipient, the applicant must be 62 years of age.

Funds allocated and expended under this program were.—(Loans) fiscal year 1990—$11,558,404; fiscal year 1991—$11,195,590; fiscal year 1992—$11,329,500; (Grants) fiscal year 1990—$12,642,930; and fiscal year 1991—$12,743,040; and fiscal year 1992—$12,804,300.

Brief description of accomplishments

In fiscal year 1991, 375 elderly projects were funded under the Rural Rental Housing Loan Program.

Under the Very Low Income Housing Repair Loans and Grants, 2,996 loans and 3,664 grants were made in Fiscal Year 1990. In Fiscal Year 1991, 2,951 loans and 3,695 grants were made. In fiscal year 1992, 2,857 loans and 3,678 grants were made.

FOOD AND NUTRITION SERVICE (FNS)

Title and purpose statement of each program or activity which affects older Americans

The Food Stamp Program provides monthly benefits to help low-income families and individuals purchase a more nutritious diet. In Fiscal Year 1991 $17.3 billion in food stamps were provided to a monthly average of 22.6 million persons.

Households with elderly members accounted for approximately 20 percent of the total food stamp caseload in fiscal year 1989. However, since these households were smaller on average and had relatively higher net income, they received only 7.9 percent of all benefits issued.

Brief description of accomplishments

The Food and Nutrition Service (FNS) continues to work closely with the Social Security Administration (SSA) in order to meet the legislative objectives of joint application processing for Supplemental Security Income households.

In response to the recommendations of recent FAO audit report, FNS and SSA have formed a workgroup which is now conducting monthly meetings with the goal of addressing the failures and inadequacies of the current joint processing system. Options for addressing joint processing problems are being developed.

The Supplemental Security Income Modernization Project, which was initiated by the Social Security Administration in order to review and study the Supplemental Security Income Program, recently issued its final report. The report included two recommendations to improve the "linkage" between SSI and the Food Stamp Program. The recommendations were to develop a short food stamp application form for use in joint processing and to eliminate categorical eligibility in the food stamp program when recipients' SSI benefits reach the poverty level. FNS is preparing a response to the Modernization Project's recommendations.

Title and purpose statement of each program or activity which affects older Americans

The Food Distribution Program for Charitable Institutions and Summer Camps provides commodities to nonprofit charitable institutions serving the needy. Eligible charitable institutions include nonpenal, noneducational, nonprofit organizations such as homes for the elderly, congregate meals programs, hospitals and soup kitchens.

It is thought that a large proportion of the beneficiaries of this program are elderly, but accurate estimates are not available.

Brief description of accomplishments

In 1991, total cost for the program was about $93 million.

Title and purpose statement of each program or activity which affects older Americans

The Commodity Supplemental Food Program provides supplemental foods, in the form of commodities, and nutrition education to infants and children up to age 6, pregnant, postpartum or breastfeeding women, and elderly who have low incomes and reside in approved project areas.

Service to elderly began in 1982 with pilot projects. In 1985, legislation allowed the participation of older Americans outside the pilot sites if available resources exceed those needed to serve women, infants and children. In Fiscal Year 1991, $16 million was spent on the elderly component.

Brief description of accomplishments

About 23 percent of total program spending provides supplemental food to approximately 110,000 elderly participants a month. Older Americans are served by 12 of the 20 State agencies.

Title and purpose statement of each program or activity which affects older Americans

The Food Distribution Program on Indian Reservations provides commodity packages to eligible households, including household with elderly persons, living on or near Indian reservations. Under this program, commodity assistance is provided in lieu of food stamps.

Approximately $23 million of total costs went to households with at least one elderly person. (This figure was estimated using a 1990 study that found about 39 percent of FDPIR households had at least one elderly individual.)

Brief description of accomplishments

This program serves approximately 51,000 households with elderly participants per month.

Title and purpose statement of each program or activity which affects older Americans

The Child and Adult Care Food Program provides Federal funds to initiate, maintain, and expand nonprofit food service for children and elderly or impaired adults in nonresidential institutions which provide child or adult care. The program enables child and adult care institutions to integrate a nutritious food service with organized care services.

The adult day care component permits adult day care centers to receive reimbursement of meals and supplements served to persons 60 years or older and to functionally impaired adults. An adult day care center is any public or private nonprofit organization or any proprietary Title XIX or Title XX center licensed or approved by Federal, State or local authorities to provide nonresidential adult day

care services to eligible adults. In Fiscal Year 1991, $10.9 million was spent on the adult day care component.

Brief description of accomplishments

The adult day care component of CACFP served approximately 11 million meals and supplements to over 26,000 participants a day.

A study of adult day care is currently underway in the Office of Analysis and Evaluation. The objectives of this study are to: (1) describe the characteristics of the adults and the adult day care centers participating in the adult day care component of CACFP; (2) compare participating centers and adults to centers and adults not participating in the Program; (3) determine participants' dietary intakes; and (4) project potential future Program growth.

Title and purpose statement of each program or activity which affects older Americans

The Emergency Food Assistance Program (TEFAP) provides nutritional assistance in the form of commodities to emergency feeding organizations for distribution to low-income households for household consumption or for use in soup kitchens.

Approximately $101 million in commodities were distributed to households headed by the elderly. (This figure is estimated using a 1986 survey indicating that about 38 percent of TEFAP households have members 60 years of age or older.)

Brief description of accomplishments

About 38 percent of the households receiving commodities under this program had at least one elderly individual.

Title and purpose statement of each program activity which affects older Americans

The Nutrition Program for the Elderly (NPE) provides cash and commodities to States for distribution to local organizations that prepare meals served to elderly persons in congregate settings or delivered to their homes. The program promotes good health through nutrition assistance and by reducing the isolation of old age. USDA supplements funding from the Department of Health and Human Services' Administration on Aging with cash and commodities provided on a per meal basis.

Brief description of accomplishments

In Fiscal year 1991 over 240 million meals were reimbursed at a total program cost of almost $139 million. On an average day approximately 925,000 meals were provided at over 14,000 sites.

FOOD SAFETY AND INSPECTION SERVICE (FSIS)

Title and purpose statement of each program or activity which affects older Americans

FSIS is continuing a consumer education campaign targeted to older Americans, one of several groups of people who face special risks from foodborne illness. The goal is to reduce the incidence of foodborne illness due to consumer mishandling of food. Foodborne illness can lead to serious health problems and even death for a person who is chronically ill or has a weakened immune system. The elderly, with more than 35 million people in their ranks, are the largest group at risk and are increasing in number due to advances in medicine.

Brief description of accomplishments

Issues of FSIS' FOOD NEWS FOR CONSUMERS magazine contained articles detailing how foodborne illness affects those at-risk and how to prevent it. Reprints of these articles were made available to organizations representing or providing services to the elderly.

Additional materials were distributed at appropriate conventions such as the American Public Health Association, the American Dietetic Association and the Association of Long-Term Care Providers.

FOREST SERVICE

Title and purpose statement of each program or activity which affects older Americans

The Department of Agriculture, Forest Service, in cooperation with the Department of Labor, sponsors the Senior Community Service Employment Program (SCSEP), which is authorized by Title V of the Older Americans Act, as amended. The SCSEP has three fundamental purposes: (1) part-time income for disadvantaged persons aged 55 and over, (2) training and transition of participants to the private/

public sector labor markets; and (3) community services to the general public. This program employs economically disadvantaged persons age 55 and older in 38 States, the District of Columbia, and Puerto Rico. The SCSEP seeks to improve the welfare of underprivileged, low-income elderly, and to foster a renewed sense of self-worth and community involvement among the rural elderly.

Program participants are involved in projects conducted by the Forest Service such as construction, rehabilitation, maintenance, and natural resource improvement work. Participants receive at least the minimum wage to supplement opportunity to have participants regain a sense of involvement with the mainstream of life through meaningful work. Additionally, valuable conservation projects are completed on National Forest lands.

Brief description of accomplishments

The Service's Interagency Agreement for July 1, 1991 to June 30, 1992, provided $25.8 million which employed an estimated 5,600 seniors; 22 percent were minorities, and 40 percent were women. Sixteen percent of the participants were later placed in nonsubsidized jobs. The Government reaped a return of $1.57 for each dollar invested in this program.

Title and purpose statement of each program or activity which affects older Americans

The Volunteer in the National Forests Program offers individuals from all walks of life the opportunity to donate their services to help manage the nation's natural resources. This program continues to grow in popularity as people realize how they can personally help carry out natural resource programs. Volunteers assist in almost all Forest Service programs or activities except law enforcement. They may choose to work in an office at a reception desk, operate a computer terminal, or conduct natural history walks and auto tours. Volunteers may also be involved in outdoor work such as building trails, maintaining campgrounds, improving wildlife habitat and serving as a host at a campground.

Brief description of accomplishments

During fiscal year 1991, 11,740 persons aged 55 and above volunteered their services in the National Forest.

ITEM 2. DEPARTMENT OF COMMERCE

DECEMBER 16, 1992.

DEAR MR. CHAIRMAN: Thank you for your letter regarding the Department f Commerce programs pertaining to the older Americans.

We are enclosing our report for 1992 for inclusion in "Developments in Aging," Volume II. The report includes programs relevant to the older population.

If you need further information, please have a member of your staff call Mr. Paul Powell, Bureau of the Census, Office of Congressional Affairs, on (301) 763-2446.

Sincerely,

BARBARA HACKMAN FRANKLIN.

Enclosure.

BUREAU OF THE CENSUS—CURRENT POPULATION REPORTS—1992

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CURRENT HOUSING REPORTS

OTHER REPORTS, PAPERS, DATA BASES, AND CONTINUING WORK

I. THE FEDERAL INTERAGENCY FORUM ON AGING-RELATED STATISTICS

The Census Bureau is one of the lead agencies in The Federal Interagency Forum on Aging-Related Statistics (The Forum), a first-of-its-kind effort. The Forum encourages cooperation among Federal agencies in the development, collection, analysis, and dissemination of data pertaining to the older population. Through cooperation and coordinated approaches, The Forum extends the use of limited resources among agencies through joint problem solving, identification of data gaps, and improvement of the statistical information bases on the older population that are used to set the priorities of the work of individual agencies. The participants are appointed by the directors of the agencies and have broad policymaking authority within the agency. Senior subject-matter specialists from the agencies are also involved in the activities of The Forum. The Forum was cochaired in 1992 by Barbara Everitt Bryant, Director, Bureau of the Census; Manning Feinleib, Director, National Center for Health Statistics; and Gene D. Cohen, Acting Director, National Institute on Aging.

At the initial meeting of The Forum, held October 24, 1986, it was agreed that The Forum would work on the following activities: (1) identify data gaps, potential research topics, and inconsistencies among agencies in the collection and presentation of data related to the older population; (2) create opportunities for joint research and publications among agencies; (3) improve access to data on the older population; (4) identify statistical and methodological problems in the collection of data on the older population and investigate questions of data quality; and (5) work with other countries to promote consistency in definitions and presentation of data on the older population.

The work of The Forum facilitates the exchange of information about needs at the time new data are being developed or changes are being made in existing data systems. It also promotes communication between data producers and policymakers.

As part of The Forum's work to improve access to data on the older population, the Census Bureau publishes a newsletter, "Data Base News in Aging," which brings news of recent developments in data bases of interest to researchers and others in the field of aging. All Federal agencies are invited to contribute to the newsletter, which is issued periodically.

The Census Bureau released a report titled "Federal Forum Report 1989–90" in March 1992, which reviews the activities of The Forum and its member agencies during 1989–90. Various sections of the report summarize Forum work and accomplishments, cooperative efforts of members, publications by member agencies, and activities planned for the near future. A telephone contact list of specialists on subjects related to aging is also included.

The Census Bureau published a report of the Income Working Group of the Federal Interagency Forum on Aging-Related Statistics in June 1990, "Income Data for the Elderly: Guidelines." The report recommends ways in which data-collecting agencies can improve the comparability, quality, and usefulness of the income data collected across surveys. The report also discusses uses of income data, important sources of income for the elderly, and suggests a core set of information on income that all surveys with income data should collect, as well as a more extensive set of income items that survey designers may consider including. The Census Bureau has also published the "Inventory of Data on the Oldest Old," which is a reference docu-

ment of Federal data bases on the oldest old population. The above reports are available from Arnold A. Goldstein, Population Division, Bureau of the Census, Washington, DC 20233. Additional reports of The Forum's work groups are available from the National Center for Health Statistics.

Census Bureau staff cochair the Working Group on Data on Minority Aging. The group is making an inventory of Federal and other large data sets to identify the extent to which data are available on minority groups in the older population. Census Bureau staff provided data and written materials for the Working Group on Older Americans in Rural Areas. This group briefed Congressional staff on whether available data support common beliefs about the rural elderly. Census Bureau staff also cochair the Working Group on Administrative Data on Aging. This group is considering the strength of administrative record data, particularly from Medicare files, as an input to estimating the very old population.

II. Projects Between the Census Bureau and the Administration on Aging

From the 1990 census, the Census Bureau plans to produce special tabulations particularly useful to local Area Agencies on Aging for administering programs under the Older Americans Act. The Census Bureau also plans to produce a 1990 census subject report, "The Older Population in the United States," with information published in printed form at the national level and on computer files (magnetic tapes and compact disks) for States. The Census Bureau will also prepare a 1990 census public-use microdata file with individual questionnaire information (to protect respondents' confidentiality, the records contain no identifying information) for 3 percent of persons aged 60 and over and members of their households.

A "Guide to 1980 Census Data on Elderly" was published in 1986. This guide explains how to locate census data on the older population. The report reviews census products, services, and explains how to obtain them. The report has table outlines from the census publications and summary tape files to show the specific form of data available about the older population.

III. Projects Between the Census Bureau and the National Institute on Aging

A. The Census Bureau published a report titled, "Sixty-Five Plus in America," Series P-23, No. 178. This report is a chartbook and analysis of demographic, social, and economic trends among the older population. The data used in this report are primarily from the 1990 Census of Population and Housing and national surveys such as the Current Population Survey, the Survey of Income and Program Participation, the Health Interview Survey, and the Longitudinal Survey on Aging. This report summarizes numerous reports prepared by statisticians from the Census Bureau and other Federal agencies with information about the elderly. It also includes information not previously released. This report expands on information in "Diversity: the Dramatic Reality" by Cynthia M. Taeuber, Chapter 1 of "Diversity in Aging" Scott A. Bass, Elizabeth A. Kutza, Fernando M. Torres-Gil, eds., (Glenview, IL, Scott, Foresman and Co., 1990).

B. The Census Bureau published a wall chart titled "Elderly in the United States." This wall chart was produced by Cynthia Taeuber and Barry Ocker with the support of the Office of the Demography of Aging of the National Institutes on Aging (NIA). The statistics shown in the wall chart are intended to highlight dimensions of aging in American States. Data are primarily from the 1990 Census of Population. Projections for the United States and States are from Series A issued in 1990 and are available only through 2010.

C. The Census Bureau published the first two of a series of "Profiles of America's Elderly." These profiles are titled "Growth of America's Elderly in the 1980's," and "Growth of America's Oldest-Old Population." These 2-page profiles include demographic, social, and economic trends among the elderly. These profiles also include topics on demographic changes during the 1980's, racial and ethnic characteristics, and characteristics of the centenarian population. Additional profiles that will follow in this series will include international comparisons of older populations.

D. "The 1990 Census and the Older Population: Data for Researchers, Planners, and Practitioners," by Cynthia M. Taeuber and Arnold A. Goldstein, summarizes the availability of 1990 census data on topics of interest to researchers on the older population.

E. The Census Bureau prepared special tabulations from the 1980 census for the National Institute on Aging. These tabulations include selected tables from Summary Tape File 5 retabulated with 5-year age groups from 60 years to 85 years and over. These tabulations also include other selected tabulations from the 1980 census. The University of Michigan archives these tabulations (Nancy Fultz, 313-763-5010).

F. The Census Bureau developed an international data base on the older population. The University of Michigan archives this data base (Nancy Fultz, 313-763-5010).

G. Cynthia Taeuber wrote a chapter on the quality of census data on the elderly that includes an evaluation of coverage, age misreporting, estimates, and projections of centenarians, and so forth. It is "Types and Quality of Data Available on the Elderly in the 1990 Census," in "Epidemiology Study of the Elderly," ed. Robert B. Wallace, New York: Oxford University Press, 1992.

H. The Census Bureau prepared a file from the Survey of Income and Program Participation (SIPP) on the health, wealth, and economic status of the older population. The SIPP file is archived at the University of Michigan (Nancy Fultz, 313-763-5010).

I. Cynthia Taeuber (with Jessie Allen) wrote "Women in our Aging Society: The Demographic Outlook," in "Women in the Frontline: Meeting the Challenge of an Aging America," ed. by Alan Pifer and Jessie Allen, forthcoming from The Urban Institute, Washington, DC, 1993. The chapter looks at the demographics of population aging and its present and future intersection with various aspects of the experience of American women.

J. The Census Bureau provided The Forum with special tabulations on poverty of nonmetropolitan elderly (from 1989 Current Population Survey).

K. "A Demographic Portrait of America's Oldest Old" was prepared by Cynthia M. Taeuber, Bureau of the Census, and Ira Rosenwaike, University of Pennsylvania, in "The Oldest Old," ed. by Richard Suzman and David Willis, Oxford University Press, 1992. This chapter looks at the rapid growth of the oldest old population, those 85 years and over and the reasons for that growth. This chapter also: (1) compares the oldest old's demographic, social, and economic characteristics with those of the younger old; (2) describes the characteristics of the centenarian population; (3) examines the quality of census data on the oldest old; and (4) discusses the implications of the growth and characteristics of this unique and important group.

L. The Census Bureau reprogrammed the regularly published tabulations of the Current Population Survey to include data for the population "65 to 74 years" and "75 years and over" in annual reports (see especially P-20, Nos. 461 and 458, P-60, Nos. 181 and 180). The report on marital status includes data for the population 85 years and over.

IV. International Research on Aging

A. Studies from the International Data Base on Aging:

1. The CIR and the Population Division updated the 1987 publication, "An Aging World." The new report, "An Aging World II," assesses demographic, social, economic, and health trends from recent population censuses and surveys. The report also emphasizes a number of additional topics: the oldest old; aging in Eastern Europe; health and disability-free life expectancy; and institutionalization and other living arrangements. Expected release date is March 1993.

2. The CIR is preparing a report for publication focussing specifically on population aging in Eastern Europe and the former Soviet Union. Topics include basic demographic trends, health status, and various socioeconomic dimensions of the elderly in this region of the world. Release is expected in mid-1993.

3. The CIR completed updates for the original 42 countries in the International Data Base on Aging and added 12 countries to the data base. Additional countries are being incorporated on a flow basis.

4. An updated version of the paper, "Living Arrangements of the Elderly and Social Policy: A Cross-National Perspective," by Kevin Kinsella of the Census Bureau was presented at the International Conference on Population Aging in San Diego, September 17-19, 1992. The paper examines family and household structure, changes over time, and potential implications for social support and expenditures.

5. The CIR is preparing a report, "Population and Health Transitions." It looks at aspects of the demographic and epidemiologic transitions in Eastern Europe and the developing world, and discusses several implications for health policy. Expected release date is January 1993. An excerpt of this report was presented at the Nations Expert Group Meeting on Population Growth and Demographic Structure in Paris, November 16-20, 1992.

6. "Population Aging in Africa: The Case of Zimbabwe," appeared in "Changing Population Age Structures. Demographic and Economic Consequences and

Implications," published by the United Nations Economic Commission for Europe (Geneva) in 1992. Kevin Kinsella is the author.

7. The CIR issued two briefs in its "Aging Trends" series, one on Hungary and one on the Baltic nations of Latvia, Lithuania, and Estonia.

8. "Demographic and Health Dimensions of Population Aging in Latin America and the Caribbean," by Kevin Kinsella of the Census Bureau, is a chapter in the forthcoming Pan American Health Organization publication, "Elderly Care: A Challenge for the 90's."

9. "Research on the Demography of Aging in Developing Countries," by Kevin Kinsella of the Census Bureau, and Linda Martin of the National Academy of Sciences, was presented at the Workshop on the Demography of Aging, Committee on Population, National Academy of Sciences, Washington, DC, December 10–11, 1992.

10. The "Journal of Cross-Cultural Gerontology" began including an Aging Trends report in each of its quarterly issues. In 1992, reports on Kenya, Jamaica, Thailand, and Hungary appeared in the journal. The authors are Kevin Kinsella, Heather Francese, and Victoria Velkoff of the Census Bureau.

11. "Demographic Dimension of Population Aging in Developing Countries," by Kevin Kinsella of the Census Bureau and Richard Suzman of the National Institute on Aging, is a chapter in the "Journal of Human Biology," Vol. 4, pages 3–8, 1992. In this chapter, several demographic aspects of population aging in developing countries are considered: the oldest old, median population age; life expectancy and mortality; functional status and disability, and sex differences. While our understanding of the demographic impact of population aging is becoming better appreciated, research on the descriptive epidemiology of age-related changes in health and physical functioning in developing countries is still at an early stage.

12. "Population Dynamics of the United States and the Soviet Union," was prepared by Barbara Boyle Torrey and W. Ward Kingkade of the Census Bureau for the United Nations Seminar on Demographic and Economic Consequences and Implications of Changing Population Age Structures in Ottawa, September 1990. This paper was also published in the "Science Journal," March 30, 1990, Volume 247.

13. "Changes in Life Expectancy—1900 to 1990," was prepared by Kevin Kinsella of the Census Bureau for presentation at an International Conference on Aging: Nutrition and the Quality of Life in Marbella, Spain. The paper summarizes levels of and changes in life expectancy at birth and at older ages in industrialized countries during the 20th century. Trends in mortality and morbidity are summarized in the context of the historic epidemiological transition from infectious to chronic diseases. Cause-specific mortality and decomposition of life expectancy into active and inactive components are examined. There is also an initial attempt to correlate life expectancy with physical attributes that may reflect differences in nutrition.

14. "Demography of Older Populations in Developed Countries," was published as a chapter in the Oxford Textbook of Geriatric Medicine. Richard Suzman of the National Institute on Aging, Kevin Kinsella of the Census Bureau, and George C. Myers of Duke University are the authors. The chapter explores differences and similarities in the aging process and among the elderly populations of 34 industrialized nations. The chapter reviews past and projected trajectories of the growth of older populations, socioeconomic characteristics, and current and expected health status.

15. "The Paradox of the Oldest Old in the United States: An International Comparison," was published as a chapter in "The Oldest Old," ed. by Richard Suzman, David Willis, and Kenneth Martin, Oxford University Press publication, 1992. Barbara Boyle Torrey and Kevin Kinsella of the Census Bureau and George C. Myers of Duke University are the authors. The paper focuses on demographic trends, marital status, and living arrangements, and income, related to the oldest old (80+) in eight countries. Data are shown from 1985 to 2025.

16. "Suicide at Older Ages—An International Enigma," was prepared by Kevin Kinsella of the Census Bureau for presentation at the Gerontological Society of America Meeting, November 1991. This paper examines suicide rates in the United States compared with those in 20 industrialized countries. He used data from World Health Organization files from 1965 through 1989.

17. A software program of the International Data Base on aging was created for use on microcomputers and is being distributed by the Interuniversity Consortium for Political and Social Research at the University of Michigan.

18. A wall chart on Global Aging was prepared by the CIR for wide distribution. It is based largely on information from the International Data Base on Aging. The multicolored chart includes demographic and social statistics for 100 countries. It also features tables and graphs that highlight important research topics in the field of aging.

19. "A Comparative Study of the Economics of the Aged," was presented at the Conference on Aged Populations and the Gray Revolution in Louvain, Belgium in 1986. Barbara Boyle Torrey and Kevin Kinsella of the Census Bureau and Timothy Smeeding of Vanderbilt University are the authors. The paper presents estimates of how social insurance programs for the elderly have grown as a percentage of gross domestic product in several countries partly as a result of lowering retirement age and an increase in real benefits. It then discusses how the labor force participation of the elderly in these countries has uniformly declined. Finally, it examines what contribution the Social Security benefit makes to the total income of the elderly and how the average income of the elderly compares with the average national income in each country.

20. "Aging in the Third World" was published in "International Population Reports," Series P-95, No. 79.

21. "An Aging World" was published in "International Population Reports," Series P-95, No. 78.

B. The Census Bureau completed a contract with Meyer Zitter, a consultant in demographics, to work with other industrialized countries to produce internationally-comparable data on the older population from the 1990 round of censuses. A report titled "Comparative International Statistics available on the Older Population" was prepared by Meyer Zitter and is available. The report focuses on data available from the 1980 round of censuses and what subjects will be available from the 1990 round of censuses. The countries also sent 1980 census tabulations that are somewhat comparable. This report will make it possible to recommend tabulations for 1990 that countries may wish to produce to allow international comparability.

V. Other

A. Information on the elderly population is included in the Census Bureau's publication, "Population Profile of the United States: 1991," Current Population Reports, Series P-23, No. 173.

B. The Census Bureau prepared a paper on "Emerging Data Needs for the Elderly Population in the 21st Century," for public discussion of the census of 2000.

ITEM 3. DEPARTMENT OF DEFENSE

February 22, 1993.

Dear Mr. Chairman: The Department is pleased to have the opportunity to provide information on our activities on behalf of older Americans.

We have enclosed a summary of the various efforts taken by the Department in addressing the important issue of eldercare insofar as it relates to our personnel and their families. We have also included a copy of the recently published *DOD Eldercare Handbook*.[1] The Department remains committed to undertaking further initiatives in this area.

Sincerely,

Robert M. Alexander,
Lieutenant General, USAF.

Enclosures.

DEPARTMENT OF DEFENSE—1992 ELDERCARE INITIATIVES

The Office of the Assistant Secretary of Defense for Health Affairs has several programs relating to older Americans who have eligibility in the Military Health Service System, including the Military Treatment Facilities (MTFs) and the Civilian Health and Medical program of the Uniformed Services. Enclosed are two Fact Sheets on the Department of Defense initiatives with the Department of Veterans Affairs and the Health Care Financing Administration. These programs provide services to the Department's retiree population eligible for treatment on a space available basis in MTFs and the retiree population over 65 who are eligible for Medicare.

[1] Held in Committee files.

The Office of Personnel Support, Families and Education (PS, F&E) in the Office of the Assistant Secretary of Defense (Force Management and Personnel) has taken several important steps in addressing eldercare issues and support for DOD family members providing care for aging persons. Recognizing the growing impact of eldercare issues in the workplace, the Department has developed specific resources to assist military and civilian personnel in dealing with this important subject.

In 1991, DOD established an "Eldercare Task Force" with representatives from the Departments of Army, Navy and Air Force along with representatives from the Office of the Deputy Assistant Secretary of Defense, Equal Opportunity, the Chaplain's Board and the Federal Women's Program. The task force met to explore ways to provide support for the elderly and their caregivers. Several important initiatives emanated from the task force's recommendations.

A major recommendation of the task force was to develop a handbook that would assist DOD personnel with caretaker issues. This resource, the *DOD Eldercare Handbook*, is enclosed for your information. The handbook was developed by an eldercare expert in consultation with DOD offices familiar with the unique needs of DOD personnel, such as long distance care. The handbook was distributed DOD-wide and is available for military and civilian personnel through the Family Centers, Civilian Personnel Offices, Chaplains' offices, libraries, retired affairs offices and medical facilities. An accompanying public affairs notice announcing the publication and availability of the handbook was also distributed throughout the Department.

Currently, the Department is completing the *Eldercare Guide for Professionals*, which is designed for professionals who deal with DOD personnel and their families who may be facing eldercare issues. The guide will enable these professionals to identify areas of concern and to assist individuals who deal with various aging situations. It will also help professionals identify resources that may be helpful in addressing the needs of the families confronted with eldercare concerns.

The DOD Family Conference, held in November 1992, had over 500 participants from around the world. Participants represented family support leadership, senior noncommissioned officers and volunteers in family programs. The conference featured two important plenary speakers who addressed the issues of aging and eldercare. Dr. Harry Sussman, a noted expert in work/family issues, presented an excellent discussion on the aging of the American population. Dr. Michael Creedon, a leading eldercare expert, addressed the conference on the needs, resources and issues of caregivers for the elderly. Both speakers went far in heightening the awareness of the Department's family support leaders who were at the conference.

The Department staff is currently reviewing materials to determine which resources would be useful to personnel at the field activity level who may conduct eldercare classes and workshops. The Department is obtaining some of the highly professional materials which have been developed in this area.

The Military Family Clearinghouse, a component of the Office of Family Policy, Support and Services within PSF&E, has compiled an extensive bibliography on eldercare. This bibliography covers a wide range of eldercare resources and issues. The Clearinghouse is a focal point of research and resources for DOD professionals dealing with work/family programs and issues.

The Department has entered into a collaborative intergenerational research effort involving an Army officer, Major Michael Parker, who is conducting post-doctoral research at the University of Michigan, and Dr. Hiroko Akiyama, from the University of Michigan's Institute of Social Research. The research will analyze the 1992 Department of Defense Member and Spouse Survey data to:

1. Identify the magnitude of military families' involvement in giving assistance to older relatives.
2. Assess the prevalence of multiple family responsibilities such as the concurrent child and eldercare.
3. Identify military demographics and the needs of those who bear such responsibilities for the purpose of designing preliminary predictive models and cost-effective intervention strategies.
4. Evaluate the "life health" status of military families experiencing the effects of being responsible for both children and elderly parents simultaneously.
5. Gauge the impact of elder responsibilities on vocational performance and readiness.

The Department of Defense is clearly aware of the long-term implications of the aging of the American population and is committed to ongoing efforts in support of this important work/family issue.

ITEM 4. DEPARTMENT OF EDUCATION

DEAR SENATOR PRYOR: Thank you for your recent letter to Secretary Alexander in which you requested information on initiatives or activities taken by our Department on behalf of older persons and their families for Volume II of the annual report of the U.S. Special Committee on Aging, Developments in Aging. Your letter was forwarded to the Office of Vocational and Adult Education for a reply.

Activities for older Americans and their families are provided under the Adult Education Act (AEA), Public Law 100-297, as amended by the National Literacy Act, Public Law 102-73, and implemented by the State-administered adult education program. Generally, the purpose of the Adult Education Act is to provide basic education and literacy instruction to adults who are 16 years of age and older or beyond the age of compulsory school attendance under State law. The Act encourages the establishment of programs that will enable adults to acquire the basic educational skills necessary for literate functioning, to benefit from job training and retraining and to obtain productive employment, and to continue their education to at least secondary level completion.

In 1991, the total number of participants in the AEA program was 3.7 million. Approximately 599,947 or about 16 percent of all persons served in adult education programs were 45 years of age or older. Participation by persons aged 60 and over was 185,749. Data in the table that follows show participation by these age groups from 1988 to 1991.

Program year	Ages 45 to 59	Ages 60 plus	Total
1988	338,395	195,184	533,579
1989	370,942	171,617	542,559
1990	406,405	198,333	604,738
1991	414,198	185,749	599,947

The Federal adult education program addresses the needs of older adults by emphasizing functional competency and grade level progression, from the lowest literacy level through attaining the General Educational Development (GED) Certificate. States also operate special projects to expand programs and services for older persons through individualized instruction, use of print and audio-visual media, home-based instruction, and curricula focused on coping with daily problems in maintaining health, managing money, using community resources, understanding government, and participating in civic activities.

Equally significant are the expansion of the delivery system through satellite learning centers and increased public awareness through clearinghouses. These recent developments assist older Americans in overcoming barriers to participation. Where needed, supportive services, such as transportation, are provided. Self-learning preferences are recognized and assisted through the provision of information, guidance, and study materials. To reach more people in the targeted age range, adult education programs often operate in conjunction with senior citizen centers, nutrition programs, nursing homes, and retirement and day care centers.

The Federal adult education program will continue to provide support for services in the States to meet the learning needs of older Americans. Increased cooperation among organizations, institutions, and community groups involved in this area at the national, State, and local levels should lead to increased sharing of resources and expanded services.

Please let me know if I can be of further assistance to you.

Sincerely,

BETSY BRAND.

ITEM 5. DEPARTMENT OF ENERGY

DECEMBER 18, 1992.

DEAR MR. CHAIRMAN: In response to your letter of October 27, 1992, requesting an update of the Department's current and upcoming activities of particular interest to older Americans, I am submitting the following report. The document describes departmental activities of interest to senior citizens in the areas of energy efficiency programs, information collection and distribution, public participation, and research on the biological and physiological aging process.

I am pleased to contribute to your annual report of Federal activities and programs on behalf of older Americans.

Sincerely,

JAMES D. WATKINS,
Admiral, U.S. Navy (Retired).

Enclosure.

INTRODUCTION

The mission of the U.S. Department of Energy (DOE) is to develop energy policies and programs in support of the President's broad objectives for America's future: sustained, noninflationary economic growth; good stewardship of the environment; and long-term strategic security. President Bush requested the development of a National Energy Strategy (NES) in 1989. As the President directed, Secretary of Energy James D. Watkins crafted a strategy that emphasized reliance on market forces to balance our increasing need for energy at reasonable prices; our commitment to a safer, healthier environment; our determination to maintain an economy second to none; and our goal to reduce reliance on insecure energy supplies.

Following release of the NES in 1991, President Bush submitted to the Congress legislation to carry out key features of his strategy. The Energy Policy Act of 1992, passed by Congress and signed into law by the President on October 24, 1992, contains most of the President's original legislative proposals. In Secretary Watkins' view, this act is "the most comprehensive and balanced energy legislation ever enacted . . . it will serve to fuel new jobs, greater energy security and a cleaner environment." Secretary Watkins added that "The Energy Policy Act will stimulate domestic energy production, promote energy efficiency, increase competition in the electricity sector and reduce consumer costs, and develop alternatives to imported oil such as clean-burning, domestic natural gas."

Increased conservation and energy efficiency by government, industry, and consumers are projected under the Act (based upon the assumption described in the 1991 National Energy Strategy) to reduce the Nation's cumulative energy demand by the equivalent of about 8 billion barrels of oil between now and the year 2010. The bill is also estimated to increase the use of renewable energy by more than 20 percent and alternative fuels by more than 50 percent over projected 2010 levels.

The Act has the potential to reduce oil imports by about 4.7 million barrels a day by the year 2010. This represents a one-third cut in the projected level of petroleum imports. Over the next 15 years, the Act is estimated to keep about $400 billion (in 1990 dollars) from flowing overseas for oil—a significant positive contribution to the U.S. balance of trade. The Act is projected to provide substantial energy cost savings for consumers. The Nation's electricity consumers will save about $250 billion (in 1990 dollars) over the next 15 years—an average savings of about $750 per household.

"Together with the more than 90 NES initiatives which the Bush Administration has been able to undertake on its own, this Act will result in a cleaner, more prosperous and more secure energy future for all Americans," Secretary Watkins added. "This legislation will create hundreds of thousands of jobs and increase our gross domestic product by over $500 billion."

The following provides a brief survey of DOE programs and activities of particular interest to senior citizens.

ENERGY EFFICIENCY PROGRAMS

Weatherization Assistance Program.—The elderly and the handicapped receive priority under this program, which provides grants to States for the installation of energy-saving building envelope and heating and cooling system measures in low-income homes. The program operates through a network of State grantees and approximately 1,200 local subgrantee agencies. Local service providers are predominantly community action agencies. In addition to DOE appropriations, State and local programs receive funding from the Health and Human Services Low Income Home Energy Assistance Program, from utilities, and from States.

In 1992, the Weatherization Assistance Program awarded $188,924,996 of appropriated funds in grants to the 50 States, the District of Columbia, and nine Native American tribal organizations for weatherization of the homes of low-income families. As of March 31, 1992 (the end of the most recent program year), over 4 million homes had been weatherized with Federal, State, and utility funds; of these, an estimated 1.7 million were occupied by elderly persons.

State Energy Conservation Program.—The State Energy Conservation Program (SECP) was created to promote energy efficiency and to reduce the growth of energy

demand. Under this program, DOE provides technical and cost-shared financial assistance to States to develop and implement comprehensive plans for specific energy goals. At present, all States, the District of Columbia, and U.S. Territories participate in the SECP.

Energy Extension Service.—The Energy Extension Service (EES) was established as a Federal/State partnership to provide small-scale energy users with personalized information and technical assistance to facilitate energy efficiency and the use of renewable resources. The EES was repealed by Public Law 102–486, the Energy Policy Act of 1992. DOE is encouraging States to incorporate EES functions into a more broadly defined SECP.

Senior citizens are eligible for services provided through the SECP and (until its recent repeal) the EES. In addition, many States have developed and implemented projects specifically for the elderly. Examples include senior citizen weatherization projects and related training, hands-on energy conservation workshops, low-interest loan programs, senior energy savings months, and numerous seminars addressing the needs of senior citizens. These projects are often cosponsored with agencies whose primary focus is on senior citizens. In fiscal year 1992, $16,194,000 was appropriated for SECP and EES.

Information Collection and Distribution

The Energy Information Administration collects and publishes comprehensive data on energy consumption in the residential sector through the Residential Energy Consumption Survey (RECS) and the Residential Transportation Energy Consumption Survey (RTECS). The RECS includes data collected from individual households throughout the country, along with actual billing data from the households' fuel suppliers for a 12-month period. The data include information on energy consumption, expenditures for energy, cost by fuel type, and related housing unit characteristics (such as size, insulation, and major energy-consuming appliances). The RTECS collects data on characteristics of household vehicles and annual miles traveled. The RECS and the RTECS contain data pertaining to the elderly.

The results of these surveys are analyzed and published by the Energy Information Administration. The most recent RECS was conducted for calendar year 1990. Results of the 1990 RECS are published in three reports: "Housing Characteristics 1990 (published in May 1992); Household Energy Consumption and Expenditures 1990; and Household Energy Consumption and Expenditures 1990 Supplement: Regional Data" (both to be published in March 1993). The next RECS will be conducted for 1993.

The most recent survey for which all reports have been published and the data file is available is the 1987 RECS. Results of the 1987 RECS are published in three reports. "Housing Characteristics 1987" (published May 1989); "Household Energy Consumption and Expenditures 1987 Part 1: National Data" (published October 1989); and "Household Energy Consumption and Expenditures 1987 Part 2: Regional Data" (published January 1990). The data file for the 1987 RECS is available on diskettes for use with personal computers. The data file contains the ages of all household members.

"Household Energy Consumption and Expenditures 1987 Part 1: National Data" provides estimates of consumption and expenditures of electricity, natural gas, fuel oil, kerosene, and liquefied petroleum gas for elderly households. Also included in the report is a discussion of energy use and the elderly, which indicates that in 1987, the elderly used about 10 percent more energy to heat their homes than the nonelderly, even after adjusting for weather and size of the housing unit. Overall energy expenditures were less for the elderly for all end uses except space heating, which was 13 percent higher. Approximately 61 percent of the elderly's total energy consumption was for space heating, and about 38 percent of their total energy expenditures were for heating.

"Household Energy Consumption and Expenditures 1987 Part 2: Regional Data" provides energy consumption and expenditure data by four census regions and nine census divisions. These data are also presented by age of householder.

The RTECS was conducted for calendar year 1991 and a report will be published late 1993. However, the most recent RTECS for which data are published was conducted during 1988. Results of this survey are published in "Household Vehicles Energy Consumption 1988" (published February 1990). This publication presents data, categorized by age of householder, on vehicle characteristics, vehicle miles traveled, gallons of motor vehicle fuel consumed, and expenditures for motor vehicle fuel. Data from the 1988 RTECS show that the elderly drove fewer miles and used less vehicle fuel per household than the nonelderly. Vehicle fuel consumption and

average miles traveled also differed among the elderly. Households with only one elderly adult spent an average of $426 per household for vehicle fuel and drove 7,229 miles compared to two-adult households with a 60-year or older householder. These households drove an average of 14,058 miles and spent about $808 per household.

The published reports and the data diskettes for the 1987 RECS and the 1988 RTECS can be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20401.

Public Participation Activities

During fiscal year 1992, the Department of Energy continued to work with the National Energy and Aging Consortium, Inc., a network of more than 40 organizations from the public and private sectors. The National Energy and Aging Consortium (NEAC) is an organization that brings Federal agencies together with national aging organizations and the private sector to discuss and implement solutions to the energy-related needs of the elderly.

The Office of the Deputy Assistant Secretary for Consumer and Public Liaison represents the Department in the Consortium by serving on the Federal Advisory Committee to the NEAC. Through participation in this group, DOE continues to exercise leadership in forming partnerships with a variety of organizations that have worked with elderly citizens to assist with their energy needs and concerns.

During 1992, the National Energy and Aging Consortium continued to work with the Oklahoma Energy and Aging Consortium in a research project funded by the Administration on Aging which is designed to establish new State energy and aging consortia. Participants were drawn from eight States interested in forming State energy and aging consortia, including: Connecticut, Illinois, Michigan, New Mexico, Pennsylvania, Tennessee, Texas, and Virginia. The project's highly successful "National Dissemination Conference" was held January 29–31, 1992, in Washington, D.C.

Throughout 1992, the Department of Energy staff maintained open channels of communication with Federal agencies and departments to improve information exchange about energy assistance programs. This information exchange gives particular emphasis to programs that allow for attention to the elderly.

Research Related to Biological Aging

In 1992, the Office of Health and Environmental Research (OHER) and the Office of Environment, Safety and Health administered research that used the department of Energy's (DOE) unique laboratory capabilities and university research facilities to understand basic biological principles and the health effects of radiation and energy-related chemicals. As part of its research program, DOE sponsors two categories of studies (human epidemiological and animal studies) that are indirectly concerned with understanding biological changes over time and various biological processes, including those of aging. The Department continues research to characterize late-appearing effects induced by chronic exposure to low levels of physical agents.

Because health effects that are caused by chronic low-level exposure to energy-related toxic agents may develop over a lifetime, they must be distinguished from normal aging processes. To distinguish between induced and spontaneous changes, information on changes that occur throughout the lifespan is collected for both experimental and control groups. These data help characterize normal aging processes, as well as the toxicity of energy-related agents. Additional studies are conducted to obtain a better understanding of the aging process itself. As in the past, lifetime studies of humans and animals constitute the major research related to biological aging. Research concerned with the aging process has been conducted at several of the Department's contractor facilities. Summarized below are specific research projects addressing aging that the Department sponsored in 1992.

LONG-TERM STUDIES OF HUMAN POPULATIONS

Through the Office of Environment, Safety and Health, the DOE supports epidemiological studies of health effects in humans who may have been exposed to chemicals and radiation associated with energy. Information on lifespan and aging in human populations is obtained as part of these studies. Because long-term studies of human populations are difficult and expensive, they are initiated on a highly selective basis.

The Radiation Effects Research Foundation (RERF), sponsored jointly by the United States and Japan, continued work on a lifetime followup of survivors of

atomic bombings that occurred in Hiroshima and Nagasaki in 1945. Over 100,000 persons are under observation in this study.

An important feature of this study is the acquisition of valuable quantitative data on dose-response relationships. Studies specifically concerned with age-related changes also are conducted. No evidence of radiation-induced premature aging has been obtained.

After being accidentally exposed in 1954 to radioactive fallout released during the atmospheric testing of a thermonuclear device, a group of some 200 inhabitants of the Marshall Islands has been followed clinically, along with unexposed controls, by medical specialists at the Brookhaven National Laboratory. Thyroid pathology, which has responded well to medical treatment, has been prevalent in individuals heavily exposed to radioiodine.

STUDIES IN THE FORMER SOVIET UNION

The DOE has also become involved in the studies of two major populations in the Former Soviet Union. The first is the population which was exposed to radiation as a result of the accident at the Chernobyl Nuclear Power Plant. Numerous pilot projects have been conducted to reconstruct dose to populations affected by the accident, and a large-scale study of thyroid disease in children in Byelarus was recently initiated. The second population is those persons exposed to ionizing radiation and chemicals as a result of operations at a Russian nuclear weapons complex in the Southern Ural Mountains. Through studies of this population, we hope to learn more about the health effects of joint exposure to chronic low-level radiation and mixtures of chemicals.

Nearly 2,000 persons exposed to radium, occupationally or for medical reasons, have been studied at the Center for Human Radiobiology, Argonne National Laboratory.

Other epidemiological or human studies currently involving the Department include:

A Los Alamos National Laboratory epidemiologic study of plutonium workers at three Department of Energy facilities. An estimated 15,000 to 20,000 workers will be followed in this retrospective mortality study.

A study of some 600,000 contractor employees at Department of Energy facilities who are being analyzed in an epidemiologic study to assess health effects produced by long-term exposure to low levels of ionizing radiation.

The U.S. Uranium/Transuranium Registry, which is operated by Washington State University, is collecting occupational data (work, medical, and radiation exposure histories), as well as information on mortality in worker populations exposed to plutonium or other transuranium radioelements.

STUDIES USING LABORATORY ANIMALS

Although epidemiological studies of humans provide the most relevant data for assessing health effects of chemicals or radiation in humans, animal studies provide supportive data for assessing these effects.

The DOE uses rodents in large-scale studies of the effects induced by low doses of ionizing radiation. Studies using rodents to determine the chronic effects of radiation are under way at the Lawrence Berkeley Laboratory and at the Oak Ridge National Laboratory.

Larger, longer-living mammals (such as dogs) may represent better human surrogates for chronic diseases than do shorter-lived animals. Because of this, understanding the effects of energy-related agents on longer-lived animals is also important. Several years ago, DOE initiated several studies using dogs that were exposed to a variety of energy-related agents. These continue at Lovelace Inhalation Toxicology Research Institute and at the Pacific Northwest Laboratory; most of these studies are coming to closure. In these final phases, emphasis is being placed on data analysis and on pursuing new and creative methods of statistical analyses. This research should increase knowledge of lifespan, age-related changes, morbidity, mortality, and causes of death, as well as alterations in these characteristics that may be induced by radiation. Because of changes in its research goals and directions during the last few years, no additional studies in dogs have been initiated by DOE.

RESEARCH CONCERNED WITH AGING

Interest in biological aging has continued in several of the DOE laboratories and has resulted in additional research at the molecular, cellular, and organismal levels of biological organization. Examples include: (a) research at the Lovelace Inhalation Toxicology Research Institute on effects of age on lung functions and structure of

adult animals and (b) the study and diagnosis via radiopharmaceuticals and new imaging devices of age-related dysfunctions of the brain and heart, including senile dementia, Alzheimer's disease, stroke, and atherosclerosis.

Radiobiology Archives Used to Investigate Alzheimer's Disease.—Researchers from the University of California, Davis Medical Center are using beagle brain tissue stored in the National Radiobiology Archives at the Pacific Northwest Laboratory to study Alzheimer's disease. The dog is the first practical animal model observed to exhibit the senile amyloid plaques and tangles associated with Alzheimer's. The research is examining the correlation between clinically observed senility and pathology. Tissues and clinical records in the archives represent a unique resource for these investigations. It contains a large number of aged animals along with their full medical, genetic, and life histories. Although the incidence of Alzheimer's in humans is approximately 30 percent at age 85, 15 percent at 75, and 10 percent at 65, preliminary results indicate that the incidence of senile plaques in archived beagle tissues is nearly 50 percent at age 15.

Alzheimer's disease has been recognized and investigated in humans since the end of the last century. The lack of progress in treating the disease has been due primarily to the absence of a suitable model. These archival investigations could represent a first step toward identifying such a model. The archived tissues are especially valuable because several genetic and environmental factors that have been shown to be associated with Alzheimer's disease in humans have been carefully controlled in these dogs; including heredity, diet, and exposure to toxic agents. Initial investigations have been productive—an estimate of incidence is being derived and evidence of an increased risk in female beagles is being explored. Current studies include noninvasive testing of aged beagles, from DOE life span studies, for symptoms of Alzheimer's senility (e.g., olfactory loss, memory loss, and EEG changes).

TRENDS AND PROSPECTS

Given the need to assess long-term and late-appearing effects of chemicals and radiation associated with energy, lifetime studies of animal and human epidemiological studies will continue. Because there is a critical need for better methods to predict effects of exposure to low levels of chemicals and radiation, DOE research into these areas is receiving ever-greater emphasis. The DOE research in areas of basic biological principles, gene sequencing, and structural biology should eventually lead to better understandings of such effects.

Although lifetime studies involving short-lived species will continue, no new lifetime studies involving long-lived mammals are planned. Research to understand molecular and cellular mechanisms, including aging, will continue, as will studies to sequence the human genome. As a result, additional information on age-related changes in both animals and humans should be produced.

ITEM 6. DEPARTMENT OF HEALTH AND HUMAN SERVICES

JANUARY 11, 1993.

DEAR MR. CHAIRMAN: On behalf of Secretary Sullivan, I am submitting the Department of Health and Human Services' annual report for 1992 summarizing the Department's activities on behalf of older Americans. We are pleased that we could be of assistance in developing this material for inclusion in Volume II of the Committee's annual report, Developments in Aging.

I hope the enclosed information will be of value to the Committee. Should your staff need further assistance, the point of contact on my staff is Barbara Clark on 690-6311.

Sincerely,

STEVEN B. KELMAR,
Assistant Secretary for Legislation.

Enclosures.

HEALTH CARE FINANCING ADMINISTRATION

LONG-TERM CARE

The mission of the Health Care Financing Administration (HCFA) is to promote the timely delivery of appropriate, quality health care to its beneficiaries—approximately 50 million aged, disabled, and poor Americans.

Medicaid and Medicare are the principal sources of funding for long term care in the United States. The primary types of care reimbursed by these programs of

HCFA are skilled nursing facilities (SNFs), intermediate care facilities (ICFs), and home health services.

HCFA's Office of Research and Demonstrations (ORD) conducts research studies on a broad variety of issues relating to long term services and their users, providers, costs, and quality. ORD also conducts demonstration projects that demonstrate and evaluate optional reimbursement, coverage, eligibility, delivery mechanisms, and management alternatives to the present Medicaid and Medicare programs.

RESEARCH ACTIVITIES

Long term care research activities in ORD can be classified according to the following objectives:

Assessing and evaluating long term care programs in terms of costs, effectiveness, and quality;

Examining the effect of the hospital prospective payment system (PPS) on long term care providers;

Examining alternative payment systems for long term care; and

Supporting data development and analyses.

Because of interest in promoting noninstitutional care, and recent increase in the utilization of these services, ORD's research is examining the cost, quality, and effectiveness of the services in the home setting. These efforts include comparison of the quality, case mix, and cost of noninstitutional services, as well as the examination of home care provided under different payment arrangements, e.g., fee-for-service versus capitation. As part of these efforts, some studies are developing groupings of patients in both institutional and noninstitutional settings that have similar expected outcomes. Such groupings are essential since home health care serves so many different types of patients, some of whom may fully recover and some who, even under the best of circumstances, are still expected to continue to decline.

A major responsibility of ORD is assessing the effects of various Medicare and Medicaid programs and policies affects subacute and long term care services. Since the implementation of PPS for paying hospitals, ORD has been assessing the effects of this change on other parts of the health care system. Included in this research is the examination of the effects of the prospective payment system (PPS) on long term care case mix, utilization, costs, and quality. Changes in the supply of long term care providers are also being studied. Major research projects are underway to analyze the appropriateness of post-hospital care and the course and outcomes of that care. In recent years, there has been increased emphasis on examining episodes of care rather than utilization of just one type of service. Medicare files, which link hospital with post-hospital care, continue to be analyzed to provide information on trends in the post acute care utilization of post-hospital care since the passage of the PPS legislation.

Several research studies by ORD are examining the course and outcomes of post-hospital care. After the implementation of PPS, there was increased interest in the post-acute care area because the resulting shorter average hospital stays were expected to increase patients' post-acute care utilization. In addition, another purpose of funding this research was to gather information about decision-making at the point of hospital discharge and the types of patients who are referred to the various post-acute modalities of care. These research studies involve collection and analysis of data in order to provide Medicare payment, quality assurance, and coverage policy recommendations relating to subacute care (e.g., home health care, nursing homes, and rehabilitation hospitals).

Efforts are also underway to improve the data bases, statistics, and baseline information upon which future assessment of needs, problem identification, and policy decisions will be based.

DEMONSTRATION ACTIVITIES

Demonstration activities in ORD include the development, testing, and evaluation of:

Alternative methods of service delivery for post-acute and long term care;

Alternative payment systems for post-acute and long term care services; and

Innovative quality assurance systems and methods.

In 1992, HCFA continued the operation of a major demonstration testing the effectiveness of community-based and in-home services for victims of Alzheimer's disease and other dementias. This project focuses on the coordination and management of an appropriate mix of health and social services directed at the individual needs of these patients and their families. In 1992, HCFA also continued operation of a

major demonstration aimed at testing prospective payment for Medicare home health agencies. This program is being conducted in two phases. The first phase involves testing of prospectively established per-visit payment rates for Medicare covered home health visits. A second phase, scheduled to begin in late 1993, will test per-episode payment rates for an entire episode of Medicare covered home health services. Substantial effort also was devoted to the design and development of a multi-State demonstration program to testing innovative case-mix payment and quality assurance methods for nursing homes that participate in Medicare and Medicaid. This project is scheduled to begin by the summer of 1993.

ORD also continued work on several other major initiatives to test innovative reimbursement strategies to promote cost containment and foster quality of care. ORD has devoted extensive effort to the testing of capitated payment systems for a combination of acute and long term care services, including conducting and evaluating the demonstration of Social/Health Maintenance Organizations (S/HMOs) and conducting the Program for All-inclusive Care for the Elderly (PACE). The purpose of the PACE demonstration has the purpose of replicating a unique model of managed care service delivery for very frail community dwelling elderly, most of whom are dually eligible for Medicare and Medicaid coverage and all of whom are assessed as being eligible for nursing home placement according to the standards established by participating States. Work is continuing to develop a "second generation" model of the S/HMO that can be tested in a future demonstration. HCFA also awarded contracts to four community nursing organizations (CNOs) in 1992. This demonstration will test the feasibility and effect on patient care of a capitated, nurse-directed service delivery system. The CNO sites are in a 1-year developmental period during which they are establishing detailed operating plans and protocols. At the end of this year, if the developmental period has proceeded as scheduled, HCFA will then enter into an agreement with the CNOs to begin a 3-year operational period as CNO sites.

Information follows on specific HCFA research and demonstrations.

Developing the Design for a Demonstration of Medicare Payment for Community Nursing Organizations

Period: August 1988–January 1993.

Total Funding: $326,409.

Awardee: Project HOPE Research Center, Two Wisconsin Circle, Suite 500, Chevy Chase, MD 20815.

Investigator: Robyn Stone, Ph.D.

The purpose of this project is to assist the Health Care Financing Administration in designing a demonstration project (consisting of at least four sites) to provide payment to community nursing organizations (CNOs) for home health services, durable medical equipment, and certain ambulatory care furnished to Medicare beneficiaries on a prepaid, capitated basis. Public Law 100–203 specifies that two different capitated payment methods must be implemented in the demonstration. Before the implementation of the demonstration, detailed planning and development of the project design elements required by the congressional mandate must be undertaken. These include:

—Establishing organizational requirements and standards for CNOs.

—Developing a detailed methodology for computing payment rates.

—Preparing an implementation plan for the demonstration which includes developing site selection criteria, quality assurance mechanisms, and marketing strategies appropriate for these sites; criteria for evaluating site proposals; selecting demonstration sites; and preparing an evaluation strategy.

The basic elements of the demonstration design have been completed. A Request for Proposal to develop demonstration sites was issued in September 1991, and contracts to the project sites were awarded in September 1992.

Community Nursing Organization Demonstration

Period: September 1992-August 1993.

Contractors: See Below.

Section 4079 of Public Law 100–203 directs the Secretary to conduct demonstration projects at four or more sites testing payment under the Medicare program for services furnished to Medicare beneficiaries by Community Nursing Organizations (CNOs). The demonstration will test the feasibility and effect on patient care of a capitated, nurse-directed service delivery model. Urban and rural sites as well as different kinds of organizations (such as home health agencies, health maintenance organizations) will participate. The model will cover a Medicare service package that includes home health care, durable medical equipment, and certain ambulatory care. The CNO sites may also provide other optional community services to enroll-

ees. Awardees will have a 1-year developmental period to establish detailed operating plans and protocols. At the end of this year, if the developmental period has proceeded as scheduled, HCFA will then enter into an agreement with the individual organizations to begin a 3-year operational period as CNO sites.

Contractors

Carle Clinic Association, 602 West University Ave., Urbana, IL 61801.

Carondelet Health Services, Inc., Carondelet St. Mary's Hospital, 350 North Wilmont Road, Tucson, AZ 85711.

Living at Home/Block Nurse Program/Metropolitan Visiting Nurse Association, Ivy League Place, Suite 225, 475 Cleveland Ave. North, St. Paul, MN 55104.

Visiting Nurse Service of New York, 107 East 70th St., New York, NY 10021-5087.

Four sites were awarded contracts on September 30, 1992. These sites are located in Tucson, AZ, Urbana, IL, St. Paul, MN and New York, NY. A 2-day start-up meeting was held in Baltimore with Project Officers for both the Demonstration and Evaluation contracts, representatives from the four sites, and the evaluation contractor, Abt Associates Inc. The evaluation contractor will be active in providing training and technical assistance to the sites during the start-up year.

Evaluation of the Community Nursing Organizations Demonstration

Period: September 1992–September 1993.

Funding: $262,433.

Contractor: Abt Associates Inc., 55 Wheeler St., Cambridge, MA 02138-1168.

Investigator: Robert Schmitz, Ph.D.

Section 4079 of P.L. 100-203 directs the Secretary to conduct demonstration projects at four or more sites testing payment under the Medicaid program for services furnished to Medicare beneficiaries by Community Nursing Organizations (CNOs). The demonstration will test the feasibility and effect on patient care of a capitated, nurse-directed service delivery model. Urban and rural sites, as well as different kinds of sponsoring organizations (such as home health agencies, health maintenance organizations) will participate. The model will cover a Medicare service package that includes home health care, durable medicare equipment and certain ambulatory care services. The CNO sites may also provide other optional community services to enrollees. Sites will have a 1-year developmental period to establish detailed operating plans and protocols. At the end of the developmental year, if development has proceeded as scheduled, HCFA will then enter into an agreement with the organizations to begin a 3-year operational period as CNO sites.

The evaluation of the CNO demonstration is a two-tiered study. The first tier will focus on operational feasibility of the CNO model, relying primarily on process analyses and case studies. The evaluator will also develop an evaluation strategy for a possible second tier study to evaluate patient-level impacts on such measures as mortality, hospitalization, physician visits, nursing home admissions, and Medicare expenditures. The second tier evaluation will only be carried out if the number of sites and CNO enrollees is sufficient to evaluate patient-level impacts.

This contract was awarded in September 1992 and is in the early developmental phase.

Social Health Maintenance Organization Project for Long-Term Care

Period: August 1984–December 1995.

Grantees: See Below.

In accordance with Section 2355 of Public Law 98-369, this project was developed and is currently implementing the concept of a social health maintenance organization (S/HMO) for acute and long-term care. A S/HMO integrates health and social services under the direct financial management of the provider of services. All services are provided by or through the S/HMO at a fixed annual prepaid capitation sum. Four sites have been selected to participate in this project.

Of the four S/HMO demonstration sites selected, two are HMOs that have added long-term care services to their existing service packages and two are long-term care providers that have added acute care service packages. The demonstration sites utilize Medicare and Medicaid waivers, and all initiated service delivery by March 1985. During the first 30 months of operation, Federal and State governments shared financial risk with the sites. This risk sharing ended August 31, 1987. This demonstration was extended twice by legislation. The current legislation (Public Law 101-508) extends the demonstration period through December 31, 1995. The S/HMO sites are:

Elderplan, Inc.

Grantee: Elderplan, Inc., 6323 Seventh Avenue, Brooklyn, NY 11220.

Seniors Plus

Grantee: Group Health, Inc., and Ebenezer Society, 2829 University Avenue, SE, Minneapolis, MN 55414.

Medicare Plus II

Grantee: Kaiser-Permanente Center for Health Research, 4610 Southeast Belmont Street, Portland, OR 97215-1795.

SCAN Health Plan

Grantee: Senior Care Action Network, 521 East Fourth Street, Long Beach, CA 90802.

Evaluation of Social Health Maintenance Organization

Period: September 1985-July 1991.

Total Funding: $3,533,396.

Contractor: Institute for Health and Aging, University of California, San Francisco, 201 Filbert Street, San Francisco, CA 94133.

Investigator: Robert Newcomer, Ph.D.

The social health maintenance organization (S/HMO) seeks to enroll, voluntarily, persons 65 years of age or over in an innovative prepaid program that integrates medical, social, and long-term care delivery systems. The S/HMO merges the health maintenance organization concepts of capitation financing and provider risk sharing developed by the Health Care Financing Administration under its Medicare capitation and competition demonstrations with the case management and support services concepts underlying the long-term care demonstrations serving the chronically ill aged, which are sponsored by the Department of Health and Human Services.

An interim report was forwarded to Congress in August 1988. A copy of the report, Evaluation of the Social/Health Maintenance Organization Demonstration, may be obtained from the National Technical Information Service (NTIS), accession number PB89-215446. The evaluation and data collection plan for the demonstration is available from NTIS as a technical appendix and may be obtained by using accession number PB89-191779. The data collection phase has been completed. Data analysis will be completed in winter 1993. Preliminary findings regarding health status, service utilization and service expenditures were presented at the Association for Health Services Research annual meeting. The results of this evaluation will provide the basis for the second interim report due to Congress by March 1993 as mandated by Public Laws 100-203 and 101-508.

Suitability of Grade of Membership Techniques to Correct for Selection Bias in the Social Health Maintenance Organization Evaluation

Period: March 1991-June 1991.

Total Funding: $2,500.

Awardee: Division of Health Services Research and Policy, School of Public Health, University of Minnesota, 420 Delaware Street, SW., Box 729, Minneapolis, MN 55455.

Investigator: Roger Feldman, Ph.D.

The purpose of this project is to provide technical advice in assessing the suitability of grade of membership (GoM) analysis to correct for selection bias in the social health maintenance organization demonstration evaluation.

This project has been completed. A final report entitled "Suitability of Grade of Membership Techniques to Correct for Selection Bias in the Social Health Maintenance Organization Evaluation" is available from the National Technical Information Service, accession number PB92-18552. The researchers concluded that although GoM is an innovative and useful method of data reduction, it does not correct for selection bias in the S/HMO evaluation analyses. They further recommend that the effects of selection bias be tested for and, if feasible, corrected in the evaluation analyses.

Design of the Second Generation Social Health Maintenance Organization

Period: July 1991-February 1992.

Total Funding: $285,660.

Awardee: Brandeis University Research Center, 415 South St., Waltham, MA 02254.

Investigator: Stuart Altman, Ph.D.

Section 4207(b)(4) of Public Law 101-508 requires approval of not more than four additional social health maintenance organization (S/HMO) sites. The purpose of these second generation S/HMO sites is to refine the targeting and financing methodologies and benefit design of a S/HMO. For this study, researchers are to analyze design issues (including recommendations) associated with the development of one or more models of the second generation S/HMOs.

A draft final report has been received and is under review.

Study of the Second Generation Social Health Maintenance Organization

Period: July 1991–September 1992.

Total Funding: $100,000.

Awardee: University of Minnesota Research Center, 1919 University Ave., St. Paul, MN 55104.

Investigator: Michael Finch, Ph.D.

In accordance with Section 2355 of Public Law 98-369, the concept of a social health maintenance organization (S/HMO) for acute and long-term care is being implemented. The purpose of this project is to conduct an analysis of the conditions and considerations related to participation in a S/HMO by providers, insurers, consumers, and State Medicaid agencies.

The final report has been accepted and is being sent to the National Technical Information Service. After reviewing the incentives faced by the S/HMOs and discussing lessons learned from the first 5 years of operation, the report makes recommendations for the second generation S/HMO demonstration sites. The recommendations cover pricing and content of the chronic care benefit, provision of geriatric care and case management, characteristics of potential provider organizations, and issues to be faced in the evaluation of the second generation sites.

Analysis of Implementation Issues Related to a Capitated Acute and Long-Term Care Service Delivery System

Period: August 1991–January 1993.

Total Funding: $99,822.

Awardee: Brandeis University Research Center, 415 South St., Waltham, MA 02254.

Investigator: Walter Leutz, Ph.D.

The purpose of this project is to analyze issues related to marketing strategies, reimbursement rates and mechanisms, site selection criteria, and site operational protocols for a capitated acute and long-term care service delivery system.

A draft report is under review.

Analysis of S/HMO Data to Support Research Regarding HMOs, TEFRA HMOs, and Long-Term Care Issues

Period: August 1992–November 1992.

Total Funding: $24,963.

Contractor: Division of Health Services Research, University of Minnesota, 420 Delaware St., SE, Box 729, Minneapolis, MN 55455.

Investigator: Bryan Dowd, Ph.D.

The purpose of this project is to analyze the social health maintenance organization (S/HMO) data to determine the capacity to support research regarding (1) HMO issues (e.g., cost-effectiveness of coordinated care relative to the fee-for-service (FFS) system, differences in access to and use of various services such as use of expensive technologies and provision of preventive services in HMOs relative to the FFS system); (2) TEFRA HMO issues (e.g., what is the effect of the phenomenon of "aging in place?"); and (3) long-term care issues (e.g., how does provision of expanded chronic care services influence acute care service use?). A draft final report is under review.

Study of Post-Acute Care in Health Maintenance Organizations: Implications for Bundling

Period: August 1991–July 1992.

Total Funding: $83,577.

Awardee: The RAND Policy Research Center, 1700 Main St., Santa Monica, CA 90406.

Investigator: Peter Jacobson, Ph.D.

Post-acute services paid for by Medicare are typically reimbursed on a cost basis. Because of the success of prospective payment in restraining hospital costs with little attendant loss in quality of care, consideration is being given to extending this type of payment system to post-acute care. The innovative post-acute care programs developed by many Health Maintenance Organizations (HMOs) provide a natural

experiment for evaluating the feasibility of introducing a prospective payment structure to the present system. The purpose of this project was to determine if the post-acute care innovations now being implemented in HMOs can be replicated in the traditional fee-for-service sector.

RAND selected six HMOs and conducted case studies of these organizations. Two plans were large multi-specialty group models; one plan was a medium size multi-specialty group HMO; one plan was a manager of health care rather than a provider; another HMO was a small staff model; and the other plan was a small group HMO. Two Social HMOs were included in the study. Each plan in the sample had over 10 years of operational experience.

Four common issues emerged from RAND's survey of HMO post-acute care initiatives:

—HMOs are confronted with the decision of whether to provide services themselves or to purchase them from a vendor;

—Coordination of services is a critical factor in achieving effective and efficient care management;

—Nonmedical services must be considered an important part of the service package; and

—Appropriate services must be provided in a cost effective way.

From this study, RAND concluded that bundling hospital and post-acute care is a major step in the evolution of managed care. To do this successfully, there must be a realistic incentive structure to discourage inpatient care. There should also be continuous patient monitoring and a coordinated transition between the different levels of care. In addition, medical and nonmedical services must be combined in the post-acute care package. Another important component in a bundling model is patient choice. The project's final report will be sent to the National Technical Information Service.

Bundling of Acute and Post-Acute Care Services into Payment for an Episode of Care

Period: August 1990–September 1992.

Funding: $71,605.

Awardee: University of Minnesota Research Center, 1919 University Ave., St. Paul, MN 55104.

Investigator: Robert Kane, M.D.

The Health Care Financing Administration (HCFA) is interested in developing alternatives to the present fee for service payment system for post-acute care. One approach to reconfigure this cost based reimbursement is to combine or bundle hospital and post-hospital services for Medicare beneficiaries into a single episode of care. This would eliminate the separate payment structure that now exists for post-acute services. At HCFA's request the University of Minnesota is preparing a report on the issue of paying for hospital and post-hospital care collectively. Various design options for managing, coordinating, and paying for acute and post-acute care will be discussed.

The University of Minnesota's draft report was reviewed by a technical expert panel representing the constituencies who would be most affected by bundling health care services; i.e., hospitals, post-acute care providers, and consumers. A final report reflecting the comments and recommendations of this panel was accepted in December 1992 and is being submitted to the National Technical Information Service.

Focused Analysis of Post-Acute Care Use for Selected Diagnosis-Related Groups

Period: September 1991–January 1993.

Total Funding: $130,006.

Awardee: Brandeis University Research Center, 415 South St., Waltham, MA 02254.

Investigator: James Lee, Ph.D.

For several years the Health Care Financing Administration (HCFA) has been interested in the concept of integrating post-acute care (PAC) into Medicare's prospective payment system. This study evaluated the distributional and risk consequences of various alternatives for bundling and paying for PAC services on a diagnosis-related group (DRG) type fixed-fee basis. The characteristics of patients, their variations in types of and costs for PAC use, their probability of being rehospitalized, and the potential effects of different outlier policies in a bundled payment system were examined. Medicare claims data and the Center for Health Economics Research Multistate Data were used in the analysis. Fourteen DRGs were selected for study based on their homogeneity and their potential for constructing a prototypical bundled payment system. Oxygen and other durable medical equipment were included in the definition of PAC services because they were considered important

complements to home health care. The study's analytical data file was used to describe or profile patterns in PAC use and to simulate and interpret the distributional impacts of packaged payments.

A draft final report is currently under review. Information from this study could assist HCFA in exploring possible designs of alternative payment models for hospital and post-hospital services. The final report will be available in March 1993.

Natural History of Post-Acute Care for Medicare Patients

Period: December 1986–December 1992.

Total Funding: $3,702,330.

Awardee: University of Minnesota, School of Public Health, Post-Acute Care Project, 704 Washington Ave., SE, Suite 203, Minneapolis, MN 55414.

Investigator: Robert Kane, M.D.

This is a study of the course and outcomes of post-acute care. It has two major components—an analysis of Medicare data to assess differences in patterns of care across the country and to determine the extent of substitution where various forms of post-acute care services are more or less available and a detailed examination of clinical cases from the most common diagnostic-related groupings receiving post-acute care in a few selected locations. Measures of the complexity of the clinical cases will be developed using a modification of the medical illness severity grouping system. This project is jointly funded by the Health Care Financing Administration and the Office of the Assistant Secretary for Planning and Evaluation. The conditions specifically being examined in the clinical analyses are stroke, chronic obstructive pulmonary disease, congestive heart failure, hip fracture, and hip replacement. The three locations from which patients were obtained for the case studies are Houston, Minneapolis/St. Paul, and Pittsburgh. Patients and caregivers were followed with interviews 6 weeks, 6 months, and 1 year after hospital discharge, whether the patients were discharged to nursing homes, rehabilitation hospitals, or home. The results of direct observation of selected aspects of patients' functional ability over time were also recorded. The study will provide extensive clinical and functional information about the kinds of patients who receive post-acute care and what happens to them.

The awardee has submitted a draft interim report of preliminary outcome results. The final report, which is expected in winter 1993, will include cost comparisons.

New Jersey Respite Care Pilot Project

Period: July 1988–September 1992.

Awardee: New Jersey Department of Human Services, 5 Quakerbridge Plaza, CN 712, Trenton, NJ 08625.

Investigator: William Ditto.

The New Jersey Respite Care Pilot Project was established to provide the kind of support and assistance that caregivers of the frail elderly and functionally impaired need to continue in that capacity. It was developed to learn if respite care services enhance and sustain the role of the family as caregivers by relieving them of some of their custodial responsibility, and whether these services delay or avert institutionalization. The project was designed to measure the impact on both care recipients and their caregivers.

Respite care is provided under this program by using short-term and intermittent companion services: homemaker, home health aide, and personal care services; adult day care, both social and medical; and out-of-home respite in a nursing home or residential care facility. In addition to these services, peer support, training, and counseling are being provided to family members. All of the services are available in either planned or emergency situations.

Federal funding of this statewide project began on July 1, 1988, and was originally scheduled to end on September 30, 1990. However, the project was extended until September 30, 1992 by the Omnibus Budget Reconciliation Act of 1990. During this study respite services have been provided to over 7,900 caregivers.

Preliminary data indicate that the typical caregiver is a 64-year-old female. About 40 percent of the caregivers are spouses of the care recipient and another 40 percent are their children. More than 80 percent assist with dressing and bathing and over 60 percent help with toileting. Caregivers report that the lack of time for themselves, coupled with the related stress, are the most overwhelming aspects of providing care. A substantial number also find the physical aspects of caregiving particularly difficult.

Homemaker/home health aide services have been provided to almost 80 percent of the care recipients. Fourteen percent of the recipients have used day care programs and 17 percent have had overnight stays in nursing homes or residential care facilities. Older care recipients have been less likely to use out-of-home services.

The median age of the care recipient is 79 and only 9 percent are age 60 or under. The large majority of this group's medical problems appear age-related. Twenty-two percent of the care recipients have Alzheimer's disease or a related disorder. The evaluation of the project is being conducted by the Institute for Health, Health Care Policy, and Aging Research at Rutgers University. A final report is expected in March 1993.

Program for All-Inclusive Care for the Elderly (On Lok) Case Study

Period: August 1989–June 1991.

Total Funding: $172,138.

Awardee: University of Minnesota Research Center, 1919 University Ave., St. Paul, MN 55104.

Investigator: Robert Kane, M.D.

For this study, researchers will provide a descriptive analysis of the early stages of the Program for All-Inclusive Care for the Elderly (PACE) demonstration. They will examine in detail the model of service delivery provided by On Lok Senior Health Services, San Francisco, California, and the degree to which aspects of this model are successfully replicated in eight sites nationwide. The results are expected to have utility as subsequent sites are developed for later implementation.

Two rounds of site visits to On Lok and PACE sites were completed and an interim report was submitted. A final report entitled Qualitative Analysis of the Program for All-Inclusive Care for the Elderly (On Lok) Case Study has been sent to the National Technical Information Service, accession number PB92–1784091. In addition to comparing eight PACE sites to On Lok on seven features of the PACE model, the researchers offer some lessons learned from the first eight sites regarding replicability; sources of start-up and development funds, census building, staffing, and patient mix of enrollees are seen as critical issues to future sites. Also offered are some issues to be faced by the evaluators, including the difficulty of selecting appropriate comparison groups, data equivalence across experimental and comparison groups, the need to collect additional data regarding enrollee outcomes (e.g., client and family satisfaction, affect, and quality of life), and statistical power and the role of pooling.

The following article has been published:

—Kane, R., Hixon Illston, L., and Miller, N.: Qualitative Analysis of the Program of All-inclusive Care for the Elderly (PACE). "The Gerontologist," forthcoming.

Quality of Care in the Program for All-Inclusive Care for the Elderly Model

Period: August 1991–July 1992.

Total Funding: $60,117.

Awardee: University of Minnesota Research Center, 1919 University Ave., St. Paul, MN 55104.

Investigator: Robert Kane, M.D.

The purpose of this study is to develop measures to assess quality of care on both a routine and periodic basis in the Program for All-Inclusive Care for the Elderly (PACE) model of care. These measures may be used in PACE site quality assurance programs and quality assurance monitoring undertaken by the Health Care Financing Administration and State Medicaid agencies. Attention will be given to measures that reflect concerns relevant to both acute and long-term care and the provision of that care in an integrated, capitated system.

A series of meetings has been held with PACE site clinicians and experts in geriatric care to develop tracer conditions for the quality assurance program. Preliminary findings were presented to the PACE Public Policy Forum in May 1992. A final report was received in November 1992 and is being submitted to the National Technical Information Service.

Frail Elderly Demonstration: The Program for All-Inclusive Care for the Elderly

Period: June 1990–April 1995.

Grantees: See Below.

As mandated by Public Law 99–509, as amended, the Health Care Financing Administration will conduct a demonstration which replicates, in not more than 15 sites, the model of care developed by On Lok Senior Health Services in San Francisco, California. The Program for All-Inclusive Care for the Elderly (PACE) demonstration replicates a unique model of managed-care service delivery for 300 very frail community-dwelling elderly, most of whom are dually eligible for Medicare and Medicaid coverage and all of whom are assessed as being eligible for nursing home placement according to the standards established by participating States. The model of care includes as core services the provision of adult day health care and multidisciplinary case management through which access to and allocation of all health and

long-term care services are arranged. Physician, therapeutic, ancillary, and social support services are provided on site at the adult day health center whenever possible. Hospital, nursing home, home health, and other specialized services are provided extramurally. Transportation is also provided to all enrolled members who require it. This model is financed through prospective capitation of both Medicare and Medicaid payments to the provider. Demonstration sites are to assume financial risk progressively over 3 years, as stipulated in the Omnibus Budget Reconciliation Act of 1987. The eight sites and their State Medicaid agencies that have been granted waiver approval to provide services are:

Elder Service Plan

Period: October 1989–May 1993.
Grantee: East Boston Geriatric Services, Inc., 10 Gove St., East Boston, MA 02128.
Period: October 1989–May 1993.
Grantee: Massachusetts State Department of Public Welfare, 180 Tremont St., Boston, MA 02111.

Providence ElderPlace

Period: October 1989–May 1993.
Grantee: Providence Medical Center, 4805 Northeast Glisan St., Portland, OR 97213.
Period: October 1989–May 1993.
Grantee: Oregon State Department of Human Resources, 313 Public Service Building, Salem, OR 97310.

Comprehensive Care Management

Period: October 1989–August 1993.
Grantee: Beth Abraham Hospital, 612 Allerton Ave., Bronx, NY 10467.
Period: October 1989–August 1993.
Grantee: New York State Department of Social Services, 40 North Pearl St., Albany, NY 12243.

Palmetto SeniorCare

Period: August 1990–September 1993.
Grantee: Richland Memorial Hospital, Five Richland Medical Park, Columbia, SC 29203.
Period: August 1990–September 1993.
Grantee: South Carolina State Health and Human Services Finance Commission, P.O. Box 8206, Columbia, SC 29202.

Community Care for the Elderly

Period: August 1990–October 1993.
Grantee: Community Care Organization of Milwaukee County, Inc., 1845 North Farwell Ave., Milwaukee, WI 53202.
Period: August 1990–October 1993.
Grantee: Wisconsin State Department of Health and Social Services, P.O. Box 7850, Madison, WI 53707.

Total Longterm Care, Inc.

Period: August 1991–July 1994.
Grantee: Total Longterm Care, Inc., 1801 East 19th Ave., Denver, CO 80218.
Period: August 1991–July 1994.
Grantee: Colorado Department of Social Services, 1575 Sherman St., Denver, CO 80203.

Bienvivir Senior Health Services

Period: December 1991–January 1995.
Grantee: Bienvivir Senior Health Services, 6000 Welch, Suite A-2, El Paso, TX 79905.
Period: December 1991–January 1995.
Grantee: Texas Department of Human Services, 701 West 51st St., Austin, TX 78714.

Independent Living for Seniors

Period: March 1992–April 1995.
Grantee: Rochester General Hospital, 1425 Portland Ave., Rochester, NY 14621.
Period: March 1992–April 1995.
Grantee: New York Department of Social Services, 40 North Pearl St., Albany, NY 12243.

Up to seven additional sites will be phased in over the next 2 years. A contract to evaluate the PACE demonstration was awarded in June 1991. Presentations of the demonstration implementation and evaluation issues were given at the following national meetings: American Public Health Association annual meeting and Gerontological Society of America annual meeting.

Evaluation of the Program for All-Inclusive Care for the Elderly Demonstration

Period: June 1991-February 1996.

Total Funding: $4,486,514.

Contractor: Abt Associates, Inc., 55 Wheeler St., Cambridge, MA 02138-1168.

Investigator: Laurence Branch, Ph.D.

The Program for All-Inclusive Care for the Elderly (PACE) demonstration replicates a unique model of managed-care service delivery for 300 very frail community-dwelling elderly, most of whom are dually eligible for Medicare and Medicaid coverage and all of whom are assessed as being eligible for nursing home placement according to the standards established by participating States. The model of care includes as core services the provision of adult day health care and multidisciplinary team case management through which access to and allocation of all health and long-term care services are arranged. This model is financed through prospective capitation of both Medicare and Medicaid payments to the provider. The purpose of the evaluation is to examine PACE sites before and after assumption of full financial risk, with the purpose of determining whether the PACE model of care, as a replication of the On Lok Senior Health Services model of care, is cost effective relative to the existing Medicare and Medicaid systems. Specific evaluation questions relate to the model of care and the effects of the model on participant utilization, expenditures, and outcomes.

An initial round of site visits has been completed, and the evaluation design and data collection plan are being revised based on these site visits.

Implementation of the Home Health Agency Prospective Payment Demonstration

Period: June 1990–June 1995.

Total Funding: $1,629,606.

Awardee: Abt Associates Inc., 55 Wheeler St., Cambridge, MA 02138-1168.

Investigator: Henry Goldberg.

This contract implements and monitors the demonstration design developed by an earlier contract with Abt Associates Inc., The Home Health Agency Prospective Payment Demonstration. The project will implement a demonstration testing two alternative methods of paying home health agencies (HHAs) on a prospective basis for services furnished under the Medicare program. The prospective payment approaches to be tested are Phase I, payments per visit by type of discipline, and Phase II, payments per episode of Medicare-covered home health care. Home health agency participation in the demonstration is voluntary.

Following the initial home health agency recruitment, operations of the first phase of the demonstration began October 1, 1990. Forty-nine HHAs are participating in Phase I. Developmental work involving case-mix payment adjustments in Phase II is ongoing. Implementation of the second phase testing the per episode payment method is scheduled to begin in 1993. In each phase, HHAs that agree to participate are randomly assigned to either the prospective payment method or to a control group that continues to be reimbursed in accordance with the Medicare current retrospective cost system. Each HHA will participate in the demonstration for 3 years.

Evaluation of the Home Health Prospective Payment Demonstration

Period: September 1990–June 1995.

Total Funding: $2,858,676 (Phase I).

Contractor: Mathematica Policy Research, Inc., P.O. Box 2393, Princeton, NJ 08543-2393.

Investigator: Barbara Phillips, Ph.D.

The purpose of this contract is to evaluate the first phase of a demonstration designed to test the effectiveness of using prospective payment methods to reimburse Medicare-certified home health agencies (HHAs) for services provided under the Medicare program. In Phase I, a per visit payment method which sets a separate payment rate for each of six types of home health visits (i.e., skilled nursing, home health aide, physical therapy, occupational therapy, speech therapy, and medical social services) will be tested. Mathematica Policy Research will evaluate the effects of this payment method on HHAs' operations, quality of services HHAs deliver to Medicare beneficiaries, and Medicare expenditures. The contractor will also analyze the relationship between patient characteristics and the cost and use of HHA serv-

ices in order to develop improved methodologies for adjusting prospective payment rates for case-mix variations.

The demonstration began on October 1, 1990. The contractor has submitted a design report, information collection clearance packages, several quarterly reports, and a case study report. The contractor is currently conducting case-mix analyses, as well as other analyses of HHA costs and service use patterns, to assist the Health Care Financing Administration in refining the per episode payment method that will be tested in Phase II of this demonstration. A special report on the results of the contractor's case-mix analyses is expected in winter 1993. Phase II of the demonstration, which will test the per episode payment method, is scheduled to begin in late 1993.

Quality Review for the Home Health Agency Prospective Payment Demonstration

Period: September 1991–December 1994.

Total Funding: $1,499,085.

Contractor: New England Research Institute, Inc., 9 Galen St., Watertown, MA 02172.

This contract involves quality review of the care received by Medicare beneficiaries who are clients of the home health agencies that are participating in the Home Health Agency Prospective Payment System demonstration (HHA/PPS). The HHA/PPS demonstration is testing the costs and benefits of prospective payment for Medicare home health services compared to the current retrospective cost reimbursement system. In order to assure that the incentives created under the HHA/PPS demonstration do not result in the provision of inadequate home health care to Medicare beneficiaries, the New England Research Institute, Inc. (NERI), the quality review contractor, implemented the quality assurance plan that calls for a review of patient records for a sample of Medicare beneficiaries receiving care under the HHA/PPS demonstration. If potential or actual problems are discovered, the contractor implements a defined protocol to address the situation.

During the initial year of the contract, NERI staff completed all of the activities related to the start-up of the quality assurance plan, including baseline training of NERI nurse reviewers who are conducting the medical record reviews. NERI has begun the process of assessing patterns of problems within any given home health agency which may require educational follow-up or additional medical reviews.

Develop and Demonstrate a Method for Classifying Home Health Patients to Predict Resource Requirements and to Measure Outcomes

Period: June 1987–March 1991.

Total Funding: $968,332.

Awardee: Georgetown University, Georgetown School of Nursing, 3700 Reservoir Road, NW., Washington, DC 20007.

Investigator: Virginia Saba, RN, Ed.D.

The purpose of this project is to develop a method for classifying patients that will predict resource requirements and measure outcomes of Medicare patients in certified home health agencies (HHAs). Data on 73 dependent variables were collected from the home health records of approximately 9,000 recently discharged Medicare patients drawn from a national sample of approximately 650 certified HHAs, stratified by size, ownership, and geographic location. The data are being analyzed, using multivariate statistical techniques to determine which variables are most predictive of resource requirements. The identified relevant variables will be incorporated into a classification method with an assessment tool that categorizes patients according to predicted resource requirements. A data base of participating HHAs and the characteristics of their Medicare patients will be created.

Analysis of the data collected in the study indicated that patients' nursing diagnoses and nursing procedures are important variables in explaining home health resource use and costs. The final report entitled "Develop and Demonstrate a Method for Classifying Home Health Patients to Predict Resource Requirements and to Measure Outcomes" is available from the National Technical Information Service, accession number PB177013.

Analysis of Home Health Cost and Service Utilization Issues

Period: September 1991–November 1992.

Funding: $189,607.

Awardee: University of Minnesota Research Center, 1919 University Ave., St. Paul, MN 55104.

Investigator: Barbara Phillips, Ph.D.

For this study, researchers will prepare a synthesis of research findings related to prospective payment and analyze Medicare claims data to examine several aspects

of prospective payment methodologies for home health agencies, such as outlier cases and volume adjustments. These analyses will provide information to the Health Care Financing Administration (HCFA) for use in the future development of prospective payment methodologies for Medicare home health services.

The awardee has submitted draft papers on episode length, volume adjustors, and a review of the literature related to Medicare home health prospective payment. These are currently under review within HCFA.

Home Care Quality Studies

Period: October 1989–September 1993.

Total Funding: $2,848,782.

Contractor: University of Minnesota, School of Public Health, Box 197, 420 Delaware St., SE., Minneapolis, MN 55455.

Investigator: Robert Kane, M.D.

For this study, the contractor will carry out research on the following topics:

—Quality of long-term care services in community-based and custodial settings.

—Effectiveness of (and need for) State and Federal protections for Medicare beneficiaries that ensure adequate access to nonresidential long-term care services and protection of consumer rights.

The contractor will focus on in-home care, examining traditional home health services that are reimbursed by Medicare and Medicaid, as well as personal care and supportive services which have more recently been covered by Federal and State sources of funding. Primary project tasks include:

—Development of a taxonomy clarifying the various objectives and goals ascribed to home and community-based care from the various perspectives of consumers, payers, and care providers.

—Development and feasibility-testing of a survey design that would measure the extent of, need for, and adequacy of home care services for the elderly.

—A study of variations in labor supply and related effect(s) on home care quality, as well as factors that contribute to these variations.

—Recommendations to improve the quality of home and community-based services by identifying best practices and promising quality assurance approaches.

The first project task (development of a taxonomy of goals and objectives) has been completed, and a report on this component has been received. The University of Minnesota is continuing work on each of the remaining primary tasks. The final report for this contract is expected in September 1993.

Study of Home Health Care Quality and Cost Under Capitated and Fee-for-Service Payment Systems

Period: June 1987–June 1993.

Total Funding: $1,683,773.

Awardee: Center for Health Policy Research, 1355 South Colorado Blvd., Denver, CO 80222.

Investigator: Peter Shaughnessy, Ph.D.

This project is designed to evaluate service utilization, quality, and cost of Medicare home health care provided under capitated and noncapitated (fee-for-service) payment systems. The Center for Health Policy Research will collect patient-level, case-mix, and service use data on a sample of approximately 4,000 patients from 44 agencies nationwide. A random and stratified patient sample will be drawn from both fee-for-service and capitated payment environments to assess and compare cost effectiveness of care, quality of care, and incentives to admit and provide care in the two payment environments. Secondary data analysis will also be completed on a sample of 10,000 Medicare beneficiaries using Medicare claims data to compare service use patterns among post-hospital Medicare patients discharged to skilled nursing facilities, home health care facilities, and the community, as well as Medicare home health patients admitted from the community.

Primary data collection has been completed and data processing is underway. Eight study papers have been received, reviewed and accepted. The Final Report is expected to be complete in spring 1993.

Testing the Predictive Validity of Using Medicare Claims Data to Target High-Cost Patients

Period: August 1991–November 1992.

Total Funding: $139,898.

Awardee: Brandeis University Research Center, 415 South St., Waltham, MA 02254.

Investigator: Christine Bishop, Ph.D.

For this study, Brandeis will investigate the feasibility of using historical Medicare claims data of patients hospitalized with certain primary diagnoses in order to identify a subset of patients who are more likely to incur high levels of Medicare reimbursements in the future. Analysis will be restricted to a sample of hospital patients with selected illnesses where past research indicates the specific patient diagnoses eventually results in higher Medicare costs, and it is determined that targeted case management or coordinated care programs can be potentially effective (based on research and/or professional clinical judgment) in reducing overall health care costs.

A preliminary study design has been completed, as well as construction of an analytic research file. The final report for this project is anticipated in winter 1993.

Evaluation and Technical Assistance of the Medicare Alzheimer's Disease Demonstration

Period: September 1989–September 1994.

Total Funding: $2,999,812.

Contractor: Institute for Health and Aging, University of California, San Francisco, Building N631, San Francisco, CA 94134.

Investigator: Robert Newcomer, Ph.D.

The Medicare Alzheimer's Disease Demonstration was authorized by Congress under Section 9342 of Public Law 99-509 to determine the effectiveness, cost, and impact on health status and functioning of providing comprehensive services to beneficiaries who have dementia. Two models of care are being studied under this project. Both provide case management and a wide range of in-home and community-based services, including homemaker and personal care services, adult day care, and education and counseling for family caregivers. The two models vary by the intensity of the case management beneficiaries and their families receive and the level of Medicare reimbursement that is available each month to pay for demonstration services. Clients are responsible for a 20-percent coinsurance just as they are under the regular Medicare program. There are four Model A and four Model B sites participating in this demonstration. Under Model A, each site has a case manager to client ratio of 1:100. Monthly client expenditure caps which have been adjusted for geographical cost variations range from $336 to $407. Model A sites are located in Memphis, Tennessee; Portland, Oregon; Rochester, New York; and Urbana, Illinois. The case management ratio in the Model B sites is 1:30 and their monthly expenditure caps are between $549 and $662. Model B sites are located in Cincinnati, Ohio; Miami, Florida; Minneapolis, Minnesota; and Parkersburg, West Virginia. Major questions to be addressed by the evaluation include:

—What factors are associated with the cost effectiveness of providing an expanded package of home care and community-based services to Medicare beneficiaries with Alzheimer's disease or related disorders?

—How do various services impact on the health status and functioning of dementia patients and their caregivers?

—What are the effects of providing community-based services on caregiver burden and stress?

—Do additional home care services delay or prevent institutionalization of beneficiaries with dementia?

A provision in the Omnibus Budget Reconciliation Act of 1990 extended the demonstration from 3 to 4 years. It also increased the funding for the project's administrative and service costs from $40 million to $55 million and for the evaluation from $2 million to $3 million. During the first 2 years of the demonstration, the sites enrolled approximately 6,000 Medicare beneficiaries, including both treatment and control group members. However, there has been an unexpectedly high client attrition rate. Most of the individuals who have left the project have been disenrolled because of death or nursing home placement. The demonstration is scheduled to end in May 1993. A final report indicating the project's findings and recommendations for possible legislative changes will be available in September 1994.

National Recurring Data Set Project: Ongoing National and State-by-State Data Collection and Policy/Impact Analysis on Residential Services for Persons With Developmental Disabilities

Period: August 1991–September 1992.

Total Funding: $50,000.

Awardee: The Administration on Developmental Disabilities, Room 336-D, Hubert H. Humphrey Building, 200 Independence Ave., SW., Washington, DC 20201.

Investigator: Charles Lakin, Ph.D.

The Health Care Financing Administration's transfer of funds to the Administration on Developmental Disabilities (ADD) is in support of an existing ADD grant to

the Institute on Community Integration, Center for Residential and Community Services at the University of Minnesota. This supplement will support the conduct of secondary data analyses and the production of a report that will describe and update the status of persons with mental retardation and related conditions in intermediate care facilities for the mentally retarded (ICFs/MR), Medicaid waiver programs, and nursing homes funded under Medicaid in order to assist in the evaluation of Medicaid services for persons with these conditions, and to point out areas in need of reform. The report will include:

—A background description of the key Medicaid programs of interest.
—State-by-State and national statistics on ICFs/MR, Medicaid home and community-based services, and nursing home utilization.
—A description of the characteristics of ICFs/MR and their residents, with comparative statistics for noncertified facilities.

The final report for this project was received in March 1992 and is being sent to the National Technical Information Service.

The Development of Long-Term Care Reform Strategy for New York's Office of Mental Retardation and Developmental Disabilities

Period: June 1988–December 1990.

Total Funding: $115,581.

Awardee: New York State Department of Social Services, Division of Medical Assistance, 40 North Pearl St., Albany, NY 12243.

Investigator: Max Chmura.

The New York Office of Mental Retardation and Developmental Disabilities is conducting a 2½-year project to develop a comprehensive plan and waiver application that would reform the financing, regulation, and service delivery of the mentally retarded and developmentally disabled (MR/DD) system in three districts covering eight New York counties. The State considers the demonstration as the first step toward statewide implementation. The objectives are to:

—Develop a financing system that will improve services to the MR/DD population by expanding the number and types of people to be served and the types of services to be provided.
—Change the manner in which quality of care is assured.
—Constrain growth in Federal expenditures for these services.

Waivers would alter the Medicaid basis of payment, revise the State Medicaid plan requirements, change how Medicaid funds can be used, and implement revised quality assurance regulations. The demonstration will test an alternative financing approach that approximates recently formulated departmental policy directions as developed by the Department of Health and Human Services working group on intermediate care facilities for the mentally retarded. The project represents a major test of reform in the delivery of services for persons who are developmentally disabled.

Both national and State-level advisory panels have been convened and issue papers have been completed. The State submitted and received approval of a Medicaid 2176 home and community-based care waiver to implement this project. The waiver program was implemented in Fall 1991. A final report was received and accepted in Spring 1992.

Analysis and Comparison of State Board and Care Regulations and Their Effect on the Quality of Care in Board and Care Homes

Period: September 1991–September 1992.

Total Funding: $200,000.

Awardee: Office of the Assistant Secretary for Planning and Evaluation, Room 410–E, Hubert H. Humphrey Building, 200 Independence Ave., SW., Washington, DC 20201.

Investigator: Catherine Hawes, Ph.D.

The Health Care Financing Administration (HCFA) has transferred funds to the Office of the Assistant Secretary for Planning and Evaluation (ASPE) in support of an existing contract with the Research Triangle Institute (RTI). ASPE has funded RTI to conduct a study to examine the relationship between the type and amount of State regulation and the quality of care in board and care homes. In addition, the study will document the characteristics of a large sample of board and care homes, their residents, and owners/operators. HCFA's support will enable the contractor to increase the project's sample size to allow for analysis of the relationship between additional characteristics of board and care homes and to conduct a more detailed field test.

The following ten states have been selected to participate in the study: New Jersey, Texas, Oklahoma, Georgia, Kentucky, Arkansas. Florida, Illinois, California,

and Oregon. Survey instruments are currently under revision and pre-test activities are underway in facilities in North Carolina and the District of Columbia. Data collection activities are expected to begin in the Fall of 1991.

Prior and Concurrent Authorization Demonstrations

Period: September 1987–August 1992.
Total Funding: $827,200.
Contractor: Lewin/ICF, 9300 Lee Highway, Fairfax, VA 22031–1207.
Investigator: Barbara Manard, Ph.D.

Under Section 9305 of Public Law 99–509, the Secretary of Health and Human Services is required to conduct a demonstration program concerning prior and concurrent authorization for post-hospital extended care services and home health services furnished under Part A or Part B of Title XVIII. This legislation responds to concerns expressed by home health agencies and skilled nursing facilities (SNFs) that under the current system of Medicare payment they cannot adequately predict what services the fiscal intermediaries (FIs) will deny as noncovered. In recent years, the number of visits denied by FIs has increased steadily. It is hypothesized that prior authorization (PA) and concurrent authorization (CA) payment approaches will reduce the number of services denied without increasing Medicare expenditures. Under PA, providers submit treatment plans to FIs for review prior to the start of care; under CA, plans of treatment are submitted when care begins. In both approaches, the provider receives notification from the FI about how many services will be covered. This provides greater certainty about coverage and payment before services are given. The law requires that the demonstration include at least four projects and be initiated by January 1, 1987, and that the Secretary must evaluate the demonstration and report to Congress on the evaluation. The evaluation and report must address:

—The administrative and program cost for prior and concurrent authorization compared with the current system of retroactive claims review.
—The impact on access and availability of post-hospital services and timeliness of hospital discharges.
—The accuracy and cost savings of payment determinations and rates of claims denials compared with the current system.

The Bureau of Program Operations, Health Care Financing Administration (HCFA), implemented a home health CA pilot project in July 1987. This project was initiated in Illinois and in the entire Dallas region and is still in progress. Lewin/ICF implemented the SNF demonstration in September 1989 at sites in Indiana and Tennessee. Lewin/ICF is responsible for evaluating both the home health pilot project and the SNF demonstration.

A Report to Congress based on Lewin/ICF's preliminary evaluation of the home health project and the design of the SNF project was submitted to Congress in August 1990. The SNF prior authorization demonstration ended in November 1990. Both an update of the home health pilot project and an evaluation of the SNF demonstration have been submitted to HCFA and are under review.

Long-Term Care Supply and Medicare Hospital Utilization

Period: August 1989–August 1990.
Total Funding: $47,986.
Awardee: Abt Associates, Inc., 55 Wheeler St., Cambridge, MA 02138–1168.
Investigator: Robert Schmitz, Ph.D.

The purpose of this project was to investigate how local variations in the availability of nursing home beds affect Medicare hospitalization rates. Effects on the number of admissions, the number of hospital readmissions, the number of hospital days used, and the costs per Medicare Part A enrollee were evaluated. Urban and rural differences were assessed. The impacts of community long-term care services, Medicare risk-contract health maintenance organization services, and the prospective payment system on Medicare Part A utilization were evaluated.

A final report was received in May 1992, and is being sent to the National Technical Information Service. Findings from the report were presented at the Association for Health Services Research and American Public Health Association annual meetings. The author concludes that while increased availability of nursing home beds was found to reduce the average length of hospital stays, it also appeared to stimulate rather than reduce hospital admissions for aged beneficiaries living in urban areas and to increase the likelihood of rehospitalization, contrary to the study's hypotheses. Moreover, the increase in the probability of hospital admission associated with the addition of nursing home beds was most pronounced among the oldest beneficiaries, those most likely to use nursing home care. Furthermore, the relation

between nursing home beds and hospital use was positive even after controlling for persistent county-specific effects.

Impacts of Long-Term Care Supply Differences on Medicare Service Use

Period: August 1990–December 1991.

Total Funding: $80,204.

Awardee: Brandeis University Research Center, 415 South St., Waltham, MA 02254.

Investigator: Christine Bishop, Ph.D.

For this study, Brandeis identified and assessed methodological and practical problems associated with a potential investigation of access to long-term care (LTC) service and the resulting impact on beneficiary use of Medicare-covered services. These services include hospital care, Medicare-covered home health care, and Medicare-covered skilled nursing facility care. The project directly addresses issues, which have been studied in various models, of the effects of LTC access and supply on utilization of health services. Brandeis has also developed a suggested study design on this topic.

The final report for this study, entitled "Impacts of LTC Supply Differences on Medicare Services Use: A Conceptual Model," has been accepted and will be submitted to the NTIS.

Urban/Rural Variation in Home Health Agency and Nursing Home Services

Period: September 1989–December 1991.

Total Funding: $155,096.

Awardee: Brandeis University Research Center, 415 South St., Waltham, MA 02254.

Investigator: Christine Bishop, Ph.D.

Brandeis University and The Urban Institute compared urban and rural home health services and nursing home services to determine variation between provider characteristics and service utilization patterns. The underlying cost structures of urban and rural home health agencies were studied as well. This study is national in scope and utilizes several Medicare data bases for analysis.

The following reports have been prepared by The Urban Institute under this study:

—"Home Health Use Patterns in Rural and Urban Areas: Are They Different?"
—"Access to Home Health Services: Is it a Problem for the Rural Elderly?"
—"The Provision of Home Health Services: Is it a Problem in Rural Areas?"
—"The Provision of Nursing Home Services: Is there a Problem in Rural Areas?"
—"The Characteristics of Nursing Home Residents: An Urban-Rural Comparison."
—"Explaining Urban-Rural Differences in Skilled Nursing Facility Benefit Use."
—"Medicare Costs in Urban and Rural Nursing Homes: Are Differential Payments Required?"

These reports indicate that the proportion of Medicare beneficiaries using home health services and the average number of visits per user are greater in urban areas. Within rural areas, use rates increase with population density. A greater proportion of home health visits provided to rural home health users is skilled nursing services, possibly substituting for reduced availability of physical, speech, and occupational therapists in rural areas. Researchers found that the supply of nursing home beds per 1,000 Medicare beneficiaries is higher in rural areas, but rural nursing homes are more likely to provide intermediate care facility level of care rather than skilled nursing facility (SNF) level of care. Access to the Medicare SNF benefit appears to be greatest in large metropolitan areas, followed by rural areas, with enrollees in small and medium-sized areas having less accessibility to beds. The hospital swing-bed program appears to be an important element of access to post-hospital SNF level of care in rural areas. All reports have been completed and will be sent to the National Technical Information Service in winter 1993.

Analysis of Costs, Patient Characteristics, Access, and Service Use in Urban/Rural Home Health Agencies

Period: September 1989–August 1991.

Total Funding: $103,420.

Awardee: University of Minnesota Research Center, 1919 University Ave., St. Paul, MN 55104.

Investigator: John Nyman, Ph.D.

The purpose of this project was to study urban and rural differences in home health agency costs, patient characteristics, access to care, and service utilization patterns in the State of Wisconsin. The study included two types of analyses:

—Costs, patient characteristics, and service utilization patterns using home health data from Wisconsin.
—Access to health care services using patient-level Medicare data. For the second type of analysis, Mathematica Policy Research, Inc., as subcontractor for the project, applied two of the "Aftercare Guidelines" to the Medicare plan of treatment data to develop a measure of access between urban and rural recipients of home health care.

This project has been completed. Two reports were prepared. In the first, "Access to Medicare Home Health Agencies: Differences Between Urban and Rural Areas," researchers indicate that Medicare home health users in rural areas of Wisconsin used fewer physical therapy services than those in urban areas. It appears that rural home health agencies may have compensated by providing more restorative skilled nursing services. In the second, "Analysis of Costs, Patient Characteristics, Access, and Service Use in Urban and Rural Home Health Agencies," researchers estimate a total cost function for home health agency costs in urban and rural areas of Wisconsin. Findings indicate that urban residents in Wisconsin were more likely to be home health patients and to receive more visits, but that these differences may be explained by differences in the types of patients being served in these areas. Both reports will be sent to the National Technical Information Service in winter 1993.

Study of Medicare Home Health Agency Use of the Home Health Case Management Benefit

Period: September 1991–January 1992.
Total Funding: $76,836.
Awardee: Project HOPE Research Center, 2 Wisconsin Circle, Suite 500, Chevy Chase, MD 20815.
Investigator: Robyn Stone, Ph.D.

For this study, researchers will analyze Medicare claims and plan of treatment data for home health agencies (HHAs) in order to examine the provision of skilled patient management by HHAs. Recent information suggests that the use of this service has significantly increased in recent years as a result of changes in the interpretation of coverage requirements for home health care. This study will provide the Health Care Financing Administration with information on the characteristics of patients who are receiving this service, and the types of HHAs that are furnishing the service.

Construction of data/analytical files is almost complete. These files will subsequently be used to conduct episode analyses and to link plan-of-treatment information with Medicare claims data. The final report for this project is due January 1993.

Nurse Practitioner/Physician Assistant Aggregate Visit Demonstration

Period: September 1990–September 1993.
Total Funding: $130,538.
Awardee: The Urban Medical Group, 545 D Centre St., Jamaica Plain, MA 02130.
Investigator: Rita Chang, Ph.D.

Under section 6114(e) of Public Law 101–239, the Medicare program provides Part B coverage to nursing home residents for medical visits rendered by nurse practitioners who are members of a physician/physician assistant/nurse practitioner team. Under this legislation, the number of visits supplied to any nursing home patient is limited to an average of 1.5 visits per month. Section 6114(e) mandates a demonstration project under which the visit limitation would be applied on an average basis over the aggregate total of residents receiving services from members of the provider team. A preliminary Massachusetts demonstration project, Case Managed Medical Care for Nursing Home Patients, used nurse practitioners and physician assistants to provide visits to nursing home patients. This demonstration ended on September 30, 1990. Many of the original Massachusetts demonstration sites are also participating in this second project.

The project is being conducted in two phases. The first phase (primarily for planning and development) was completed in March 1992. The second phase, which includes the actual implementation and operation of the demonstration, began in April 1992. Negotiations with the Medicare carrier, Massachusetts Blue Cross and Blue Shield, are almost complete. The Urban Medical Group has arranged for approximately 16 provider groups (medical teams) to participate in this demonstration. The final report for this project is expected in July 1993.

Future Directions For Long-Term Care

During 1992, HCFA devoted substantial resources to the further development and implementation of demonstrations to test the cost-effectiveness of prospective payment systems for nursing homes and home health agencies implement and monitor new coordinated care systems for the frail elderly, and develop outcome-oriented quality measures to improve the quality of care in these settings.

We will continue to test alternative financing schemes for long term care services, including preparations for implementation of the Multi-State Nursing Home Case Mix and Quality Demonstration. The Home Health Agency Prospective Payment Demonstration will continue during 1993, and we will continue current analyses to develop a case-mix adjusted per-episode payment methodology to be implemented in the second phase of the demonstration. Developmental activities related to the Community Nursing Organization Demonstration will continue, including development of detailed operating plans and protocols, in preparation for implementation of the demonstration with the four CNO sites.

We will continue our efforts to develop, operate, and evaluate coordinate care systems for the frail elderly, including the Medicare Alzheimer's Disease Demonstration, the Program for the All-inclusive Care of the Elderly Demonstration, and the Social/Health Maintenance Organization Demonstration.

We also will continue the development and testing of outcome-oriented measures of quality for nursing home and home health services and assessment of the applicability of using payment generated data to monitor quality. In this light, we will continue to develop a multi-State demonstration integrating resident assessment and case-mix payment data with the quality assurance process for nursing home providers.

Another very important area that will continue to be explored is alternative financing mechanisms for long term care. Although the majority of the elderly are covered by both Medicare and supplemental insurance, a large portion of long term care services remain uncovered. Medicaid covers long term nursing care, but only after the elderly individuals have depleted their resources. Research is continuing that will identify the sources of financing for long term care at various points throughout institutionalization. This research will further examine characteristics of individuals who come to rely upon Medicaid for payment for their care. By identifying the risks associated with nursing home use, we hope to be able to propose improved methods of paying for this care. Alternatives being studied as a solution for some of the elderly's problems in financing long term care are life care centers and private long term care insurance. Other ORD financing research continues to examine various States' reimbursement of long term care in order to assess the feasibility of recommending policy changes, e.g., prospective payment for SNF care.

We will continue to support data collection and data analyses from projects that gather detailed information from representative national samples or other large segments of the elderly population. Research is continuing on the estimated future acute and long term care utilization based on information from available surveys on the morbidity, disability, and mortality of different birth cohorts. We will continue initiatives to make additional data bases available for research and analysis, such as the 1989 Long Term Care Survey and State Medicaid data.

In 1993, we also will begin an evaluation of the Community Supported Living Arrangements (CSLA) program, mandated by section 4712 of OBRA 90. Eight States are receiving funding through this optional Medicaid State plan service to develop CSLA programs, in which service individuals with mental retardation and related conditions living in the community independently, with their family or in a home of three or fewer individuals. HCFA will also expand its research activities related to the nonelderly disabled.

Social Health Maintenance Organization Project for Long-Term Care

Period: August 1984–December 1995.

Awardees: See Below.

In accordance with Section 2355 of Public Law 98–369, this project was developed and is currently implementing the concept of a social health maintenance organization (S/HMO) for acute and long-term care. A S/HMO integrates health and social services under the direct financial management of the provider of services. All services are provided by or through the S/HMO at a fixed annual prepaid capitation sum. Four sites have been selected to participate in this project.

Of the four S/HMO demonstration sites selected, two are HMOs that have added long-term care services to their existing service packages and two are long-term care providers that have added acute care service packages. The demonstration sites utilize Medicare and Medicaid waivers, and all initiated service delivery by March

1985. During the first 30 months of operation, Federal and State governments shared financial risk with the sites. This risk sharing ended August 31, 1987. This demonstration was extended twice by legislation. The current legislation (P.L. 101-508) extends the demonstration period through December 31, 1995. The S/HMO sites are:

Grantee: Elderplan, Inc., 6323 Seventh Avenue, Brooklyn, NY 11220.

Grantee: Group Health, Inc., and Ebenezer Society, 2829 University Avenue, SE., Minneapolis, MN 55414.

Grantee: Kaiser-Permanente Center for Health Research, 4610 Southeast Belmont Street, Portland, OR 97215-1795.

Grantee: Senior Care Action Network, 521 East Fourth Street, Long Beach, CA 90802.

Analysis of Utilization and Cost Data From Comprehensive Outpatient Rehabilitation Facilities

Period: August 1991-September 1992.

Total Funding: $80,890.

Awardee: The RAND Policy Research Center.

Investigator: Joan Buchanan, Ph.D.

The RAND Policy Research Center will provide information on the utilization patterns of comprehensive outpatient rehabilitation facilities (CORFs) including the types of Medicare patients being treated, and the composition and duration of services. The types of patients and the patterns of care for Medicare patients treated in CORFs will also be compared with those receiving outpatient rehabilitation services in other settings including hospital outpatient departments, independent rehabilitation agencies, and home health agencies.

Analysis of the data is underway and a draft final report is expected in fall 1992.

Prospective Payment System and Post-Hospital Care: Use, Cost, and Market Changes

Period: September 1985-January 1990.

Funding: $706,118.

Awardee: Georgetown University, Center for Health Policy Studies, 2233 Wisconsin Avenue, NW., Washington, DC 20007.

Investigator: William Scanlon, Ph.D.

The purpose of the project is to determine how much the hospital prospective payment system (PPS) shifts care from the hospital to skilled nursing facilities (SNFs) and home health providers and to analyze the impact of this shift on total costs to Medicare and on changes in SNF characteristics that are likely to cause an increase in use by Medicare beneficiaries in the future. Medicare claims will be analyzed to determine how PPS has affected total service use (i.e., hospital, SNF, and home health) and costs for hospital patients. In addition, SNFs will be surveyed to identify changes in nursing home patients, services, and market structure likely to affect Medicare use. The survey will be supplemented with data from the Medicare/Medicaid Automated Certification System (MMACS), SNF cost reports, and other sources.

A draft final report has been received and is under review. When it is accepted, it will be made available through NTIS.

Multistate Case-Mix Payment and Quality Demonstration

Period: May 1990-June 1996.

Funding: $981,718.

Awardee: New York State Department of Health, Room 1683, Corning Tower, Albany, NY 12237.

Investigator: David Wilcox.

New York State will participate in the Multistate Nursing Home Case-Mix and Quality (NHCMQ) Demonstration presently in its development phase. The objective of the demonstration is to test the feasibility and cost effectiveness of a case-mix payment system for nursing facility services under Medicare and Medicaid that are based on a common patient classification system. The addition of New York to the demonstration enhances the Health Care Financing Administration's ability to project the results of the demonstration on a national basis. New York represents a heavily regulated, northern industrialized area with larger, high-cost nursing facilities that are medically sophisticated and highly skilled. Sixteen percent of the national Medicare skilled nursing facility days are incurred in New York State. New York is uniquely suited for inclusion in this demonstration because it has already implemented a complementary system for its Medicaid nursing facility payment program.

In early 1991, project staff completed the minimum data set field test in 25 facilities on 993 residents. These data have been added to the data base analyzed to de-

velop the new NHCMQ Medicare/Medicaid classification system. The inclusion of the New York data have resulted in the addition of a very high rehabilitation group to the upper end of the classification. The State has implemented the minimum data set plus (MDS+) statewide as their resident assessment instrument. In November 1992, the State will begin receiving the information monthly from all facilities. The State is conducting analyses of 1990 Medicare cost report data, MEDPAR Part A skilled nursing facility stay data and New York patient review instrument (PRI) data for use in developing the demonstration Medicare case-mix payment system. The demonstration is expected to become operational in July 1993.

The Use of Medicaid Reimbursement Data in the Nursing Home Quality Assurance Process

Period: June 1988–February 1993.

Funding: $542,389.

Awardee: Center for Health Systems Research and Analysis, University of Wisconsin-Madison, Room 1163, WARF Office Bldg., 610 Walnut Street, Madison, WI 53705.

Investigator: David Zimmerman, Ph.D.

The purposes of this project are to assess the feasibility of using Medicaid reimbursement data to target facilities and residents in the nursing home quality assurance survey process and to develop a set of quality of care indicators (QCIs) using resident assessment data. Medicaid reimbursement data on medication use, sentinel health event, and other indicators are being provided to surveyors in preparation for the field survey to help target facilities for more intensive review, identify specific areas of deficient care, and identify individual residents for more detailed review. The objectives of the project are to:

Convert reimbursement data into specific QCIs.

Identify the Federal regulations for which the use of QCIs has the greatest potential benefit.

Develop and demonstrate in one State (Wisconsin) procedures for providing QCIs to survey staffs.

Assess the potential for implementing the system in other States.

Develop a set of quality indicators (QIs), using resident assessment information, sometimes in combination with claims data, that can be used in the survey process as part of The Multistate Nursing Home Case-Mix and Quality (NHCMQ) Demonstration.

A program was implemented on December 1, 1990, in which a randomly assigned group of survey teams in two Wisconsin regions were provided information on 33 QCIs for each nursing facility prior to the survey. Surveyors used the QCI information in selecting residents for indepth review and in determining whether care deficiencies should be cited. The surveyors completed and returned a feedback report that documented the results of QCI residents' investigations. Through November 1991, QCIs were used in approximately 120 surveys, in addition to the 17 surveys in which they were used in a pilot study. A report on the QCI demonstration is expected in fall of 1992.

Activities continue on the development of QIs for the Multistate NHCMQ Demonstration. Twelve quality areas (domains) have been identified. Within these domains, 158 different constellations of process, outcome and risk factors have been analyzed using resident set information from facilities in Kansas, Maine, Mississippi and South Dakota. This analysis will be reviewed by a research oriented quality panel, with the intent of reducing the list from which the QIs to be pilot tested by the States in spring 1993 will be selected. A clinical work group consisting of more than 60 nurses, social workers, rehabilitation specialists, physicians, and other health care professionals, as well as case-mix States' project staff make recommendations regarding the QIs to be pilot tested, and those that should be researched for possible future use. It is expected that no more than 30 QIs will be proposed for use in the operational phase of the demonstration in July 1993.

Texas Nursing Home Case-Mix Demonstration

Period: September 1987–March 1993.

Funding: $532,830.

Awardee: State of Texas Department of Human Services, P.O. Box 149030 (MC–E–601), Austin, TX 78714–9030.

Investigator: Pam Coleman.

This Texas Department of Human Services project has two parts. The first part was to develop, implement, and evaluate a Medicaid prospective case-mix payment system. The payment system is based on feasibility studies sponsored by the Health

Care Financing Administration (HCFA). The major Medicaid objectives of this part of the project are to:

Match payment rates to resident need.
Promote the admission of heavy-care patients to nursing homes.
Provide incentives to improve quality of care.
Improve management practices.
Demonstrate administrative feasibility of the new system.

The second phase of the project is to develop and pilot test a case-mix adjusted prospective payment system for Medicare patients in skilled nursing facilities. The objective for the Medicare pilot test is to develop and implement the administrative processes for a Medicare prospective payment system in 4 facilities based on a resource utilization group (RUG) classification. The index that will be used for the classification of Medicare patients is the RUG-T18, which uses the same clinical groups and the activities of daily living (ADL) scale used in the New York RUGs II system. The difference occurs in the expanded rehabilitation groups for Medicare patients. Texas will use a quasi-experimental design for the Medicare pilot test to compare the effect of introducing case-mix payment in an experimental catchment area versus continuing the flat-rate, cost-based system in a control catchment area. The State is using a pre-post design for the Medicaid system. The case-mix classifications are based on a review of six different systems in which the New York RUGs II explained the greatest variance of staff time. The case-mix indexes borrow major elements of the RUGs II system and some of the rationale from the Minnesota system. The Texas index of level of effort (TILE) uses four clinical groups to form clusters and develop subgroups using an ADL scale. Two third-party evaluations will be used—one of data reliability and a second of the validity of the data analysis methods.

During the first year, the TILE and RUG-T18 indexes were reviewed for compatibility. The Medicaid payment system became operational statewide under the Texas Medicaid State plan in April 1989. As of fall 1992, 102,000 Medicaid recipients had been a part of the demonstration. An evaluation data base consisting of the Medicaid Client Assessment, Review, and Evaluation (CARE) claims documents for the 102,000 recipients with at least 3 assessments will be used for the evaluation of the demonstration. The final report will be submitted in summer 1993.

Medicare waivers were approved and the Medicare pilot test is scheduled for implementation in the four Austin area nursing homes in November 1992 for a period of 15 months. At the time of their 1991 federal certification survey, the pilot test facilities had 59 Medicare Part A covered residents. Cost analyses of both national and State samples of Medicare providers were performed to arrive at baseline costs for calculating the rates for the RUG-T18 groups. The modified patient assessment instrument, the MDS plus, that was developed for the multistate Nursing Home Case-Mix and Quality (NHCMQ) demonstration will be used for Medicare classification. In the Medicare pilot, a nurse will review new admissions weekly onsite to classify residents into the RUG-T18 groups and to give prior authorization of the Medicare stays for specific time intervals. The interrater reliability of the project nurse and the facility nurses will be documented. The lessons learned from this pilot will be used in the implementation of the NHCMQ demonstration.

On Lok's Risk-Based Community Care Organization for Dependent Adults

Project Nos.: 95-P-98246/9; 11-P-98334/9.
Period: November 1983-Indefinite.
Award: Grants.
Grantees: On Lok Senior Health Services, 1441 Powell Street, San Francisco, CA 94133. California Department of Health Services, 714-744 P Street, Sacramento, CA 95814.
Investigator: Marie Louise Ansak.

As mandated by Sections 603(c) (1) and (2) of Public Law 98-21, the Health Care Financing Administration granted Medicare waivers to On Lok Senior Health Services and Medicaid waivers to the California Department of Health Services. Together, these waivers permitted On Lok to implement an at-risk, capitated payment demonstration in which more than 300 frail elderly persons, certified by the California Department of Health Services for institutionalization in a skilled nursing facility, are provided a comprehensive array of health and health-related services in the community. The current demonstration maintains On Lok's comprehensive community-based program but has modified its financial base and reimbursement mechanism. All services are paid for by a predetermined capitated rate from both Medicare and Medicaid (Medi-Cal). The Medicare rate is based on the average per capita cost for the San Francisco County Medicare population. The Medi-Cal rate is based

on the State's computation of current costs for similar Medi-Cal recipients, using the formula for prepaid health plans. Individual participants may be required to make copayments, spend down income, or divest assets, based on their financial status and eligibility for either or both programs. On Lok has accepted total risk beyond the capitated rates of both Medicare and Medi-Cal with the exception of the Medicare payment for end stage renal disease. The demonstration provides service funding only under the waivers. The research and development activities are funded through private foundations.

Section 9220 of Public Law 99-272 has extended On Lok's Risk-Based Community Care Organization for Dependent Adults indefinitely, subject to the terms and conditions in effect as of July 1, 1985, except that requirements relating to data collection and evaluation do not apply.

Quality of Care in the Program for All-Inclusive Care for the Elderly Model

Period: August 1991-July 1992.

Funding: $60,117.

Awardee: University of Minnesota Research Center.

Investigator: Robert Kane, M.D.

The purpose of this study is to develop measures to assess quality of care on both a routine and periodic basis in the Program for All-Inclusive Care for the Elderly (PACE) model of care. These measures may be used in PACE site quality assurance programs and quality assurance monitoring undertaken by the Health Care Financing Administration and State Medicaid agencies. Attention will be given to measures that reflect concerns relevant to both acute and long-term care and the provision of that care in an integrated, capitated system.

A series of meetings has been held with PACE site clinicians and experts in geriatric care to develop tracer conditions for the quality assurance program. Preliminary findings were presented to the PACE Public Policy Forum in May 1992. A final report is due November 1992.

Evaluation of the Program for All-Inclusive Care for the Elderly Demonstration

Period: June 1991-February 1996.

Funding: $4,486,514.

Contractor: Abt Associates, Inc., 55 Wheeler Street, Cambridge, MA 02138-1168.

Investigator: Larry Branch, Ph.D.

The Program for All-Inclusive Care for the Elderly (PACE) demonstration replicates a unique model of managed-care service delivery for 300 very frail community-dwelling elderly, most of whom are dually eligible for Medicare and Medicaid coverage and all of whom are assessed as being eligible for nursing home placement according to the standards established by participating States. The model of care includes as core services the provision of adult day health care and multidisciplinary team case management through which access to and allocation of all health and long-term care services are arranged. This model is financed through prospective capitation of both Medicare and Medicaid payments to the provider. The purpose of the evaluation is to examine PACE sites before and after assumption of full financial risk, with the purpose of determining whether the PACE model of care, as a replication of the On Lok Senior Health Services model of care, is cost effective relative to the existant Medicare and Medicaid systems. Specific evaluation questions relate to the model of care and the effects of the model on participant utilization, expenditures, and outcomes.

An initial round of site visits has been completed, and the evaluation design and data collection plan are being revised based on these site visits.

Demand for Formal and Informal Home Care Among the Functionally Impaired Elderly in the Community

Period: August 1991-December 1991.

Funding: $16,000.

Contractor: Fu Associates, 2300 Clarendon Boulevard, Suite 1400, Arlington, VA 22201.

Investigator: Judith Sangl.

For this project, the contractor provided programming support for an analysis of the demand for home care. A market price was created from 1984 Medicare home health aide charges to proxy the price of formal unskilled home care (i.e., non-nursing care) in a county area. These price proxies were merged with the county of residence of functionally impaired elderly community respondents in the 1984 National Long-Term Care Survey for the analysis.

An average home health aide visit charge in the county was calculated by dividing the total charges for home health aide visits by the total number of visits. There

were a total of 460 unique counties for the survey sample; 56 counties did not have Medicare home health aide claims for which imputations were done using claims from similar contiguous counties. The Medicare charge per visit ranged from $7 to $73, with a mean of $40 and a standard deviation of 11.3. Medicare charges were found to be highest in the West and lowest in the Northeast. The Medicare charges were not found to be statistically significant in either (1) the probability of use of paid unskilled home care, or (2) the days of paid unskilled care used, given that one is a user.

The Development of Long-Term Care Reform Strategy for New York's Office of Mental Retardation and Developmental Disabilities

Period: June 1988–December 1990.

Funding: $115,581.

Awardee: New York State Department of Social Services, Division of Medical Assistance, 40 North Pearl Street, Albany, NY 12243.

Investigator: Howard Gold.

The New York Office of Mental Retardation and Developmental Disabilities is conducting a 2½-year project to develop a comprehensive plan and waiver application that would reform the financing, regulation, and service delivery of the mentally retarded and developmentally disabled (MR/DD) system in three districts covering eight New York counties. The State considers the demonstration as the first step toward statewide implementation. The objectives are to:

Develop a financing system that will improve services to the MR/DD population by expanding the number and types of people to be served and the types of services to be provided.

Change the manner in which quality of care is assured.

Constrain growth in Federal expenditures for these services.

Waivers would alter the Medicaid basis of payment, revise the State Medicaid plan requirements, change how Medicaid funds can be used, and implement revised quality assurance regulations. The demonstration will test an alternative financing approach that approximates recently formulated departmental policy directions as developed by the Department of Health and Human Services working group on intermediate care facilities for the mentally retarded. The project represents a major test of reform in the delivery of services for persons who are developmentally disabled.

Both national and State-level advisory panels have been convened and issue papers have been completed. The State submitted and received approval of a Medicaid 2176 home and community-based care waiver to implement this project. The waiver program was implemented in fall 1991. A final report was received and accepted in spring 1992.

Cohort Analysis of Disabled Elderly

Period: August 1988–November 1991.

Funding: $89,986.

Awardee: Brandeis University Research Center.

Investigator: Christine Bishop, Ph.D.

For this project, researchers apply event history analyses to nationally representative data sources to derive estimates of the transitions between various health status categories and the duration within categories for different wage groups. These data sources include multiple years of National Health Interview Surveys, mortality records, National Long-Term Care Surveys, Longitudinal Study of Aging, and the National Nursing Home Surveys. Researchers will also estimate, based on the type and level of severity of morbidity and disability categories, the risks involved and the duration of specific types of acute and long-term care.

A draft final report on the analyses is expected in fall 1991.

Long-Term Care Studies (Section 207)

Period: September 1989–September 1994.

Funding: $3,790,000.

Contractor: Health and Sciences Research Incorporated, 9300 Lee Highway, Fairfax, VA 22031.

Investigator: David Kennell, Ph.D.

The purpose of this project is to conduct research related to the Health Care Financing Administration's Medicare and Medicaid programs in the area of long-term care (LTC) policy development. The contractor will focus primarily on four major areas:

The financial characteristics of Medicare beneficiaries who receive or need LTC services.

How the Medicare beneficiaries' characteristics affect their utilization of institutional and noninstitutional LTC services.

How relatives of Medicare beneficiaries are affected financially and in other ways when beneficiaries require or receive LTC services.

How the provision of LTC services may reduce expenditures for acute care health services.

Analyses will use existing LTC and other survey data bases (e.g., the National Long-Term Care Surveys, the Longitudinal Study of Aging, the National Nursing Home Survey, the Survey of Income and Program Participation, and the National Medical Care Expenditure Survey). Medicare administrative records and other extant information will also be utilized. A number of focused analytic studies, policy reports, syntheses, and special studies are required under the contract.

With the repeal of the Medicare Catastrophic Coverage Act of 1988, this project is no longer congressionally mandated. A large number of studies have been initiated, and several draft reports have been received. Current studies include:

—Health Care Service Use and Expenditures of the Non-Institutionalized Population
—An Examination of the Relation of Part A and Part B Medicare Expenditures
—The Catastrophic Costs of Long Term Care
—Analysis of Induced Demand for Long Term Care Services
—Issues in Long Term Care Policy for the Disabled Elderly with Cognitive Impairment
—Synthesis of Literature on Targeting to Reduce Hospital Use
—Synthesis on Reimbursement Options for Medicaid and Medicare Nursing Home Stays
—Elderly Wealth and Savings; Implications for Long Term Care
—Synthesis of the Literature on Effectiveness of Special Assistive Devices in Managing Functional Impairment
—Nursing Home Bed Supply: Synthesis of the Literature and State Initiatives
—Synthesis of the Literature on Unmet Need for Long Term Care Services
—Synthesis of the Literature on Financing and Delivery of Long Term Care for the Disabled Non-Elderly
—Examining the Competing Demands and Extra Expense of Informal Care of the Disabled Elderly
—Analysis of Nursing Home Payment with Current Beneficiary Survey (CBS) Data
—Analysis of Informal and Formal Care
—The Potential of Coordinated Care Targeted to Medicare Beneficiaries with Medicaid Coverage
—Analysis of Non-Participation in the 2176 Program

Analysis and Comparison of State Board and Care Regulations and Their Effect on the Quality of Care in Board and Care Homes

Period: September 1991–September 1992.
Funding: $200,000.
Awardee: Office of the Assistant Secretary for Planning and Evaluation, Room 410–E, Hubert H. Humphrey Building, 200 Independence Avenue, SW., Washington, DC 20201.
Investigator: Catherine Hawes, Ph.D.

The Health Care Financing Administration (HCFA) has transferred funds to the Office of the Assistant Secretary for Planning and Evaluation (ASPE) in support of an existing contract with the Research Triangle Institute (RTI). ASPE has funded RTI to conduct a study to examine the relationship between the type and amount of State regulation and the quality of care in board and care homes. In addition, the study will document the characteristics of a large sample of board and care homes, their residents, and owners/operators. HCFA's support will enable the contractor to increase the project's sample size to allow for analysis of the relationship between additional characteristics of board and care homes and to conduct a more detailed field test.

The following ten states have been selected to participate in the study: New Jersey, Texas, Oklahoma, Georgia, Kentucky, Arkansas, Florida, Illinois, California, and Oregon. Survey instruments are currently under revision and pre-test activities are underway in facilities in North Carolina and the District of Columbia. Data collection activities are expected to begin in the fall of 1992.

Financial Impact to Beneficiaries of Nursing Home Care

Period: August 1988–August 1990.
Funding: $129,888.

Awardee: Brandeis University Research Center.
Investigator: Korbin Liu, Sc.D.

For this project, researchers used The Urban Institute's Transfer Income Model-2 (TRIM-2) for State estimates and the Connecticut Nursing Home Inventory data base to calculate nursing home use and payments. TRIM-2 is a microsimulation model based on the 1984 Current Population Survey used in forecasting use and payments. The Connecticut Inventory data base contains patient-specific information on all nursing home patients (private and public) from 1977 to the present. In addition, the 1985 National Nursing Home Survey was used to analyze several dimensions of nursing home use. From the collected data, estimates for the nursing home patients' spend-down provision were made.

A draft report, Changes in Duration and Outcomes of Nursing Home Stays: 1977-1985, was completed. The report concludes that changes have occurred in the overall composition of nursing home admissions from 1977 through 1985. The analysis indicates that nursing home patients have become older, more disabled, and more likely to have been admitted for terminal care. Once finalized, the report will be sent to the National Technical Information Service. An article was published in a journal: Liu, K., and Manton, K.: Nursing Home Length of Stay and Spend-down: Connecticut, 1977-1985. "Gerontologist" 31(2):165-173, 1991. This article reports data on nursing home stays over an 8-year period, October 1977 to September 1985. Person-specific records were merged with death certificates and Medicaid eligibility dates, and multiple stays for individuals were studied using life-table methodologies. One of the major study findings is the distribution of the length of nursing home stay based on person-level use (multiple stays rather than single stays are markedly different). For example, Connecticut's data based on person-level use indicate that 39 percent of an admission cohort are still residents at 2 years compared with only 16 percent based on single stays. This information has important implications for design of private insurance policies or public policy options. Another major finding is that approximately 21 percent of individuals not covered by Medicaid who enter nursing homes ultimately convert to Medicaid. The timing of spend-down was over 1 year for one-half of the individuals, which is longer than indicated by some other studies. A final major finding is that the estimate of the proportion of Medicaid to total nursing home days is 55.3 percent. However, Medicaid's proportion to the cost of care is expected to be less because of the contribution from income of persons spending down.

Use of Medicare Part A and Part B in Nursing Homes

Period: August 1991-December 1992.
Funding: $100,000.
Awardee: Brandeis University Research Center.
Investigator: Korbin Liu, Sc.D.

For this project, researchers will examine the relationship between Medicare Part A and Part B service use in nursing homes. This includes examining:

The extent to which Part B therapy services are used for patients with a fully or partially covered Part A skilled nursing facility stay.

The patterns of physician visits to nursing homes.

The overall Medicare Parts A and B costs incurred in the nursing home by Part A-covered patients.

Data analysis is underway and the final report is expected in December 1992.

Changes in Post-Hospital Care Utilization Among Medicare Patients

Period: August 1989-December 1992.
Funding: $102,247.
Awardee: The RAND Policy Research Center.
Investigator: Richard Neu, Ph.D.

For this project, a data file was created linking Medicare billing records for inpatient hospital and post-hospital care for 1987 and 1988. RAND is using this file to document changes in post-hospital utilization among Medicare patients. The analyses will include an examination of skilled nursing facility, home health agency, and rehabilitative hospital care.

Reanalyses with revised HCFA data were required due to the discovery of a large number of missing home health claims. A final report of the findings is expected in December 1992.

Analysis of Implementation Issues Related to a Capitated Acute and Long-Term Care Service Delivery System

Period: August 1991-1992.
Total Funding: $99,822.

Awardee: Brandeis University Research Center.
Investigator: Walter Leutz, Ph.D.
The purpose of this project is to analyze issues related to marketing strategies, reimbursement rates and mechanisms, site selection criteria, and site operational protocols for a capitated acute and long-term care service delivery system.
This project is in the early developmental stage.

New York State Quality Assurance System Evaluation

Period: October 1989–December 1992.
Funding: $349,477.
Contractor: Abt Associates, Inc., 55 Wheeler Street, Cambridge, MA 02138–1168.
Investigator: Margot Cella.
The objectives of the New York State Quality Assurance System (NYQAS) are to link data from the case-mix reimbursement system for use in the quality assurance system and to integrate the quality assurance processes of survey and certification, inspection of care, and utilization review. The purpose of the evaluation is to determine which aspects of NYQAS are effective and which are not, and why. Researchers hope that this information will improve the implementation and monitoring of The Multistate Nursing Home Case-Mix and Quality Demonstration, the nursing home reform provisions of the Omnibus Budget Reconciliation Act of 1987, and the surveillance of nursing homes in general. Consistent with these objectives, the evaluation will employ a variety of qualitative and quantitative methods to assess NYQAS' reliability and validity of problem identification, monitoring, and enforcement, and the impact of NYQAS on the quality of care.
Several factors have delayed the implementation of this evaluation, including problems of access to the required data. The project has been extended to December 1992. At this point, draft reports have been received on the influence of NYQAS on casemix, resident deterioration and adverse outcomes, and a case study on the validity of the NYQAS survey process.

The Multistate Nursing Home Case-Mix and Quality Demonstration

Project Nos.: Kansas, 11-C-99366/7, Maine, 11-C-99363/1, Mississippi, 11-C-99362/4, South Dakota, 11-C-99367/8.
Period: June 1989–June 1996.
Funding: $2,098,831.
Awardees: State Medicaid Agencies.
This project builds on past and current initiatives with case-mix payment and quality assurance. The 6-year demonstration will design, implement, and evaluate a combined Medicare and Medicaid system in four States—Kansas, Maine, Mississippi, and South Dakota. The purpose of the demonstration is to test a resident information system with variables for classifying residents into homogeneous resource utilization groups for equitable payment and for quality monitoring of outcomes adjusted for case mix. The new minimum data set plus (MDS+) for resident assessment will be used for resident care planning, payment classification, and quality monitoring systems. The project consists of three phases—systems development and design, systems implementation and monitoring, and evaluation.
The project has conducted a field test of the minimum data set on 6,660 nursing home residents. The average direct-care staff time across the States is 115 minutes per day. A new patient classification system and a Medicare/Medicaid Payment Index (M^3PI) containing 44 groups has been created. The States implemented the MDS+ in fall 1990 with the approval of the Health Standards and Quality Bureau. The States have collected and reviewed over 300,000 assessments on 100,000 different residents assessed between October, 1990 and July 1992. In preparation for developing the payment systems for the demonstration, the resident characteristic data and facility cost reports are being analyzed to determine the case-mix of residents and patterns of service utilization. The States expect to have their proposed payment system changes ready but early 1993. The demonstration States are scheduled to implement the new Medicare and Medicaid payment systems and quality monitoring information systems in summer 1993.

Long-Term Care Case-Mix and Quality Technical Design Project

Period: September 1989–September 1993.
Funding: $2,427,594.
Contractor: The Circle, Inc., 8201 Greensboro Drive, Suite 600, McLean, VA 22102.
Investigator: Robert Burke, Ph.D.
This 4-year contract will support the design and early implementation phase of The Multistate Nursing Home Case-Mix and Quality (NHCMQ) Demonstration. The demonstration combines the Medicare and Medicaid nursing home payment and

quality monitoring system across several States—Kansas, Maine, Mississippi, New York, South Dakota and Texas. This project builds on past and current initiatives with nursing home case-mix payment and quality assurance in nursing homes. The purpose of the demonstration is to test a resident information system with variables for classifying residents into homogeneous resource utilization groups for equitable payment and for quality monitoring of process and outcomes adjusted for case mix. The project will have three phases:

Systems design and development.
Systems implementation and monitoring.
Evaluation.

The classification system to be used across the demonstration States for Medicare and Medicaid was completed in June 1991 by researchers from The University of Michigan and Rensselaer Polytechnic Institute. The resource utilization groups, version III (RUG-III) uses 44 groups to explain approximately 45 percent of the variance in nursing staff time and 52 percent of the costs across nursing, occupational therapy, physical therapy, speech pathology, transportation, and social work services. The RUG-III groups are split on clinical conditions including signs and symptoms of distress, type and intensity of service, and activities of daily living. The 27 groups at the top of the classification match the Medicare coverage criteria. A working paper entitled Description of the Resource Utilization Group, Version III (RUG-III), which describes the classification, has been developed. The common assessment tool, the minimum data set plus (MDS+), has been published and implemented as the State resident assessment instrument in the demonstration States: Feldman, J., and Boulter, C., eds.: "Minimum Data Set Plus (MDS+). Multistate Nursing Home Case Mix and Quality Demonstration Training Manual." Natick, MA. Eliot Press, 1991.

During the past year, a coordinated effort has been undertaken to develop the state specific Medicaid payment systems and the Medicare payment system using cost reports from 1990. The analysis of 1990 Medicare cost reports and 1991 case-mix data to develop the Medicare payment design is well underway. The Medicare Payment Workgroup has met once and continuing input is being received from professional associations and the nursing home industry. The payment design should be completed by early spring 1993. The University of Wisconsin researchers developed and analyzed 158 quality indicators (QIs) which will be reviewed by expert surveyors from the six States, a research oriented quality panel, and a clinical workgroup of 60 health professionals representing about 15 disciplines working in long-term care. The final set of QIs will serve to enhance the quality assurance process to be used for the operational phase of the demonstration. The demonstration is expected to become operational in summer 1993.

Impact of Omnibus Budget Reconciliation Act Drug Regulations: Nursing Home Trends in Rates of Drug Use

Period: August 1991–January 1993.
Funding: $25,000.
Awardee: University of Minnesota Research Center.
Investigator: Judith Gerrard, Ph.D.

The purpose of this project is to study the impact of the first year of the Omnibus Budget Reconciliation Act (OBRA) of 1987 on the use of psychotropic drugs in Minnesota nursing homes. An analysis of trends in rates of psychotropic drugs before and after the implementation of the OBRA Drug Regulations will focus on:

The use of antipsychotic drugs.
The use of antianxiety drugs.
The use of antidepressant drugs.
The rates of appropriate and inappropriate use of antipsychotic drugs.

"Appropriate use" of antipsychotic drugs is defined as the presence of a HCFA-specified diagnosis when an antipsychotic drug is used. All rates are adjusted for nursing home case-mix. Data for this statistical analysis are the patient information in the case-mix reimbursement system, a secondary source data base from the Minnesota Department of Health.

A draft final report has been received and is under reviewed.

Evaluation of Life-Continuum of Care Residential Centers in the United States

Period: January 1985–September 1989.
Funding: $832,871.
Awardee: Hebrew Rehabilitation Center for the Aged, 1200 Centre Street, Boston, MA 02131.
Investigator: Sylvia Sherwood, Ph.D.

The objective of this project was to obtain information about the characteristics of continuum of care residential centers (CCRCs) and their residents and to compare these characteristics with respect to quality of life and health, service costs, and utilization with those of elderly residents living in the community. Data were gathered from 20 CCRCs in Arizona, California, Florida, and Pennsylvania. These sites were stratified according to the type of contract offered (extended versus limited), the age of the facility, and the income levels of those enrolled. Three types of CCRC residents were selected from the sites for the study sample—new admissions (580), existing residents, both short- and long-stay residents (1,640), and residents who died just prior to or during the field data gathering period (660). Quality of life and service utilization data were gathered at two points in time, at baseline and 12 months later. Three types of comparison samples were employed:

A representative sample of elderly in their own homes or independent apartments (2,422).

A national sample of elderly living in congregate housing settings (2,350).

A representative sample of elderly who have died and for whom retrospective data are available for their last year of life (1,500).

A draft final report has been received and is under review. Once accepted, the report will be made available through NTIS.

Study of Adult Daycare Services

Period: June 1989–January 1990.

Funding: $96,950.

Contractor: Institute for Health and Aging, University of California, San Francisco, 201 Filbert Street, San Francisco, CA 94133.

Investigator: Rick Zawadski, Ph.D.

The purpose of this survey of adult day centers was to provide updated information on:

Who the adult day centers serve.

The number of centers and their locations.

The services the centers provide.

The characteristics of operating these centers.

Who funds these centers.

The cost of operating these centers.

Licensing, certification, and quality assurance standards governing these centers.

How these characteristics vary by State.

Funding for the survey was obtained from the American Association for Retired Persons. All the known and designated adult day centers in the United States (over 2,100) were mailed a survey during February 1989. Responses were received from 1,425 centers in 49 States providing information on organizational structure, licensing and certification, client characteristics, operating time and attendance, services provided, staffing, program costs, and revenue. A contract was awarded to the University of California, San Francisco, to perform the analyses of the survey data. The contractor found that most centers are nonprofit organizations. The service package available in adult day centers varies, but most centers include recreational therapy; meals and transportation; social work; nursing; personal care; and medical assessment. Clients are predominantly older persons who are physically and/or cognitively impaired. The average program enrollment was 37 and daily attendance was fewer than 20. The daily operating cost in 1989 was $36, with more than one-half of the centers operating at a deficit. Medicaid was the largest funding source of adult daycare. A draft final report on the analysis has been received and is being revised. The final report is expected to be available by the end of 1992. With the repeal of the Medicare Catastrophic Coverage Act of 1988, this project is no longer congressionally mandated.

Program for All-Inclusive Care for the Elderly (On Lok) Case Study

Period: August 1989–June 1991.

Funding: $172,138.

Award: Cooperative Agreement.

Awardee: University of Minnesota Research Center.

Investigator: Robert Kane, M.D.

For this study, researchers will provide a descriptive analysis of the early stages of the Program for All-Inclusive Care for the Elderly (PACE) demonstration. They will examine in detail the model of service delivery provided by On Lok Senior Health Services, San Francisco, California, and the degree to which aspects of this model are successfully replicated in eight sites nationwide. The results are expected to have utility as subsequent sites are developed for later implementation.

Two rounds of site visits to On Lok and PACE sites were completed and an interim report was submitted. A final report entitled Qualitative Analysis of the Program for All-Inclusive Care for the Elderly (On Lok) Case Study has been sent to the National Technical Information Service, accession number PB92-1784091. In addition to comparing eight PACE sites to On Lok on seven features of the PACE model, the researchers offer some lessons learned from the first eight sites regarding replicability; sources of start-up and development funds, census building, staffing, and patient mix of enrollees are seen as critical issues to future sites. Also offered are some issues to be faced by the evaluators, including the difficulty of selecting appropriate comparison groups, data equivalence across experimental and comparison groups, the need to collect additional data regarding enrollee outcomes (e.g., client and family satisfaction, affect, and quality of life), and statistical power and the role of pooling. The following article has been published:

Kane, R., Hixon Illston, L., and Miller, N.: Qualitative analysis of the Program of All-inclusive Care for the Elderly (PACE). "The Gerontologist," forthcoming.

Frail Elderly Demonstration: The Program for All-Inclusive Care for the Elderly

Period: June 1990–October 1994.

Grantees: See Below.

As mandated by Public Law 99-509, as amended, the Health Care Financing Administration will conduct a demonstration which replicates, in not more than 15 sites, the model of care developed by On Lok Senior Health Services in San Francisco, California. The Program for All-Inclusive Care for the Elderly (PACE) demonstration replicates a unique model of managed-care service delivery for 300 very frail community-dwelling elderly, most of whom are dually eligible for Medicare and Medicaid coverage and all of whom are assessed as being eligible for nursing home placement according to the standards established by participating States. The model of care includes as core services the provision of adult day health care and multidisciplinary case management through which access to and allocation of all health and long-term care services are arranged. Physician, therapeutic, ancillary, and social support services are provided onsite at the adult day health center whenever possible. Hospital, nursing home, home health, and other specialized services are provided extramurally. Transportation is also provided to all enrolled members who require it. This model is financed through prospective capitation of both Medicare and Medicaid payments to the provider. Demonstration sites are to assume financial risk progressively over 3 years, as stipulated in the Omnibus Budget Reconciliation Act of 1987. The eight sites and their State Medicaid agencies that have been granted waiver approval to provide services are:

Elder Service Plan

Period: October 1989–May 1993.

Grantee: East Boston Geriatric Services, Inc., 10 Gove Street, East Boston, MA 02128.

Period: October 1989–May 1993.

Grantee: Massachusetts State Department of Public Welfare, 180 Tremont Street, Boston, MA 02111.

Providence ElderPlace

Period: October 1989–May 1993.

Grantee: Providence Medical Center, 4805 Northeast Glisan Street, Portland, OR 97213.

Period: October 1989–May 1993.

Grantee: Oregon State Department of Human Resources, 313 Public Service Building, Salem, OR 97310.

Comprehensive Care Management

Period: October 1989–August 1993.

Grantee: Beth Abraham Hospital, 612 Allerton Avenue, Bronx, NY 10467.

Period: October 1989–August 1993.

Grantee: New York State Department of Social Services, 40 North Pearl Street, Albany, NY 12243.

Palmetto SeniorCare

Period: August 1990–September 1993.

Grantee: Richland Memorial Hospital, Five Richland Medical Park, Columbia, SC 29203.

Period: August 1990–September 1993.

Grantee: South Carolina State Health and Human Services, Finance Commission, P.O. Box 8206, Columbia, SC 29202.

Community Care for the Elderly

Period: August 1990–October 1993.

Grantee: Community Care Organization of Milwaukee County, Inc., 1845 North Farwell Avenue, Milwaukee, WI 53202.

Period: August 1990–October 1993.

Grantee: Wisconsin State Department of Health and Social Services, P.O. Box 7850, Madison, WI 53707.

Total Longterm Care, Inc.

Period: August 1991–July 1994.

Grantee: Total Longterm Care, Inc., 1801 East 19th Avenue, Denver, CO 80218.

Period: August 1991–July 1994.

Grantee: Colorado Department of Social Services, 1575 Sherman Street, Denver, CO 80203.

Bienvivir Senior Health Services

Period: December 1991–January 1995.

Grantee: Bienvivir Senior Health Services, 6000 Welch, Suite A-2, El Paso, TX 79905.

Period: December 1991–January 1995.

Grantee: Texas Department of Human Services, 701 West 51st Street, Austin, TX 78714.

Independent Living for Seniors

Period: March 1992–April 1995.

Grantee: Rochester General Hospital, 1425 Portland Avenue, Rochester, NY 14621.

Period: March 1992–April 1995.

Grantee: New York Department of Social Services, 40 North Pearl Street, Albany, NY 12243.

Up to seven additional sites may be phased in over the next 2 years. A contract to evaluate the PACE demonstration was awarded in June 1991. Presentations of the demonstration implementation and evaluation issues were given at the following national meetings: American Public Health Association annual meeting and Gerontological Society of America annual meeting.

Policy Study of the Cost Effectiveness of Institutional Subacute Care Alternatives and Services: 1984–92

Period: May 1990–April 1994.

Funding: $1,370,000.

Awardee: University of Colorado, Health Sciences Center, 4200 East 9th Avenue, Box C–241, Denver, CO 80262.

Investigator: Andrew Kramer, M.D.

The University of Colorado will assess which subacute institutional settings and combinations of services are most cost effective and provide more positive outcomes for various types of patients. Researchers will identify potential Health Care Financing Administration (HCFA) policy changes that might encourage use of the most appropriate settings and services. This 4-year project will use primary and secondary data from three previous HCFA-sponsored studies to compare quality, cost effectiveness, case mix, service mix, and utilization among institutional subacute care alternatives (e.g., skilled nursing facilities and rehabilitation hospitals) within and between two time periods—1984–87 and 1990–92. This methodology is designed to determine the most cost-effective combinations of services and provider settings for various types of patients requiring subacute care; i.e., stroke and hip fracture.

Cross-sectional and longitudinal data collection started in October 1991. As of July 1992, 116 facilities were recruited and 73 had been visited.

Long-Term Care Survey

Period: September 1990–February 1993.

Award: Interagency Agreement.

Agency: National Institute on Aging, 9000 Rockville Pike, Bethesda, MD 20892.

The Office of the Assistant Secretary for Planning and Evaluation and the Health Care Financing Administration agree to transfer funds to the National Institute on Aging (NIA) to support an existing NIA grant to Duke University, Center for Demographic Studies. This grant, number 1R37AG07198, is entitled Functional and Health Changes of the Elderly, 1982–89. The National Long-Term Care Survey

(NLTCS) is a detailed household survey of persons 65 years of age or over who have some chronic (90 days or more) functional impairment. The survey has been administered three times. The first, conducted in 1982, was devised as a cross-sectional survey. The second, conducted in 1984, added a longitudinal component to the sample design. The third, administered in 1989, used the cohorts from the previous surveys in addition to persons becoming 65 years of age to form a nationally representative sample of impaired elderly persons. To facilitate the use of the data base, the following tasks related to the 1982, 1984, and 1989 NLTCSs will be carried out under this agreement:

File linkage over the entire period 1982-89.
Derivation of new longitudinal sample weights.
Linkage of Medicare administrative records.
Improvement of coding by checking consistency of survey items.
Improvement in survey documentation.
Seminars and education.

Weights for the 1982 and 1984 surveys have been revised and a file with Medicare Part B records has been prepared. File cleanup and documentation improvement for the 1982, 1984 and 1989 NLTCS are proceeding. Additional Medicare records have just been received to complete the time period covered by all three waves of the survey.

Long-Term Care: Elderly Service Use and Trends

Period: August 1989–June 1991.
Funding: $245,249.
Awardee: The Brookings Institution, 175 Massachusetts Avenue, NW., Washington, DC 20036–2188.
Investigator: Joshua Wiener, Ph.D.
This project has three objectives:

An analysis of the financial status of nursing home users.
An analysis of the determinants of home care use.
Projections of the numbers and level of disability among the elderly and their use of long-term care services.

Data from the following major surveys will be used—the 1982 and 1984 National Long-Term Care Surveys, the 1984-86 Supplement on Aging/Longitudinal Study of Aging, and the 1984 Survey of Income and Program Participation. Data will be analyzed using cross-tabulations, logistic and least squares regression analyses, and the Brookings/Intermediate Care Facility simulation model (updated and revised).

Two journal articles have been published presenting some of the study findings. The first article, "Use of Paid Home Care by the Chronically Disabled Elderly," "Research on Aging," 13(3): 310–332, examined the determinants of home care use. Using logistic regression, the analysis found the predictors of any use of paid home care were age, sex, marital status, number of daughters and sons, ADL problems, a prior nursing home stay, an overnight hospital stay, income, home equity, and Medicaid enrollment. Using ordinary least squares regression, the study also identified predictors of the amount of formal homecare used in the past week. For elderly with a paid home care provider, greater age, disability level, not being married, fewer daughters, and cognitive impairment signal significantly more use.

The second article, "Will Paid Home Care Erode Informal Support?" in "Journal of Health Politics, Policy and Law" 16(3):507–521, examined whether the amount of paid home care used by disabled elderly persons had a significant influence on the amount of informal support they were receiving. Results from a two-stage least squares regression analysis suggest that the amount of informal home care received was not significantly affected by the level of formal care. This conclusion held for subgroups of formal care users most likely to exhibit substitution: those without cognitive problems, the disabled elderly with above average income, and persons who lived alone. Even the most severely disabled elderly, who are the target of most proposals to expand paid home care, did not substitute paid care for unpaid.

A draft final report for the entire project is expected by the end of 1992. After review, the report will be available through NTIS.

Study of Alternative Out-of-Home Services for Respite Care

Period: September 1988–February 1990.
Funding: $239,495.
Awardee: Brandeis University Research Center.
Investigator: Christine Bishop, Ph.D.

For this study, Brandeis examined the advisability of expanding the respite care benefit to cover out-of-home services such as those provided in a nursing home or an adult day care center as an alternative to in-home respite care. Researchers as-

sessed the advisability of broadening the respite care benefit to include alternative services, giving consideration to cost, access, quality of care, and the feasibility of implementation. This assessment was accomplished by using information collected from existing data sets and from ongoing respite programs and demonstrations.

The final report entitled Respite Care: Background and Use has been received and is under review. Researchers conclude that both in-home and out-of-home care should be considered in the designs of any new respite programs. The report should be available in late 1991. With the repeal of the Medicare Catastrophic Coverage Act of 1988, this project is no longer congressionally mandated.

Categorization of Nursing Homes and Rehabilitation Facilities

Period: August 1991–December 1992.
Funding: $94,362.
Awardee: University of Minnesota Research Center.
Investigator: Robert Kane, M.D.

Factors will be identified that differentiate the type and intensity of rehabilitative and other post-acute services provided to Medicare beneficiaries in nursing homes and rehabilitative facilities. Using these factors, a classification system will be developed of post-acute institutional providers based on the amount of rehabilitative care they provide. The system will provide information on the extent of overlap in the provision of rehabilitative services by these facilities and relate the identified patterns of care to institutional characteristics. The feasibility of the classification system will be tested in a pilot project by using a sample of nominated rehabilitation facilities and nursing homes. The results of the pilot project will be used to propose a study design for further refinements of the classification system and analysis of related issues.

A sample of 168 nursing homes and rehabilitation facilities were nominated. Data analysis is underway and the final report is expected in December 1992.

Implementing Federal Regulations in Nursing Homes: A Conceptual Paper

Period: April 1990–December 1991.
Funding: $52,630.
Awardee: University of Minnesota Research Center.
Investigator: Judy Gerrard, Ph.D.

The purpose of this project is to develop a conceptual paper on the issues involved in regulating the use of psychoactive drugs in nursing homes, the range of problems that the long-term care (LTC) community and Health Care Financing Administration (HCFA) surveyors might face in implementing these regulations, the quality of large-scale data bases available for examining these issues and problems, and the research designs that would be most appropriate for studying the impact of HCFA guidelines on the use of psychoactive drugs by nursing home elderly. Two panels of experts—a practitioner advisory panel consisting of five local practitioners in the LTC community and a national expert panel of researchers experienced in psychoactive drug use by nursing home elderly—will be used in this project.

This project is completed, and a final report has been accepted.

Interaction of Medicaid and Private Long-Term Care Insurance

Period: August 1991–December 1992.
Funding: $80,000.
Awardee: Brandeis University Research Center.
Investigator: Christine Bishop, Ph.D.

For this study, researchers will examine the characteristics of purchasers and nonpurchasers of private long-term care insurance, the types of insurance purchased, and the role of State Medicaid program characteristics and personal characteristics in influencing the purchase decision.

State Medicaid program characteristics are being merged with the survey participants. Data analysis is underway and the final report is expected in December 1992.

Goals and Strategies for Financing Long-Term Care

Period: August 1989–June 1991.
Funding: $95,409.
Awardee: University of Minnesota Research Center.
Investigator: Mark Pauly, Ph.D.

The purpose of this project is to use concepts drawn from a number of disciplines—economics, decision sciences, policy analysis, sociology, and demography—to develop statements of possible objectives for long-term care insurance. Defining objectives will include an analysis of benefits and costs from potential changes in financing and all analysis of expected behavioral changes in response to changes in

financing. The meaning of these objectives will then be illustrated by applying them to several types of policy proposals:

Subsidization of private insurance.
Employer-provided insurance.
Whole-life versions of insurance.
Means-tested public insurance.
Medicaid-equivalent subsidies.
Catastrophic public insurance.
Public provision of information on Medicare coverage and the need for insurance.

A final report was received in October 1991, and is available from the National Technical Information Service, accession number PB92-178383. The authors recommend that public policies should be designed to remove informational impediments to the emergence of long-term care insurance markets and to provide information about new services and assist in introducing these services to the market. Application of identified objectives to public service financing and/or delivery of long-term care services raises several points, including the belief that provision of universal insurance for long term-care is not supported by the analysis and that a means-tested program will continue to be necessary, as private markets are insufficient to finance and deliver long-term care services. Several areas for future research are also identified, including methods to control moral hazard and more extensive testing of managed care systems for the elderly.

Activities of Daily Living Measurements as Determinants of Eligibility

Period: August 1989–October 1990.
Funding: $99,991.
Awardee: Brandeis University Research Center.
Investigator: John Capitman, Ph.D. and Korbin Liu, Sc.D.

For this study, researchers will use data from the National Long-Term Care Surveys, the National Long-Term Care Channeling Demonstration, and the Social Health Maintenance Organization Demonstrations' comprehensive assessment form to examine issues associated with defining and measuring activities of daily living (ADL) for use as eligibility criteria for Medicare services. A cost analysis will be performed and other issues associated with using ADL scores as eligibility criteria will be discussed. Among the questions to be addressed are:

What level of ADL impairments is used to trigger eligibility?
Which ADL items should be used?
Under what circumstances should assessments be performed and by whom?

Three reports have been received. The first, The Administration of Eligibility for Community Long Term Care, considers issues and makes recommendations on eligibility criteria; timing and setting of assessments; assessment items; assessor qualifications and training; and review and appeal procedures. The second, Home Care for the Disabled Elderly: Predictors and Expected Costs, uses a Tobit estimation procedure on data from the 1982 National Long-Term Care Survey. Major predictors of the number of paid in-home visits per week include age, sex, living arrangement, number of informal helpers, income, and functional status. Cognitive impairment was not found to be a significant predictor. The parameter estimates then were used to simulate the cost of providing home care services to select populations based on various combinations of program eligibility standards and the costs of some anticipated behavioral responses to the institution of a home care program. The third, Predicting Participation and Costs in a National Long Term Care Program: Lessons from the Social HMO, explores what service utilization and costs might be like if there were a managed-care approach to long-term care and how utilization and cost would vary with different participant characteristics. Once finalized, these reports will be sent to the National Technical Information Service.

Determinants of Home Care Costs

Period: August 1990–January 1993.
Funding: $125,140.
Awardee: Brandeis University Research Center.
Investigator: Korbin Liu, Sc.D.

The original purpose of this project was to investigate the determinants of formal and informal home care and the mix of the two types of care. However, two shortcomings in the data from Connecticut Community Care, Inc. (CCCI) for the study period preclude this: (1) prior to January 1991, only the services paid for by CCCI and not other sources (eg., Medicaid) were included; and (2) detailed information was not available for informal care. Instead, the study will investigate the patterns and

determinants of nursing home use in this community-based population. In addition, Medicaid spend-down among a community-based population will be analyzed.

The data has been received and analyses are underway.

Demand for Formal and Informal Home Care Among the Functionally Impaired Elderly in the Community—Part 2

Funding: Intramural.

Investigator: Judith A. Sangl.

This study had two purposes: (1) to examine the effect of the price of formal (i.e., paid) home care, controlling for other factors, on the demand for formal home care among the functionally impaired elderly; and (2) to examine the effect of the price of formal home care, controlling for other factors, on the demand for informal (i.e., unpaid) home care among the functionally impaired elderly. For the purposes of this study, formal home care was defined as unskilled assistance, or help with non-nursing tasks such as IADL and ADL tasks. The study sample was restricted to persons who are considered potentially price sensitive and in the current or potential private home care market. Persons who received formal home care paid solely by Medicare and/or Medicaid are excluded because they face a zero price and the amount of home care is determined administratively, not by the individual.

The study is cross-sectional with the elderly individual as the unit of analysis; county-level price proxies and other state policy and market factors are associated with the individual's county and state of residence. Individual-level data are from the 1984 National Long Term Care Survey. Market price proxies for formal home care at the county level are from two data sources: (1) 1984 Medicare home health aide charges; and (2) the 1980 Census service occupation wage data. Other state and market level data are obtained from a variety of other sources. Because of the small percentage of formal home care users, a 2-part model is used to examine (1) the probability of use; and (2) the amount of care used, given that one is a user. Multiple logistic regression was the statistical method used in the first part of the model; ordinary least squares regression was used in the second part of the model. Since almost all of the sample has informal care, a 2-part model is not necessary and ordinary least squares regression is used to analyze the days of care used.

Three hypotheses were tested in the study:

Hypothesis 1: The demand for formal home care is inversely related to its price.

Hypothesis 2: Persons with greater functional impairment will be less responsive to price of formal home care than persons with less functional impairment.

Hypothesis 3: The demand for informal home care will be directly related the price of formal home care.

Preliminary results are available. With respect to the first hypothesis, the study found that there was a lower probability of use of paid unskilled home care by the elderly in counties where the service wages were higher. However, no relationship was found between price and the number of paid home care days used. With respect to the second hypothesis, no significant price-disability interactions were found for the probability of use of paid home care. With respect to the third hypothesis, price was not found to have a significant effect on unpaid care use or level of use. There are several important variables, other than price, which affect the demand for formal and informal home care. With respect to the probability of use of formal home care, elderly who were unmarried, older, female, white, and had higher income, more functional impairments, prior nursing home and hospital use, adult children who are working, and a non-relative household member all had a greater likelihood of using formal home care than persons without these characteristics. On the other hand, elderly who owned a home, had adult children living nearby, and had an adult child or female household members were less likely to use formal care. With respect to the number of formal home care days used, elderly who were unmarried and older, had cognitive impairment, prior nursing home use, and received some payment subsidy used more days than elderly without these characteristics. The number of informal days was greater if the elderly person was married and black, and had hospital use, cognitive and more functional impairment, adult children nearby and relatives in the household.

Validation of Nursing Home Quality Indicators

Period: July 1992–July 1995.

Funding: $790,945.

Awardee: SysteMetrics/McGraw-Hill, 104 West Anapamu Street, Santa Barbara, CA 93101.

Investigator: David Klingman, Ph.D.

This project is a continuation of a recently completed cooperative agreement to investigate the usefulness of claims data from Medicaid and Medicare administra-

tion record systems as sources of nursing home quality of care (QCIs) measures. The previous study involved retrospective analysis of 1987 Medicaid and Medicare claims data and facility deficiency data from two States. The goal of this project is to further the development of an automated quality assurance system using Medicare and Medicaid claims data to provide continuous monitoring of the quality of care rendered to Medicaid recipients in long term care facilities. The objective of this study is to validate the resident level claims-based QCIs by: (1) recomputation of the claims-based indicators for one State using data for 1990 and 1991 (i.e., pre and post OBRA 87), and an additional State for 1991; (2) physician and nurse examination of medical records for a sample of residents in a sample of nursing homes for the above States; and (3) establishment of the relationship of the QCIs to deficiencies cited and adverse outcomes.

This project is in the early developmental stage.

Long Term Care Program and Market Characteristics

Period: February 1992–February 1993.

Funding: $605,103.

Awardee: University of California, San Francisco, Office of Research Affairs, 3333 California Street, Suite 11, San Francisco, California 94143–0962.

Investigator: Charlene Harrington, Ph.D.

This project will collect data on and study the effects of nursing home and home health care characteristics and markets for Medicare and Medicaid services in fifty States. Primary and secondary data for the 1990–93 period will be collected to update earlier data collected in previous studies for the 1978–89 period. A comprehensive survey will collect data on licensed nursing home bed supply and occupancy rates, State certificate-of-need programs, State preadmission screening programs, and Medicaid nursing home and home health reimbursement. A special analysis will provide detail on each States' current methodology for determining nursing home capital costs, the impact of proposed case-mix reimbursement on operating income, reimbursement methodology for free-standing sub-acute services/units, and Medicaid methodology used to reimburse for care in board and care homes, geriatric day care centers, and ICF-MR facilities. A public use database will be prepared to provide a complete set of data for the period 1978–1993.

The project is in the early developmental stage.

A Randomized Controlled Trial of Expanded Medical Care In Nursing Homes for Acute Care Episodes

Period: March 1992–March 1995.

Funding: $269,543.

Awardee: Monroe County Long Term Care Program, Inc., 349 West Commercial Street, Suite 2250, East Rochester, NY 14445.

Investigator: Gerald Eggert, Ph.D.

The objective of this demonstration is develop, implement, and evaluate the effectiveness of expended medical services to nursing home residents who are undergoing acute illnesses, or deterioration in chronic ones, which would ordinarily require acute hospitalization. The intervention will include many services which are available in acute hospitals and which are feasible and safe in nursing homes. These include an initial physician visit, all necessary follow-up visits, diagnostic and therapeutic services, and additional nursing care including private duty if necessary. The major goals of the demonstration are to reduce medical complications and dislocation trauma resulting from hospitalization, and to save the expense of hospital care when a patient could be managed safely in the nursing home with expanded services.

This project is in the early development stages.

Nurse Practitioner/Physician Assistant Aggregate Visit Demonstration

Period: September 1990–September 1993.

Funding: $130,538.

Awardee: The Urban Medical Group, 545 D Centre Street, Jamaica Plain, MA 02130.

Investigator: Jeffery Kang, M.D.

Under Section 6114(e) of Public Law 101–239, the Medicare program provides Part B coverage to nursing home residents for medical visits rendered by nurse practitioners who are members of a physician/physician assistant/nurse practitioner team. Under this legislation, the number of visits supplied to any nursing home patient is limited to an average of 1.5 visits per month. Section 6114(e) mandates a demonstration project under which the visit limitation would be applied on an average basis over the aggregate total of residents receiving services from members of

the provider team. A preliminary Massachusetts demonstration project, Case Managed Medical Care for Nursing Home Patients, used nurse practitioners and physician assistants to provide visits to nursing home patients. This demonstration ended on September 30, 1990. Many of the original Massachusetts demonstration sites are also participating in this second project.

The project is being conducted in two phases. The first phase (primarily for planning and development) was completed in March 1992. The second phase, which includes the actual implementation and operation of the demonstration, began in April 1992. Negotiations with the Medicare carrier, Massachusetts Blue Cross and Blue Shield, are almost complete. The Urban Medical Group has arranged for approximately 16 provider groups (medical teams) to participate in this demonstration. The final report for this project is expected in July 1993.

Long-Term Care Supply and Medicare Hospital Utilization

Period: August 1989–August 1990.

Funding: $47,986.

Awardee: Abt Associates, Inc., 55 Wheeler Street, Cambridge, MA 02138–1168.

Investigator: Robert Schmitz, Ph.D.

The purpose of this project was to investigate how local variations in the availability of nursing home beds affect Medicare hospitalization rates. Effects on the number of admissions, the number of hospital readmissions, the number of hospital days used, and the costs per Medicare Part A enrollee were evaluated. Urban and rural differences were assessed. The impacts of community long-term care services, Medicare risk-contract health maintenance organization services, and the prospective payment system on Medicare Part A utilization were evaluated.

A final report was received in May 1992, and is being sent to the National Technical Information Service. Findings from the report were presented at the Association for Health Services Research and American Public Health Association annual meetings. The author concludes that while increased availability of nursing home beds was found to reduce the average length of hospital stays, it also appeared to stimulate rather than reduce hospital admissions for aged beneficiaries living in urban areas and to increase the likelihood of rehospitalization, contrary to the study's hypotheses. Moreover, the increase in the probability of hospital admission associated with the addition of nursing home beds was most pronounced among the oldest beneficiaries, those most likely to use nursing home care. Furthermore, the relation between nursing home beds and hospital use was positive even after controlling for persistent county-specific effects.

ADMINISTRATION FOR CHILDREN AND FAMILIES

Title XX Social Service Block Grant Program

The major source of Federal funding for social services programs in the States is Title XX of the Social Security Act, the Social Services Block Grant (SSBG) program. The Omnibus Budget Reconciliation Act of 1981 (P.L. 97–35) amended Title XX to establish the SSBG program under which formula grants are made directly to the 50 States, the District of Columbia, and the eligible jurisdictions (Puerto Rico, Guam, the Virgin Islands, American Samoa, and the Commonwealth of the Northern Mariana Islands) for use in funding a variety of social services best suited to the needs of individuals and families residing within the State. Public Law 97–35 also permits States to transfer up to 10 percent of their block grant funds to other block grant programs for support of health services, health promotions and disease prevention activities, and low-income home energy assistance.

Under the SSBG, Federal funds are available without a matching requirement. In fiscal year 1992, a total of $2.8 billion was allotted to States. The same amount has been appropriated for fiscal year 1993. Within the specific limitations in the law, each State has the flexibility to determine what services will be provided, who is eligible to receive services, and how funds are distributed among the various services within the State. State and/or local title XX agencies (i.e., county, city, regional offices) may provide these services directly or purchase them from qualified agencies and individuals.

A variety of social services directed at assisting aged persons to obtain or maintain a maximum level of self-care and independence may be provided under the SSBG. Such services include, but are not limited to adult day care, adult foster care, protective services, health-related services, homemaker services, chore services, housing and home maintenance services, transportation, preparation and delivery of meals, senior centers, and other services that assist elderly persons to remain in their own homes or in community living situations. Services may also be offered

which facilitate admission for institutional care when other forms of care are not appropriate. Under the SSBG, States are not required to submit data that indicate the number of elderly recipients or the amount of expenditures provided to support specific services for the elderly. States are required, prior to the expenditures of funds under the SSBG, to prepare a report on the intended use of the funds including information on the type of activities to be supported and the categories or characteristics of individuals to be served. States also are required to report annually on activities carried out under the SSBG. Beginning with fiscal year 1989, the annual report must include specific information on the numbers of children and adults receiving services, the amount spent in providing each service, the method by which services were provided, i.e., public or private agencies, and the criteria used in determining eligibility for each service.

Based on an analysis of pre-expenditure reports submitted by the States for fiscal year 1991, the list below indicates the number of States providing certain types of services to the aged under the SSBG.

Services:	*Number of States* [1]
Home-Based Services [2]	46
Adult Protective Services	32
Transportation Services	27
Adult Day Care	28
Health Related Services	30
Information and Referral	27
Home Delivered/Congregate Meals	22
Adult Foster Care	11
Housing	14

[1] Includes 50 States, the District of Columbia, and the 5 eligible territories and insular areas.
[2] Includes homemaker, chore, home health, companionship, and home maintenance services.

In enabling the elderly to maintain independent living, most States provide Home-Based Services which frequently includes homemaker services, companion and/or chore services. Homemaker services may include assisting with food shopping, light housekeeping, and personal laundry. Companion services can be personal aid to, and/or supervision of aged persons who are unable to care for themselves without assistance. Chore services frequently involve performing home maintenance tasks and heavy housecleaning for the aged person who cannot perform these tasks.

As reflected above, 32 States currently provide Adult Protective Services to persons generally 60 years of age and over. These services may consist of the identification, receipt, and investigation of complaints and reports of adult abuse. In addition, this service may involve providing counseling and assistance to stabilize a living arrangement. If appropriate, Adult Protective Services also may include the provision of, or arranging for, home based care, day care, meal service, legal assistance, and other activities to protect the elderly.

Low Income Home Energy Assistance Program

The Low Income Home Energy Assistance Program (LIHEAP) is one of six block grant programs administered within the Department of Health and Human Services (HHS). LIHEAP is administered by the Office of Community Services (OCS) in the Administration of Children and Families.

LIHEAP helps low income households meet the cost of home energy. The program is authorized by the Omnibus Budget Reconciliation Act of 1981, as amended most recently by the Augustus F. Hawkins Human Services Reauthorization Act of 1990. In fiscal year 1989 Congress appropriated $1.383 billion for the program. Congress appropriated $1.443 billion for LIHEAP in fiscal year 1990. In fiscal year 1991, Congress appropriated $1.415 billion plus a contingency fund of $195 million, which went into effect when fuel oil prices went above a certain level. For FY 1992, $1.5 billion was appropriated, plus a contingency fund of $300 million that would have been triggered if the President had declared an emergency and had requested the funds from Congress. The FY 1993 HHS appropriations act provided funding of $1,346,049,760 for FY 1993. It also provided advance funding of $1,437,408,000 for a 9-month transition period in FY 1994, of which $141,950,240 may be used by grantees to reimburse themselves for FY 1993 expenses. The transition period funds were provided in order to shift the LIHEAP program to a new "program year" of July 1 to June 30. It is expected that the FY 1994 appropriations act will provide funds for the new program year of July 1, 1994 to June 30, 1995.

Block grants are made to States, territories, and eligible applicant Indian Tribes. Grantees may provide heating assistance, cooling assistance, energy crisis interven-

tions, and low-cost residential weatherization or other energy-related home repair to eligible households. Grantees can make payments to households with incomes not exceeding the greater of 150 percent of the poverty level or 60 percent of the State's median income.[3] Most households in which one or more persons are receiving Aid to Families with Dependent Children, Supplemental Security Income, Food Stamps or need-tested veterans' benefits may be regarded as categorically eligible for LIHEAP.

Low income elderly households are a major target group for energy assistance. They spend, on average, a greater portion of their income for heating costs than other low income households. Grantees are required to target outreach activities to elderly or handicapped households eligible for energy assistance. In their crisis intervention programs, grantees must provide physically infirm individuals the means to apply for assistance without leaving their homes, or the means to travel to sites where applications are accepted.

In fiscal year 1992, about 37 percent of households receiving assistance with heating costs included at least one person age 60 or over, as estimated by the March 1992 Current Population Survey.

OCS is a member of the National Energy and Aging Consortium, which focuses on helping older Americans cope with the impact of high energy costs and related energy concerns.

No major program and policy changes for the elderly occurred in the 1990 reauthorization legislation. No new initiatives commenced in 1992 or are planned for 1993 that would impact on the status of older Americans.

The Community Services Block Grant (CSBG) and the Elderly

I. Community Service Block Grant—The Community Service Block Grant Act (Subtitle B, P. L. 97-35 as amended) is authorized through fiscal year 1994. The Act authorizes the Secretary, through the Office of Community Services (OCS), an office within the Administration for Children and Families in the Department of Health and Human Services, to make grants to States and Indian tribes or tribal organizations. States and tribes have the authority and the flexibility to make decisions about the kinds of local projects to be supported by the State or tribe, using CSBG funds. The purposes of the CSBG program are:

(A) to provide a range of services and activities having a measurable and potentially major impact on causes of poverty in the community or those areas of the community where poverty is a particularly acute problem;

(B) to provide activities designed to assist low-income participants including the elderly poor—

(i) to secure and retain meaningful employment;

(ii) to attain an adequate education;

(iii) to make better use of available income;

(iv) to obtain and maintain adequate housing and a suitable living environment;

(v) to obtain emergency assistance through loans or grants to meet immediate and urgent individual and family needs, including the need for health services, nutritious food, housing, and employment-related assistance;

(vi) to remove obstacles and solve problems which block the achievement of self-sufficiency;

(vii) to achieve greater participation in the affairs of the community; and

(viii) to make more effective use of other programs related to the purposes of the subtitle,

(C) to provide on an emergency basis for the provision of such supplies and services, nutritious foodstuffs and related services, as may be necessary to counteract conditions of starvation and malnutrition among the poor;

(D) to coordinate and establish linkages between governmental and other social services programs to assure the effective delivery of such services to low-income individuals; and

(E) to encourage the use of entities in the private sector of the community in efforts to ameliorate poverty in the community; (Reference Section 675(c)(1) of Public Law 97-35, as amended).

It should be noted that although there is a specific reference to "elderly poor" in (B) above, there is no requirement that the States or tribes place emphasis on the elderly or set aside funds to be specifically targeted on the elderly. Neither the statute nor implementing regulations include a requirement that grant recipients

[3] Beginning with fiscal year 1986, States are prohibited from setting income eligibility levels lower than 110 percent of the poverty level.

report on the kinds of activities paid for from CSBG funds or the types of indigent clients served. Hence, it is not possible for OCS to provide complete information on the amount of CSBG funds spent on the elderly, or the number of elderly, or the numbers of elderly persons served.

II. Major Activities or Research Projects Related to Older Citizens in 1992 and 1993—The Office of Community Services made no major changes in program or policy related to the CSBG program in 1992 and none is planned for 1993.

The Human Services Reauthorization Act of 1986 contained the following language: "each such evaluation shall include identifying the impact that assistance . . . has on . . . the elderly poor."

The collection of impact data activity required by this language began in fiscal year 1991 and will be available in early 1993.

III. Funding Levels—Funding levels under the CSBG program for States and Indian Tribes or tribal organizations amounted to $360 million in fiscal year 1992. For fiscal year 1993, $372 million has been appropriated.

Aging and Developmental Disabilities Program

CRITICAL AUDIENCES PROJECT

Grantee: Institute for the Study of Developmental Disabilities, Indiana University

Project Director: Barbara Hawkins, Re. D., (812) 855-6506; Fax (812) 855-9630

Project Period: 7/1/90-6/30/93, FY '90—$90,000, FY '91—$90,000, FY '92—$90,000, FY '93—$90,000

The project provides training in a late-life functional-developmental model for audiences that are critical to effective planning and care of older persons. Activities include developing training modules and instructional videos for interdisciplinary university credit courses, and illustrating the model by demonstration projects in community retirement settings.

CENTER ON AGING AND DEVELOPMENTAL DISABILITIES (CADD)

Grantee: University of Miami/CADD, Miami, FL

Project Director: John Stokesberry, Ph.D., (305) 325-1043

Project Period: 7/1/90-6/30/93, FY '90—$90,000, FY '91—$90,000, FY '92—$90,000, FY '93—$90,000

CADD is providing education and training to service providers, parents and families; advocacy and outreach for consumers, information to the public on aging and developmental disabilities; networking, policy direction and community-based research. Materials will include a manual for parents/caregivers, a resource guide and a handbook on developing a peer companion project.

INTERDISCIPLINARY TRAINING CENTER

Grantee: UAP-Institute for Human Development, University of Missouri—Kansas City

Project Director: Gerald J. Cohen, J.D., M.P.A., (816) 235-1770; Fax (816) 235-1762

Project Period: 7/1/90-6/30/93, FY '90—$90,000, FY '91—$90,000, FY '92—$90,000, FY '93—$90,000

The Center addresses personnel preparation needs with a focus on administration, interdisciplinary training, exemplary services, information/technical assistance/research; and evaluation. Materials include training guide for aging, infusion models, inservice fellowship curriculum, resource bibliography, guide for training volunteers, and course syllabus.

TRAINING MODELS FOR RURAL AREAS

Grantee: Montana University Affiliated Rural Institute on Disabilities, Missoula, MT

Project Director: Philip Wittekiend, M.S. (406) 243-5467; Fax (406) 243-2349

Project Period: 7/1/90-6/30/93, FY '90—$90,000, FY '91—$90,000, FY '92—$90,000, FY '93—$90,000

Montana's focus is on linking existing networks and expertise to meet the unique needs of a rural area with sparse populations and limited professional resources. The project will develop audio conference packages with simultaneous long-distance training for remote areas and involve nontraditional networks such as churches and senior groups.

CONSORTIUM OF EDUCATIONAL RESOURCES

Grantee: UAP-University of Rochester Medical Center, Rochester, NY
Project Director: Jenny C. Overeynder, ACSW (716) 275-2986; Fax (716) 256-2009
Project Period: 7/1/90-6/30/93, FY '90—$90,000, FY '91—$90,000, FY '92—$90,000, FY '93—$90,000

An inter-university interdisciplinary consortium of educational resources in gerontology and developmental disabilities is being established in western New York, to be linked to local and State networks. The project will develop and implement preservice and inservice education curriculum for direct care and nursing home staff.

AGING AND DEVELOPMENTAL DISABILITIES CLINICAL ASSESSMENT, TRAINING AND SERVICE

Grantee: Waisman Center UAP; University of Wisconsin-Madison
Project Director: Gary B. Seltzer, Ph.D., (608) 263-1472; Fax (608) 263-0529
Project Period: 7/1/90-6/30/93, FY '90-$90,000, FY '91—$90,000, FY '92—$90,000, FY '93—$90,000

Waisman Center operates an interdisciplinary clinic, provides training to health care and other professionals, and disseminates information and technical assistance to director care networks. Materials include a functional assessment instrument and curricula for medical students, geriatric fellows and physician assistants.

INTERDISCIPLINARY TRAINING MODELS (IDT)

Grantee: UAP, College of Family and Consumer and Consumer Sciences
Project Director: Zolinda Stoneman, Ph.D., (404) 542-4872; Fax (404) 542-4815
Project Period: 7/1/90-6/30/93, FY '91—$90,000, FY '92—$90,000, FY '93—$90,000

This project is using IDT models for graduate and undergraduate training; developing community-based internship and practicum sites; collecting audiovisual materials for dissemination; and providing information to the UAP regional information and referral service. Products will include training videotapes and modules, course materials, and radio program recordings.

COMMUNITY INTEGRATION PROJECT IN AGING AND DEVELOPMENTAL DISABILITIES (CIPADD)

Grantee: NYS Office of Mental Retardation/DD, Albany, NY
Project Director: Matthew P. Janicki, Ph.D. (518) 473-7855; Fax (518) 486-6714
Project Period: FY '91—$147,255, FY '92—$147,255

CIPADD is a cooperative effort of the New York State DD Planning Council, State Office for the Aging, State Office of Mental Retardation and DD, University of Rochester University Affiliated Program for Developmental Disabilities (UAPDD) Training Program in Aging and DD, Hunter College Brookdale Center on Aging, Institute of Gerontology at Utica College, and Rome DD Services Office. Products and activities include a how-to manual, case monographs on model projects, workshops demonstrating step-by-step approaches to promoting integration and a program manual.

MISSOURI DEVELOPMENTAL DISABILITIES AND ELDERLY RESOURCE NETWORK (MODERN)

Grantee: UAP-Institute for Human Development Missouri, MO Developmental Disabilities and Elderly Resource Network (MODERN)
Project Director: Gerald J. Cohen, J.D., M.P.A.
Project Period: FY '91—$142,160, FY '92—$142,160

MODERN is a collaborative effort of the University of Missouri in Kansas City's Institute for Human Development through its Interdisciplinary Training Center on Gerontology and DD, Missouri Planning Council for DD, Missouri Protection and Advocacy Services, Missouri Division of Mental Retardation/DD, Missouri Association of County Developmental Disability Services, and local interagency groups from St. Louis, Clay/Platte and Central Missouri. Products and activities include development of a centralized resource center with an 800 number, creation of an interagency Task Force to address policy and procedural concerns, dissemination of models and strategies, cross-training of case managers, and support for local interagency work groups.

PARTNERS II: IMPROVING SERVICES TO OLDER PERSONS WITH DD—POLICY TRAINING AND SERVICE

Grantee: Virginia Institute for DD, Virginia Commonwealth University, Richmond, VA

Project Director: Joan Wood, Ph.D., (804) 786-8903; Fax (804) 371-7905
Project Period: 7/1/90-6/30/93, FY '90—$90,000, FY '91—$90,000, FY '92—$90,000, FY '93—$90,000

Project partners are Virginia Department of Aging, Board of Rights of Virginians with Disabilities, Virginia Center on Aging and Virginia Institute on DD at Virginia Commonwealth University, Rappahannock-Rapidan Community Services Center, Norfolk Senior Center, Virginia Department of Mental Health, Mental Retardation and Substance Abuse Services, SEVAMP Area Agency on Aging. Products and activities include recommendations for public policy, personnel training, staff exchange, national teleconference, resource directories, community resource fairs, and strategies for identifying persons at risk for institutionalization.

LIFE LONG PLANNING: DEVELOPING STATE AND LOCAL PLANNING LINKAGES TO IMPROVE OPPORTUNITIES FOR OLDER PERSONS WITH DEVELOPMENTAL DISABILITIES

Grantee: Program on Aging and Developmental Disabilities, Madison, WI
Project Director: Marilyn Wilson, (608) 263-0815
Project Period: FY '90—$135,000, FY '91—$135,000, FY '92—$135,000

A cooperative effort of Bureau on Aging, Developmental Disabilities Office, Waisman Center at the University of Wisconsin-Madison, Wisconsin Council on Developmental Disabilities, and the Wisconsin Coalition for Advocacy, the grant focuses on a rural and an urban county and on Wisconsin's older Native Americans who have developmental disabilities. Products and activities include a series of personal futures planning and circles of support, local and statewide planning efforts, monographs and articles for aging and developmental disability-related newsletter.

INTERDISCIPLINARY TRAINING MODELS (IDT)

Grantee: UAP, College of Family and Consumer and Consumer Sciences
Project Director: Zolinda Stoneman, Ph.D., (404) 542-4827; Fax (404) 542-4815
Project Period: 7/1/90-6/30/93, FY '90—$90,000, FY '91—$90,000, FY '92—$90,000, FY '93—$90,000

This project is using IDT models for graduate and undergraduate training; developing community-based internship and practicum sites; collecting audiovisual materials for dissemination; and providing information to the UAP regional information and referral service. Products will include training videotapes and modules, course materials, and radio program recordings.

ADMINISTRATION ON AGING—FY 1992 REPORT

INTRODUCTION

This report describes the major activities of the Administration on Aging (AoA) in Fiscal Year 1992. Title II of the Older Americans Act of 1965 (the Act) established the Administration on Aging (AoA) as the principal Federal agency for carrying out the provisions of the Act. The 1992 Amendments to the Act, which are described in Section I, reaffirm the responsibilities of AoA, State Agencies on Aging (SUAs), and Area Agencies on Aging (AAAs) to assure that provisions for serving older people are established, strengthened, and extended throughout the nation. Through the Amendments, Congress reaffirmed the need for strong partnerships with and on behalf of older people. Congressional action underscored concern for the most vulnerable elderly and emphasized the need to assure that priority is given to strengthening community level services on their behalf.

The Older Americans Act seeks to remove barriers to economic and personal independence for older persons and to assure the availability of appropriate services for those older persons in the greatest social or economic need, with particular interest on those who are members of minority groups. The provisions of the Act are implemented primarily through a national "network on aging" consisting of the Administration on Aging at the Federal level, State and Area Agencies on Aging established under Title III of the Act, and the agencies and organizations providing direct services at the community level. In fiscal year 1992, Congress appropriated $846,472,000 to support programs and activities to implement the provisions of the Act, which are administered by AoA. This excludes $181,000 available for the Federal Council on Aging under the Older Americans Act appropriation and $2,000,000 for the White House Conference on Aging.

This report is divided into five sections. Section I describes key provisions to the 1992 Amendments to the Older Americans Act. Section II provides information on the functions and roles of AoA offices under the recently implemented reorganization. Section III highlights various activities undertaken by AoA. In particular, the

National Eldercare Campaign which is a multi-year, nation-wide effort to mobilize resources for older persons at risk of losing their independence. The National Eldercare Campaign was developed in partnership with public and private agencies, other Federal agencies and national organizations such as the National Association of State Units on Aging and the National Association of Area Agencies on Aging. Section IV provides an overview of the provisions of Title III of the Older Americans Act. It summarizes the principal activities of the network of State and Area Agencies on Aging in fiscal year 1992. Section V describes the Title VI program of grants to Indian tribal organizations and Native Hawaiians and the efforts of the Administration on Aging in assessing outreach to older Native Americans. Section VI presents a summary of AoA's fiscal year 1992 discretionary activities under Title IV (Research, Demonstration and Training), and a description of the fiscal year 1992 special activities and initiatives conducted by AoA in support of the National Eldercare Campaign.

SECTION I—OLDER AMERICANS ACT 1992 REAUTHORIZATION

Congress passed the Older Americans Act Amendments of 1992 reauthorization bill in late September, 1992. The bill, H.R. 2967, was signed by the President into law on September 30. The new law, P.L. 102–375, extends the Older Americans Act of 1965 (OAA) and the Native American Programs Act of 1974 (NAPA) through Fiscal Year 1995 and authorizes a 1994 White House Conference on Aging.

Representatives of aging organizations and constituents had mounted a major nationwide campaign to urge Congress and the White House to get the authorization bill passed before the 102nd Congress adjourned in early October, and signed before the end of the federal fiscal year which begins on October 1. But these funds were not available for 1992 until the specific congressional authorization in H.R. 2967 was signed into law. Authorization for federal appropriations for ongoing OAA programs expired on September 30, 1991 because of the delayed reauthorization of the Act. In the interim, Congress continued funding under fiscal year 1992 appropriations legislation. Fiscal year 1992 funds appropriated for an increased per-meal payment level from the Department of Agriculture for nutrition programs under the OAA and for activities connected with the White House Conference on Aging took effect with the signing of the Act on September 30, 1992.

As the Nation's major program for the social services network which delivers in-home and community based services to the elderly, including nutrition, the OAA was considerably strengthened and expanded by the 102nd Congress. Many changes affected the largest program of the Act, title III, which authorizes supportive, nutrition and other social services. The Commissioner on Aging of the Administration on Aging (hereinafter, referred to as the Commissioner) which administers the OAA, will now be required to approve State formulas for distribution of title III funding within States. The new law also greatly strengthens the targeting provisions of these formulas to those in greatest social or economic need, particularly to low-income minority individuals. There has been considerable concern about the participation of low-income and minority older persons in programs under the Older Americans Act. The new law requires the Commissioner to design and implement uniform data collection procedures for use by State Units on Aging (SUAs). P.L. 102–375 also requires State and Area Agencies on Aging and service providers to set specific objectives for improving participation by low-income minority persons, such as providing services in accordance with the needs of target groups instead of by their proportion in the population.

Another issue dealt with in the new law concerns public and private partnerships. In recent years, many State and Area Agencies have developed agreements with private, for-profit corporations and businesses, usually to provide services for employed family caregivers as part of a workplace eldercare program. These initiatives have been seen as valuable, and had also become an issue which was addressed in the reauthorization process. In April of 1990, the Administration on Aging issued an instruction to State Agencies on Aging encouraging title III agencies to participate in workplace eldercare programs with corporations, but within certain guidelines. P.L. 102–375 further clarified this guidance by requiring title III agencies to disclose the nature of their public/private activities and to assure that these programs are consistent with the public purpose mission of the OAA.

Two of the most controversial issues related to title III services considered by Congress during the reauthorization were cost sharing and access to services by rural elderly. Currently, the OAA allows voluntary contributions from older persons toward the cost of title III services. Mandatory charges by other persons are prohib-

ited. The new provisions require that states identify in their plans actual and projected costs of providing access to services for older individuals in rural areas.

As to more specific services, nutrition, which represents 44 percent of the Act's total funding, received considerable attention in the new law. Some of these new provisions include:

Restricting the percentage of funds that may be transferred between title IIIB supportive services and IIIC nutrition services, and also between congregate and home-delivered meals programs (C–I and C–II).

Increasing to 61 cents the per meal reimbursement by the U.S. Department of Agriculture (USDA) and adding an inflation adjustment. The reimbursement level is an increase of over 5 cents above the previous amount which had been fixed at 56.76 cents per meal since 1986.

Authorizing a new multigenerational school-based nutrition and volunteer program (Part C–III).

Requiring the Commissioner to conduct a national evaluation of the nutrition program, establish an advisory council and issue guidelines for specific nutrition standards.

Requiring that meals provided by nutrition projects comply with the Dietary guidelines for Americans.

Health promotion and disease prevention services under Part F of Title III were substantially expanded in P.L. 102–375 in an effort to help older persons become healthier, better nourished and more physically fit and to prevent some illnesses and injuries, thus reducing the need for more costly medical services. The reauthorization amendments intend that a regular program of services and information should be available to older persons in every local area through multipurpose senior centers, congregate meal sites, home delivered meals programs and other appropriate sites. Although Medicare has been expanded in recent years to add coverage for some preventive health services, such as mammography screening, pap smears and pneumonia vaccine, little has been done to promote the use of these services by older persons. Many other important preventive and health promotion services that are not covered by Medicare, such as smoking cessation, nutrition counseling, weight reduction, alcohol control, and medication management and screening can be made accessible to older persons through meals programs, senior centers and other sites.

Supportive services for family caregivers of frail older individuals were added to the OAA under a new Part G of title III. Approximately 80 percent of the care for frail older persons is provided by families, usually women who are often employed. Title III–G authorizes funds to assist states in developing comprehensive programs of supportive activities for caregivers such as training and counseling, assistance in forming or participating in support groups, information on obtaining in-home and respite services and other nonfinancial support.

A number of new research and demonstration programs were authorized for title IV's Training, Research, and Discretionary Program. These include programs to provide intergenerational services, pension counseling, transportation, ombudsmen for older tenants of publicly assisted housing, resource centers for comprehensive long-term care research, and Native American Elders Resource Centers.

Under another 1992 OAA amendment, national sponsors that administer title V, the Senior Community Service Employment Program for low-income older workers, will be assured a minimum funding base of about $5 million for their contract. This base is intended to help ensure that all contractors have a minimum level of funds to effectively administer the program on a national basis, which should help close the gap between national sponsors serving Indian, Pacific Island and Asian elders and other national sponsors. Currently, two of the ten national contractors receive about $1.3 million; the largest received over $100 million.

Elder rights programs, focusing on helping older persons secure rights and services, were consolidated, amended and expanded under a new title VII in P.L. 102–375. The purpose of the new title is to expand the responsibility of State aging agencies for the development, management, coordination and outreach of statewide programs and services. These include long-term care ombudsman services, legal assistance, outreach, public benefit and insurance counseling, and prevention of elder abuse, neglect and exploitation.

A White House Conference on Aging, to be conducted no later than December 31, 1994, was also authorized by the 1992 OAA amendments. The 1987 amendments had originally authorized a 1991 conference, in keeping with the previous decennial cycle. The President then called for a 1993 conference for which preparations began but funding authority expired in June of 1992 because of the long delay in the au-

thorization for the conference. For the first time, congressional appointees will work with presidential appointees on the 1994 conference policy committee.

The Administration on Aging is currently developing regulations and working with State and Area Agencies to implement the new provisions of P.L. 102-375. It has been almost 3 years since Congress began hearings in February of 1990 in preparation for the 1991-92 reauthorization. And it will not be long before aging organizations, Congress and the Administration begin the cycle again leading toward the 1996 OAA reauthorization.

SECTION II—THE ADMINISTRATION ON AGING

ROLE AND FUNCTION OF AoA

The Administration on Aging (AoA) is located in the Office of the Secretary of the Department of Health and Human Services (DHHS). The agency is headed by the U.S. Commissioner on Aging, who is appointed by the President with confirmation by the Senate. The Commissioner on Aging reports directly to the Secretary. Joyce T. Berry, Ph.D., was appointed Acting Commissioner on Aging in April 1989. She was subsequently nominated by President Bush and unanimously approved by the Senate. She was sworn in as U.S. Commissioner on Aging in March of 1990.

AoA programs are administered through a Central Office located in Washington, D.C. and 10 Regional Offices. Title II of the Older Americans Act, as amended, describes the basic roles and functions of AoA. Chief among these are to serve as an effective and visible advocate for older persons (including American Indians, Alaskan Natives and Native Hawaiians) within the Department and with other agencies and organizations at the national level and to administer the programs authorized by Congress under Titles III, IV, and VI of the Act.

The U.S. Commissioner on Aging provides policy advice to the Secretary of Health and Human Services in matters affecting older Americans and information to other Federal agencies and to Congress on the characteristics, circumstances and needs of older persons. The Administration on Aging reviews and comments on departmental policies and regulations concerning services which affect the health and general well-being of older persons.

In fiscal year 1992 the Administration on Aging initiated a significant reorganization designed to facilitate the planning and delivery of services to the nation's elderly. The major components of the reorganization are described below:

SIGNIFICANT COMPONENTS UNITS AND PROGRAMS

Office of State and Community Programs

Serves as the focal point within AoA for the operation and assessment of the programs authorized under Titles II and III of the Older Americans Act. Title II gives AoA the primary responsibility for advocacy in behalf of older Americans within the Federal government. The principal initiative under Title II at the present time is the Eldercare Campaign, which draws public and private organizations not traditionally associated with the aged into elder services, particularly to those most at risk. Title III authorizes a formula grant program to the States for the planning and organization of social and support services, and for a nationwide nutrition program for older Americans. This program distributes approximately $750 million to the States, based on the number of older people in each State, which is then distributed within each State to Area Agencies, based on population and other factors affecting service delivery.

Office of American Indian, Alaskan Native and Native Hawaiian Programs

Serves as the focal point within AoA for the operation and assessment of the programs authorized under Title VI of the Older Americans Act. Title VI gives AoA the responsibility for advocacy in behalf of Native Americans within the Federal Government, and authorizes grants to American Indian tribes and organizations serving Native Hawaiians and Alaska Natives, providing social and support services. The purpose of Title VI is to provide services to older Native Americans which is equivalent in quality to services provided under Title III through the State Agencies. The problems of older Native Americans are particularly acute, due to high unemployment, lack of adequate transportation, poor housing, and serious health problems on Indian reservations and in Native Alaskan villages.

Office of Program Development

Conducts activities for the development of adequate knowledge for improving the circumstances of older people. Administers Title IV of the Older Americans Act, which provides for grants programs to carry out research, demonstration, and training programs in behalf of older people. Responsible for disseminating knowledge gained through these activities to professional audiences and older people. In addition to direct funding of research and training activities, this Office emphasizes cooperative activities with other Federal agencies, academic institutions and other public and private institutions associated with the aging. The aim is not only to constantly expand the body of knowledge about the needs of the aged and methods of meeting those needs, but to disseminate that knowledge in the most effective ways to the audiences where it will be effective.

Office of Administration and Management

Provides for administrative support and management systems within AoA. These cover the areas of budget and finance, grants management, personnel, procurement, material and facilities management, management systems, information resources management, and similar support services. This Office has been most strongly impacted by the change in AoA's status to the Operating Division level. Until the beginning of Fiscal 1992, AoA received support services through its parent organization. During the past year, this Office has absorbed most of the support activities which had previously been provided external to AoA.

Office of External Affairs

This new unit in AoA coordinates all liaison activities with outside groups, other than grantees, contractors and professional organizations. This office manages the public education and information, and the legislative development and liaison functions. Legislative activities have been expanded. Other responsibilities include the publication of *Aging* magazine, the celebration of Older Americans' Month, and other events, publications and public inquiries.

Office of Policy Coordination and Analysis

Analyzes and interprets issues related to AoA program policy; develops and interprets AoA goals, priorities and strategies; performs statistical analyses related to the aging; manages a program for the collection and analysis of demographic and socio-economic information related to the aging; and coordinates the review and development of policy in AoA. Although this Office is new in this Fiscal Year, the activities are not new to AoA. There has been a significant increase in emphasis on long term policy and strategy, since the number and percentage of older people will significantly increase over the next 30 years. Even more significantly, from the standpoint of cost and human need, the number and percentage of people over age 85 will increase at a much higher ratio than that of the group from 65 to 85.

Office of Field Operations

Responsible for overseeing the activities of the ten Regional Offices of AoA in the execution of their responsibilities. Coordinates and facilitates contacts between AoA Central Office and Regional Offices. This Office is also new this year, and responds to the increased diversity of activities in Regional Offices, and the greater need for coordination and liaison.

SECTION III—TITLE III SUPPORTIVE AND NUTRITION SERVICES

Introduction

The Administration on Aging (AoA) is the lead component within the Department of Health and Human Services on all issues concerning Aging. It advocates for the needs of the elderly in program planning and policy development; provides technical assistance; issues best practices guidelines; and initiates policy relative to funding the States and Territories for the provision of services to older Americans under Title III (Grants for State and Community Programs on Aging.)

Each State Agency is required to subdivide the State into Planning and Service Areas (PSAs) and to designate within each PSA an Area Agency on Aging (AAA) to be specifically responsible for carrying out the purposes of the Act within the PSA. While most States have a statewide network of Area Agencies on Aging, nine States

and five Territories have designated their entire geographic area as a single PSA with the State agency performing the Area Agency functions because of their small geographic areas or population size. Single PSA States include: Alaska, Delaware, Nevada, New Hampshire, North Dakota, Rhode Island, South Dakota, Wyoming, and the District of Columbia.

STATE AGENCIES ON AGING

The Older Americans Act intends that the State Agency on Aging shall be the leader relative to all aging issues on behalf of all older persons in the State. This means that the State Agency proactively carries out a wide range of functions related to advocacy, planning, coordination, interagency linkages, information sharing, brokering, monitoring, and evaluation designed to develop or enhance services for older persons throughout the State. Fifty-seven States and other jurisdictions receive support under Title III of the Act. States may elect durations of 2, 3 or 4 years for State and Area Plans.

The State Agencies assure that the resources made available to Area Agencies on Aging under the Older Americans Act are used to carry out the Area Agency mission of assisting older persons in leading independent, meaningful and dignified lives in their own homes and communities as long as possible.

State and Area Agencies on Aging work to facilitate the most effective use of all community resources, both public and private, to provide for appropriate services to older persons within the many communities of the Planning and Service Area. To effectively accomplish this goal, there must be a communitywide effort with all appropriate resources, programs and personnel carefully coordinated.

AREA AGENCIES ON AGING

In fiscal year 1991, there were over 670 Area Agencies on Aging operating under Title III of the Act. As of the end of fiscal year 1991, there were approximately 679 Planning and Service Areas, including the 14 Single Planning and Service Areas, previously mentioned, covering nine whole States and five Territories. An Area Agency on Aging may be a public or private organization, an Indian Tribe or a sub-State regional body. Area Agencies on Aging have the major responsibility for the administration, at the sub-State level, of Title III funds for supportive and nutrition services. Area Agencies receive their funds from the State Agency on Aging and then award grants and contracts to local supportive and nutrition service providers under an approved area plan.

Area Agencies on Aging are responsible for providing technical assistance to and monitoring the effectiveness and efficiency of, their respective service providers. Through their coordination and planning activities, Area Agencies also address the concerns of older persons at the community level. Area Agencies interact with other local public and private agencies and organizations in order to coordinate their respective activities and elicit additional resources to be used on behalf of older persons.

FUNDING STATE AND AREA AGENCIES ON AGING

State Agencies on Aging received a total of $454.3 million of Title III funds during fiscal year 1991 and $464 million in fiscal year 1992. Funds under this Title of the Act are made available to the States on a formula basis upon approval of State Plans by AoA Regional Offices. States then allocate funds to Area Agencies based upon approved Area Plans to pay up to 85 percent of the costs of supportive services and senior centers, and nutrition services. In most cases, Area Agencies on Aging then arrange with both nonprofit and proprietary service providers to deliver nutrition and other services described in the Area Plan.

In general, funds provided to Area Agencies are used for the administration and provision of a wide range of supportive and nutrition services authorized under Parts B (including Ombudsman Activities), C, D, and G of Title III as described in the next paragraph.

TITLE III SERVICES

Title III activities conducted in the States during fiscal year 1991* were based upon State plans ranging in duration from 2 to 4 years. In fiscal year 1991 six sepa-

*Note: Fiscal year 1992 service data will be reported by State Agencies on Aging to the Administration on Aging in January, 1993, following the close of the previous fiscal year (which ended on September 30, 1992).

rate allocations under Title III were made to States for: (a) supportive services and senior center operations; (b) congregate nutrition services; (c) home-delivered meals; (d) in-home services for the frail elderly; (e) programs to prevent abuse, neglect, and exploitation of older individuals; and (f) ombudsman activities.

Title III-B supportive services are designed to provide assistance to all older persons, with particular attention to older persons in greatest economic or social need. Most supportive services fall under three broad categories: access services; in-home services; and other community and neighborhood services. Access services are transportation, outreach, and information and referral. Most in-home services are homemaker, personal care, chore, and/or visiting and telephone reassurance. Community and neighborhood services include legal services, residential repair, escort services, health services, physical fitness programs, pre-retirement and second career counseling, and other services.

Data on Title III services and program operations are reflected in State Program Reports which are sent to AoA Central Office each year by the State Agencies on Aging through AoA's 10 Regional Offices. The Title III State Program Reports for fiscal year 1990 were analyzed during fiscal year 1991. These data provide a national summary of the Title III program including such information as participation levels, expenditures, and units of service by service category. This information is responsive to Sections 207 (a)(1), (a)(2) and (a)(4), as required by the Older Americans Act as amended. Selected program data are presented in the following paragraphs.

Title III-B Supportive Services

In fiscal year 1991, the Title III-B program reached an estimated 6.9 million older clients in need of access, in-home, and community-based services. In fiscal year 1991, 17 percent of all participants were racial and ethnic minorities and 36 percent were low income. In the area of access services, transportation was the most frequently provided service, followed by information and referral. In the area of in-home services, personal care was reported most frequently, followed by housekeeping assistance. In the community-based services area, recreational services were most frequently provided, followed by education and training, escort, and legal services.

Title III-C, Congregate and Home Delivered Nutrition Services

Congregate and Home-Delivered Nutrition Services, authorized by Title III-C, continue to be an integral part of the systems which communities are developing to assist their older citizens in maintaining independence and remaining in their own homes as long as possible.

Congregate Nutrition Services

Over 136.6 million congregate meals were served to older people and their spouses during fiscal year 1991. In addition to Title III-C funds, these meals are also supplemented and supported by U.S. Department of Agriculture funds; Social Services Block Grant program funds; other Federal, State, and local funds; and participant contributions. Over 2.5 million elderly received meals at congregate sites.

Home-Delivered Meals

Home-delivered meals are also critical to the maintenance of independence for older persons who are unable to participate in congregate meals programs. During fiscal year 1991, 101.6 million meals were provided to the homebound elderly from Title III-C and other funding sources. This number represents an increase over the 99.6 million home-delivered meals served in fiscal year 1989. A total of 845,976 older persons received home-delivered meals.

Title III-D, In-Home Services for Frail Elderly

During fiscal year 1991, more than 77,875 frail older persons received in-home services under the Title III-D program.

Title III-G, Prevention of Abuse, Neglect, and Exploitation of Older Individuals

Established by the 1987 Amendments to the Older Americans Act, Title III-G was first funded in fiscal year 1991. Program data indicates that more than $830,000 was expended for Title III-G services representing 2.5 percent of total Title III funding for supportive services.

OMBUDSMAN PROGRAMS

State Agencies use part of their Title III-B (Supportive Services and Senior Centers) funds and funds from other sources to establish and maintain long-term care ombudsman programs at the State and sub-State levels. In addition, in fiscal year 1991 Congress provided a separate allocation of funds for ombudsman activities. Program data related to this funding shows that States expended an aggregate amount of $2,015,049 for Ombudsman programs representing 5.9 percent of total Title III funding for supportive services.

Through their ombudsman programs, States have addressed such issues as nursing home regulations, abuse of residents' personal funds, and restrictions on access to nursing homes. Complaint statistics and program data for the fiscal year 1990 reporting period were analyzed during fiscal year 1991. Some highlights of these data are as follows:

During fiscal year 1991 there were 551 sub-state programs.

Total funding for State and local ombudsman programs in fiscal year 1991 increased from approximately $27.9 million in fiscal year 1990 to $34 million in fiscal year 1991. In addition to Title III-B funds, State and local governments used funds from other sources, including State, county, and local revenues, grants under Titles IV and V of the Older Americans Act, and other funding sources.

WAIVERS AS RELATED TO PRIORITY SERVICES

The Older Americans Act, as amended, requires that the Administration on Aging collect and report special information about access, in-home, and legal assistance services. Section 307(a)(22) requires that each State Agency include in its State Plan a minimum percentage of Title III-B funds which each Area Agency must expend on these services. Otherwise, the State grants a waiver to the Area Agency. Section 306(a)(2) describes the requirements which must be met by an Area Agency when requesting a waiver from providing the required minimum amount for one or more of these priority services (access, in-home, and legal assistance) and by the State Agency in granting any such waiver request.

Pursuant to Sections 207(a)(2) and 306(b)(2)(d) of the Act, the Administration on Aging compiles a report on waivers of priority services as required under the Act; however the data for this year's report are not available at the time of submission of this report.

The Act permits State Agencies to grant waivers to Area Agencies that have not expended the mandated minimums for priority services. The Act also requires the State Agency to follow rigorous procedures in their respective granting and review of waivers.

The data from the previous year suggest that there is a high level of compliance with the provisions of the Act. The States have set minimum expenditure levels for the priority services. For most Area Agencies on Aging the States report that the actual expenditure levels have been met.

It is clear that the States have taken the Congressional mandate seriously as well as the freedom to define appropriate proportion.

ADVOCACY AND PARTNERSHIPS

In advocating for older persons, State and Area Agencies on Aging review and comment on State and community policies, programs, and issues; provide testimony at public hearings; publish reports; coordinate and provide technical assistance to other public and private agencies and organizations; and leverage resources from other Federal, State, and local programs, as well as private charitable and business resources.

NONFEDERAL RESOURCES AND PROGRAM INCOME

The Title III program has evolved from a relatively simple program of community service projects for older persons into a complex and highly differentiated "national network on aging" currently consisting of 57 State Agencies and over 670 Area Agencies on Aging and more than 25,000 local nutrition and supportive service providers. These nutrition and supportive service providers are local public, private, or voluntary organizations. Not only do the State and Area Agencies on Aging use Title III moneys to provide for services, they also are instrumental in leveraging other public and private moneys in addressing the needs of older persons.

Title III regulations (45 C.F.R. Part 1321) require each service provider to "provide each older person [receiving services] with a full and free opportunity to con-

tribute toward the cost of the service." Although AoA emphasizes through the aging network that this is not a fee and that contributions are entirely voluntary, these contributions have been steadily increasing ranging from $79 million in fiscal year 1979 to approximately $182 million in fiscal year 1991.

Business and Aging

The Administration on Aging (AoA) is reaching out to members of the business community to encourage their commitment to aging concerns both as employers and community citizens. In addition to the following initiatives, the Commissioner on Aging and staff of the Administration on Aging have made numerous presentations to business representatives on an individual basis and in public forums sponsored by national associations and industries.

Business and Aging Leadership Awards

AoA has established a Business and Aging Leadership Awards Program to reward companies that have made a commitment to aging issues and to highlight their exemplary programs. Over 165 companies were nominated for initiatives they had undertaken in four categories: Employment and Training, Work/Family Issues, Health Promotion, and Volunteerism/Community Initiatives. In a May 1991 ceremony, Commissioner Berry and Secretary Sullivan presented awards to 23 companies in recognition of their accomplishments.

Private Sector Management Committee

In 1990, AoA sought to increase the involvement of a newly established Private Sector Management Committee, comprised of approximately 20 key management officials from selected business organizations and industries. The Committee advises AoA on issues that confront the business community as it deals with an aging America.

American Express

AoA and American Express have undertaken a joint initiative to develop a model public/private sector corporate eldercare program. Through this 2-year initiative, the Area Agencies on Aging in Fort Lauderdale and Jacksonville, Florida are working with their local American Express offices to develop an eldercare program for American Express employees. It is anticipated that the program will be replicated in other communities across the Nation.

Foundation Roundtable

AoA has begun to work with the foundation community, including a number of corporate foundations. In April 1991, the Commissioner convened a roundtable of executives from approximately 35 foundations. The roundtable provided for an exchange of ideas and an opportunity to encourage foundation involvement in aging issues and the National Eldercare Campaign.

Transportation

AoA has continued to award the National Eldercare Institute on Transportation cooperative agreement to the Community Transportation Association of America. The National Eldercare Institute on Transportation will be discussed under Section V of this Report.

Under an agreement with the Department of Transportation's Federal Transit Administration (FTA), the Administration on Aging and FTA are continuing joint support of the Chickasaw Nation's volunteer van transportation program which serves elderly and low-income Native Americans living in the Oklahoma service area of the Chickasaw Nation. As a result of this grant, rural Native Americans are now able to participate in programs that provide nutrition, health, recreation and other supportive services. Home-delivered meals are the most frequently used service. Other services include senior center meals and activities, shopping for necessities, social services, and medical assistance and appointments.

AoA is a member of the Joint DOT/DHHS Coordinating Council on Human Service Transportation. As a member, AoA works with the Council to address Federal barriers that impact on the coordination of transportation services, to promote coordinated transportation planning and programming, and to coordinate technical assistance, program guidance, and information dissemination. In that light, AoA par-

ticipated in a Coordination Roundtable sponsored by the Council. At the Roundtable, participants discussed issues surrounding the development and provision of coordinated transportation services and recommended actions to encourage and facilitate coordinated transportation.

AoA has also prepared and disseminated an information memorandum to the State and Area Agencies on Aging regarding the Americans With Disabilities Act (ADA), which has broadened the perspective on providing human service transportation. The impact of this landmark legislation, especially as it relates to the elderly, is not yet fully known.

AoA is working closely with the Department's technical assistance efforts on a "Study to Analyze Factors Affecting Transportation Needs of the Elderly in Five Counties of Maryland." Ecosometrics, Inc. will prepare a written report for DHHS and AoA based on an analyses of relationship patterns between transportation and aging issues. This is a new short-term project under the Department.

AoA participated in the 13th National Conference on Accessible Transportation and Mobility in Tampa, Florida. AoA presented information at the Conference on Federal Program Initiatives as they relate to transportation and aging issues.

Employment

Regional Offices in cooperation with the Department of Labor have sponsored employment and training conferences which target Older Worker employment opportunities, placement, and retention.

AoA has funded various types of research and demonstration projects which have developed training materials and techniques to improve and enhance employment opportunities for Older Workers.

Through the funding of dissemination projects, AoA has targeted employers and potential employers to receive information on the abilities of older workers and dispel myths related to aging which projects a negative image of the older worker.

AoA has funded an National Eldercare Institute on Employment and Volunteerism which will be located at the University of Maryland, Center on Aging.

Collaboration With Social Security and Health Care Financing Administrations

In fiscal year 1990, the Administration on Aging, the Social Security Administration (SSA), and the Health Care Financing Administration (HCFA) signed a Memorandum of Understanding to promote and enhance collaboration of aging services. Since then, AoA, SSA, and HCFA have worked jointly to develop initiatives that support the following objectives of the Understanding:

(1) To improve the coordination of services funded under the program authorities of AoA, SSA, and HCFA which relate to older persons;

(2) To increase public awareness of SSA and HCFA entitlement programs, AoA's nutrition and supportive services programs, and other programs that promote the well-being of older persons;

(3) To increase older persons participation in SSA and HCFA entitlement programs, AoA's nutrition and supportive services programs, and other programs which promote the well-being of older persons through special outreach efforts that focus on "hard to reach" individuals such as low-income older persons who are members of minority groups, elderly persons who do not speak English, and older persons living in rural areas;

(4) To reduce the elderly's dependence on entitlement programs by improving their personal financial security and increasing employment opportunities for older persons, particularly those with disabilities; and

(5) To improve health care for vulnerable older people.

During fiscal year 1992 the following activities were undertaken in support of this MOU:

SSI Outreach Efforts

AoA and SSA issued discretionary grant announcements which sought project proposals that would demonstrate innovative, transferrable approaches for increasing both public awareness and participation in the Supplemental Security Income and other public benefit programs. The work group sought the collaboration of SSA and AoA in developing the announcement, disseminating the announcement to the aging agencies and organizations, and reviewing the grant applications. AoA encouraged the State and Area Agencies on Aging, and Tribal Organizations to submit ap-

plications for fiscal year 1992 funds for a series of the Social Security Administration SSI Outreach Demonstrations.

AoA/SSA/HCFA Information Dissemination

AoA and SSA assisted HCFA in disseminating a variety of materials, including videotapes, to their respective networks, ranging from information on the Qualified Medicare Beneficiary program and Medigap Insurance Counseling program to other information about programs and requirements under the Social Security Act. AoA also assisted SSA in distributing SSI Outreach information and posters to the State and Area Agencies on Aging, Tribal Organizations and the Leadership Council on Aging Organizations. In addition, AoA encouraged State and Area Agencies to submit applications for the HCFA Health Insurance Counseling and State Assistance program.

SECTION IV—SERVICES TO OLDER NATIVE AMERICANS

Services to Older Native Americans

TITLE VI GRANTS FOR NATIVE AMERICANS

Under Title VI of the Older Americans Act, the Administration on Aging annually awards grants to provide supportive and nutritional services for older Native Americans. The Older Americans Act in 1978, added Title VI—"Grants to Indian Tribes." In the Older Americans Act Amendments of 1987 (P.L. 100-175) Title VI was renamed "Grants for Native Americans," and older Native Hawaiians were added to the American Indians and Alaskan Natives already being served by Title VI. Title VI was divided into two parts, Part A—Indian Program, and Part B—Native Hawaiian Program. The first grant under Part B was made in Fiscal Year 1989. The 1992 Amendments to the Older Americans Act provided a directive for coordination between Title VI and Title III and a "hold harmless" clause for all current Title VI grantees (subject to the availability of appropriations). Of the amount appropriated for Title VI for each fiscal year, 90 percent was provided to carry out Part A and 10 percent was provided to carry out Part B.

In Fiscal Year 1992, under Title VI Part A, eight new grants were awarded, four from the breakup of two previously funded consortia and four new Tribal organizations. There are now 216 Title VI Part A grantees. The funding increased from $13,133,811 for Fiscal Year 1991 to $13,581,00 for Fiscal Year 1992.

One grant was awarded under Title VI Part B. The funds awarded, as specified by the 1987 Amendments, remained the same for Fiscal Year 1992 at $1,505,000.

ELDERS ELIGIBLE UNDER TITLE VI

Persons eligible for services under Title VI Part A are tribal members age 60 or over living in a Tribe's Title VI service area, and members under age 60 if the Tribe has selected a younger age for "older Indian." The Older Americans Act Amendments of 1981 allowed Tribes to set a younger age for "older Indian", if considered appropriate. The 216 grantees of Title VI Part A for Fiscal Year 1992 estimated that 97,609 older Indians were eligible for services, including 77,850 age 60 or over, and 19,759 under age 60.

For services under Title VI Part B, the Native Hawaiians must be age 60 or over. Alu Like, the statewide grantee, estimated that 1,300 older Native Hawaiians were in the proposed Title VI Part B service areas on the five major islands and thus were eligible for Title VI services. The grantee estimated that there were a total of 13,000 older Native Hawaiians in the entire State of Hawaii.

SERVICES UNDER TITLE VI

Congregate and home-delivered meals, and a variety of supportive services were provided by Indian Tribes Under Title VI Part A. All grantees provided the required service of information and referral unless other arrangements existed. Other supportive services that were provided included transportation, counseling and home assistance services.

The most recent service delivery data available is for Fiscal Year 1991. Approximately 2,293,837 meals were provided under Title VI Part A in fiscal Year 1991, including 1,099,705 congregate meals, and 1,194,132 home-delivered meals.

Approximately 32,000 meals were provided under Title VI Part B in Fiscal year 1991.

CONTRIBUTIONS TO THE ELDERCARE CAMPAIGN

In 1991 the Office of American Indian, Alaskan Native, Native Hawaiian Program established an Eldercare Work Group with representatives from the Administration on Aging central office, three regional offices, and eight Tribal Organizations. The purpose of the workgroup was to provide a means of exchange between the participating members in order to develop and promote the implementation of an effective strategy for eldercare in diverse Indian communities. Workgroup accomplishments included: submission of articles and updates by workgroup members for "In Touch" and "Aging Magazine;" development of a draft fact sheet for Eldercare in Indian communities; and appointment of tribal representatives to the advisory boards of the National Eldercare Institute on Nutrition, the National Eldercare Institute on Transportation, and the National Eldercare Institute on Human Resources.

The Eldercare campaign is being further promoted by the National Title VI Directors Association. This Association was awarded a grant by the Administration on Aging in 1991 to conduct a public awareness campaign on the needs of "at-risk" Native American, Native Alaskan and Native Hawaiian elders. The purpose of the grant is to educate individuals, agencies, organizations, and businesses on the needs of "at risk" Native American, Native Alaskan and Native Hawaiian elders and to secure resources to improve the quality and increase services to this population. In 1992 a video and information packet illustrating the needs of this population has since been developed. Film presentations have been delivered on national, regional, and local levels in such diverse geographic locations as New York, Washington, DC, Arizona, Oklahoma, Washington, Kansas, New Mexico, and Wisconsin.

ADMINISTRATIVE PROCEDURES

A proposed monitoring policy for Title VI grants was developed. The "Title VI Compliance Monitoring Instructions and Guide" was field tested in one region. Further field tests are necessary before finalizing the monitoring guide and implementing the monitoring plan. The monitoring plan must be implemented in fiscal year 1993.

TECHNICAL ASSISTANCE

In Fiscal Year 1992 a decentralized method of providing training and technical assistance to Title VI grantees was implemented in an effort to provide more flexibility in responding to an increasingly diversified set of individual grantee needs. Under this decentralized approach, the country was divided into three sections. A lead Region in each section was designated to manage the planning and acquisition of training and technical assistance. Training and technical assistance is being delivered in a wide variety of areas including Title III/Title VI coordination, budget and program management, nutrition, and service development.

TITLE III/TITLE VI COORDINATION

In 1992, grantees were asked to include information on Title III/Title VI coordination in their area in the grant applications. At the same time, a working relationship has been developed with NASUA to evaluate the adequacy of outreach under Title III and Title VI so recommendations can be made to the Commissioner on necessary action to improve service delivery, outreach, coordination and particular problems faced by older Native Americans.

OFFICE FOR AMERICAN INDIAN, ALASKAN NATIVE, AND NATIVE HAWAIIAN PROGRAMS

In 1992 the Associate Commissioner for Office for American Indian, Alaskan Native, and Native Hawaiian Programs has continued to serve as the focal point within AoA for the operation and assessment of programs authorized under Title VI of the Older Americans Act (OAA) and to provide program and policy direction to the 10 Regional Offices of AoA in the execution of their Title VI responsibilities. The Associate Commissioner has also continued to serve as the effective and visible advocate on behalf of older Native Americans, to coordinate activities with other Federal departments and agencies, to administer and evaluate grants provided under the OAA to Indian Tribes and public and nonprofit private organizations servicing Native Hawaiians, to collect and disseminate information related to the problems of older Native Americans and to promote coordination between the administration of Title III and the administration of Title VI.

INTERAGENCY TASK FORCE ON OLDER INDIANS

The 1987 Amendments in Section 134(d) directed the Commissioner on Aging to establish a permanent Interagency Task Force on Older Indians, with representatives of departments and agencies of the Federal Government with an interest in older Indians. This Task Force was established in Fiscal Year 1990 and became fully functioning in Fiscal Year 1991.

In Fiscal Year 1992 the Interagency Task Force on Older Indians established three major priority areas: Health/Long Term Care; Transportation; and Data Development and Dissemination. These areas were chosen on the basis of post testimony from experts from different Indian communities and from the preliminary report which the National Indian Council on Aging prepared as a basis for a National Policy for Older Indians. Participants on the Task Force will develop reports on the issues in these priority areas, recommendations for improved collaboration between and within Federal agencies and recommendations for Congressional review of key statutorily based issues. The subcommittee reports will be reviewed and discussed by the full Task Force. It is planned that a final report will be issued to all participating Federal agencies by the end of the calendar year, 1993.

The Task Force also worked with the White House Conference on Aging to inform them of issues of concern by the elderly in Indian communities in Federal and State recognized tribes as well as Urban based organizations.

SECTION V—AoA DISCRETIONARY PROGRAMS

A. Purpose of Title IV

Title IV—Training, Research, and Discretionary Projects and Programs—supports the goals of the Older Americans Act by funding model projects and research and by educating and training professionals in fields which have an impact on the aging. Through these projects, the Administration on Aging (AoA) provides valuable support to the National Eldercare Campaign, helps to build the capacity of State and Area Agencies on Aging and other organizations to provide services to the aging, promotes linkages among organizations which serve older persons, and takes a leadership role in better preparing the country for an aging society. Title IV funds are also used to support short-term evaluations, studies, and other special activities periodically specified by Congress under reauthorizations of the act.

Projects funded under Title IV complement and support the services provided through other sections of the Older Americans Act. Training and technical assistance to State and Area Agencies on Aging is provided through National Eldercare Institutes with expertise in such areas as community based long-term care, elder abuse and ombudsman programs, transportation, nutrition, and housing. Through Title IV, AoA promotes minority management and leadership of aging programs and agencies, the growth of college/university faculty who are knowledgeable about the aging process and informed on aging issues, and career preparation of students in disciplines relating to aging. Health promotion activities for older Americans are supported through Title IV by a number of projects as are model projects for serving the vulnerable elderly. Strategies for cultivating public/private partnerships and strengthening the family are developed through Title IV as well as models for using older persons as resources. As part of the Small Business Innovation Research Program, AoA also awards contracts to small businesses to develop innovative technology which will benefit the elderly.

In fiscal year 1992, a major portion of Title IV funding supported activities of the National Eldercare Campaign and its goals to create public awareness, broaden the involvement of individuals and organizations, and promote community action on behalf of older persons at risk. The first part of this section describes the project grants and contracts which support organizations assisting the Administration on Aging in the conduct of this campaign, including promotion, training, and technical assistance. The second part of this section describes a wide variety of activities supported by Title IV funds which carry out both specific and general mandates of the act. Activities are described by topical area or focus and include projects funded in prior fiscal years, but still active in fiscal year 1992.

B. Activities in Support of the National Eldercare Campaign

During fiscal year 1992, Title IV funds were used to continue support of the National Eldercare Campaign and its goals to increase advocacy, collective planning, and action on behalf of the most vulnerable older Americans. Six components of the National Eldercare Campaign, initiated in fiscal year 1991, were ongoing on fiscal

year 1992—(1) grants to national organizations for promotion of National Eldercare Campaign goals through activities of their networks; (2) Project CARE grants to State and Area Agencies on Aging to encourage development of coalitions of local organizations and businesses; (3) grants to National Eldercare Institutes to advance our knowledge base in several important issue areas and to provide technical assistance and training; (4) grants to State Agencies on Aging to foster development of an Older Americans Act Eldercare Volunteer Corps; (5) a contract to develop national media materials; and (6) a contract to support training and technical assistance in coalition-building. Additional project grants were awarded in fiscal year 1992 under the first four components: national organizations, the Eldercare Volunteer Corps, Project CARE coalitions, and the National Eldercare Institutes.

1. NATIONAL ORGANIZATIONS

In fiscal year 1992, as in fiscal year 1991, the Administration on Aging solicited project applications from national organizations to initiate and carry-out initiatives within their organization and among their members in support of the National Eldercare Campaign, with specific attention to the goals of Project CARE—Community Action to Reach the Elderly. The competition for 1992 support, as in fiscal year 1991 was held through the annual Discretionary Funds Program Announcement in two categories, one for national associations and organizations whose predominant focus is not aging, and another for national aging organizations.

a. Building Public Awareness About Eldercare in Non-Aging Organizations

Twelve national organizations were awarded grants in fiscal year 1992 to work through local affiliate chapters to promote grass-roots efforts that would respond to problems of the at-risk elderly. The activities of these new awards are similar in purpose to the 10 projects awarded in fiscal year 1991 whose public information and dissemination activities served as a model for new applicants.

FY 1992 NEW STARTS

The Helen Keller National Center for Deaf-Blind Youth and Adults will increase the awareness of professionals in aging and other older adults about the effects of sensory loss and the rehabilitative approaches necessary to assist older persons with sensory impairments. Three Helen Keller Center affiliates will implement a community based Confident Living Program that provides to older persons with sensory loss (1) training in coping skills and (2) techniques for adapting activities of daily living.

The American Foundation for the Blind will develop a five-site collective action and advocacy model to address the eldercare issue of improving access to community services and resources for older visually impaired persons. Local affiliates will work with eldercare coalitions and disseminate information about local eldercare campaigns to their members.

The Arc—a national organization for families of children with mental retardation—will provide training and technical assistance for six selected affiliate chapters to demonstrate programs that assist elderly parents of an aging son or daughter with mental retardation. Each demonstration will help families to develop plans for the care of their son or daughter which takes into account the future possibility that the parents will not be able to carry out their key care-giving roles.

The National Urban League will provide in-home, transportation, and nutrition services and health care information to the at-risk elderly in their home or local communities.

The National Council of La Raza project, Ancianos Capaces de Triunfar (ACT), will empower Hispanic elderly to become aging advocates, increase the capacity of Hispanic community-based organizations to mobilize collective action and advocacy efforts on behalf of the Hispanic elderly, and increase their access to eldercare services.

The National Council of Jewish Women will train volunteers to organize local coalitions and community education campaigns directed at family caregivers and employers in nine geographically and demographically diverse communities.

The National Baptist Convention will establish National Baptist Convention in-home care programs in four States (New York, New Jersey, Missouri, Virginia) and the District of Columbia.

The Boys and Girls Clubs of America will develop and disseminate to local affiliates a program that enables youth to plan and carry out community eldercare advocacy and service activities for the at-risk elderly.

The George Meany Center for Labor Studies will create organizational structures which will form local coalitions and support union retirees in the provision of social services to the at-risk elderly in their communities.

The Points of Light Foundation will demonstrate how local volunteer centers can play a key leadership role in mobilizing new nontraditional volunteer resources to respond to the needs of at-risk elderly.

The National Recreation and Parks Association will work with public park and recreation agencies so that they can effectively cooperate with the traditional aging network in serving the at-risk elderly through the existing service system.

The National Association for Equal Opportunity in Higher Education (NAFEO) will work to stimulate linkages among Historically Black Colleges and Universities (HBCUs) and their respective communities to develop strategies for improving the lives of minority older persons. Project activities include training, technical assistance and information dissemination. These will be carried out through a series of workshops and other targeted efforts. Anticipated products include models of HBCU-community cooperation to be developed and demonstrated by three HBCUs—Langston University in Oklahoma and Morgan State University and Sojourner-Douglas College in Baltimore, Maryland.

PROJECTS FUNDED IN FY 1991

The Public Health Foundation (Washington, DC) has developed a guide, "Wearing Well: A Guide to Public Health Practice for Eldercare," for practitioners to use in determining the needs of the older population and planning appropriate services. The guide uses a multidisciplinary approach to enhance the focus on aging in the areas of public health nursing, nutrition, social work, dentistry, and health promotion. A Commissioner's Award for Public Health Excellence in Eldercare was established to recognize excellence in local public health programs.

The Health Insurance Association of America (Washington, DC) prepared a self-study education course on long term care protection for insurers and their agents, employee benefit specialists, employers, financial planners and providers. The curriculum, which includes a textbook on long-term care and long-term care insurance, a study guide and a course examination, will be submitted to State licensing agencies for continuing education credit approval.

The American Medical Association (Chicago, IL) is using a train-the-trainer approach to increase physician awareness of the needs of homebound elderly and to maximize the capacity of physicians to provide in-home medical management. Clinical seminars conducted in Illinois, Arizona, Maryland and Texas have used materials developed during the project, including: (1) Guidelines for Medical Management of In-Home Care; (2) Patient Management in the Home: Lecture Notes and Case Studies; and (3) a monograph entitled "High Technology Home Care."

The National Easter Seal Society (Chicago, IL) increased public awareness of the needs of an aging society and of older persons with disabilities through program demonstrations in (1) North Carolina on respite and personal care and in (2) Utah on mainstreaming elderly developmentally disabled people in senior centers and using senior volunteers to assist rural families who have children with disabilities.

The American National Red Cross (Washington, DC) has developed a Nurses Assistant's Training Program with special emphasis on training home caregivers in families with dependent elderly. The Red Cross is implementing it in five local chapters.

The National Association of Social Workers (Washington, DC) conducted a series of activities to increase interest among its members and prepare them to work in the field of aging. Activities included development of sessions on aging for its World Assembly held July 18–22, 1992 in Washington, D.C.; the award of 10 mini-grants to 10 local chapters to develop specific programs in the field of aging and to promote the National Eldercare Campaign; and the development of a document on "Social Work with a Culturally Diverse Population."

Catholic Charities USA (Arlington, VA) provided information to parishes and congregations interested in learning more about linking older adults with community services through publication of a guidebook entitled "Linking Your Congregation With Services for Older Adults." The project is also expected to convene a national conference that focuses on access issues for at-risk, homebound older persons.

The National Council of Negro Women (Washington, DC) is utilizing volunteer support networks to promote community awareness of the National Eldercare Campaign with special emphasis on minority elders in five cities (Atlanta, Los Angeles, New Orleans, New York, and Rulesville, MS.

The National Black Caucus of State Legislators (Washington, DC) has held three eldercare forums to alert State legislators to the importance of the problems of the

at-risk elderly and provided fact sheets on important issues in aging that have implications for State legislative action.

The American Institute of Architects/Association of Collegiate Schools of Architecture (Washington, DC) have continued their efforts to provide information to practitioners and students highlighting the need for innovative designs for older persons housing. The Design for Aging Network has been established and a membership directory has been distributed to members. A guidelines report entitled "Better Environmental Design for Older People: Strategies for Collaboration in an Era of Universal Design" will be distributed in the near future.

The National Association of Counties (Washington, DC) continues their efforts to develop and enhance the capacity of county governments to respond to the challenges resulting from the growth in our aging population. A series of workshops have been delivered at NACO's national conference, a national Videoconference with downlinks to a majority of the States has been conducted, and an Aging Awareness Kit has been distributed to county governments.

b. Eldercare Advocacy by National Aging Organizations

Six new awards were made to national aging organizations in response to the fiscal year 1992 Discretionary Funds Program Announcement to increase awareness of the home and community-based care needs of older persons at risk and to expand public awareness of the problems and issues concerning eldercare. These awards complement the activities of seven other national aging organizations funded in fiscal year 1991.

NEW STARTS

The American Association of Homes for the Elderly (Washington, DC) will establish and sustain an Eldercare Initiative designed to increase the availability of supportive service programs for the low-income elderly residing in and around HUD-assisted elderly housing projects.

The Alzheimer's Disease and Related Disorders Association (Chicago, IL) will undertake a Community Eldercare Awareness Campaign to demonstrate to community organizations and policy and decision makers how the unmet needs for home and community based care faced by Alzheimer's Disease victims and their caregivers have an adverse affect on the entire community. This project will test the effectiveness of local eldercare awareness campaigns to bring about community change for at-risk elderly and their families.

The National Association of Area Agencies on Aging (Washington, DC) will join with the Employee Assistance Professional Association (EAPA) to orient client companies of EAPA to aging issues, to focus employers on eldercare options for older worker with dependent relatives, and to facilitate better cooperation between Area Agencies on Aging and EAPA chapters.

The Older Women's League (Washington, DC) will focus national attention on caregivers of family members at risk of losing their independence and on the contributions that health care professionals can make in assisting older women in their care-giving roles. This project will also provide technical assistance to Project CARE coalitions on family caregiving.

The National Committee for the Prevention of Elder Abuse (Worcester, MA), in cooperation with the National Association of Adult Protective Services Administrators, will promote and enhance the role of State and local eldercare coalitions in preventing elder abuse by establishing model elder abuse coalitions in Idaho, Virginia, Montana, Texas, and Tennessee.

The National Association of State Units on Aging (Washington, DC) will stimulate greater involvement by print media in the National Eldercare Campaign by improving the media's capacity to provide accurate, balanced coverage of aging issues which is responsive to the information needs of at-risk older people and their families.

PROJECTS FUNDED IN FY 1991

The American Society on Aging (San Francisco, CA) has been targeting its Eldercare Campaign advocacy project on those sectors of the community not traditionally involved in aging issues, i.e., bankers, architects, grocers, pharmacists, and religious groups.

The National Title VI Directors Association (Tahlequah, OK) has been conducting a public awareness campaign on the needs of at-risk American Indian, Alaskan Native, and Native Hawaiian elders. A video and presentation packet has been developed for Title VI Directors to assist them in conducting presentations at meet-

ings/conferences between Title VI programs and their local entities. Presentations have begun and have been so successful that more presenters will need to be trained to meet the demand.

The American Bar Association (Chicago, IL) has concentrated on law-related aspects of the National Eldercare Campaign with special emphasis on alerting and educating social workers and religious organizations regarding legal issues critical to their at-risk elderly clients and congregants.

The National Caucus and Center on Black Aged (Washington, DC) has designed its Eldercare Campaign project to provide training, technical assistance, and information regarding the service needs of at-risk Black elderly to Black sororal and professional organizations in major cities across the Nation.

The National Hispanic Council on Aging (Washington, DC) is utilizing its chapters and affiliate organizations as the "hubs" of a National Eldercare education campaign in Hispanic communities aimed at youth groups, religious and civil rights organizations, schools, and community leaders.

Save Our Security Education Fund (Washington, DC) is engaged in an advocacy effort on behalf of those elderly at risk of losing their independence because of inadequate economic resources. The SOS Education Fund project focuses on educating the public about poverty among the elderly and the importance of Supplemental Security Income (SSI) for low-income older Americans.

The Asociacion Nacional Pro Personas Mayores (Los Angeles, CA) has initiated an advocacy campaign on behalf of Hispanic elders that emphasizes the involvement of Hispanic elected and appointed officials and leaders in business and fraternal organizations in addressing the need of Hispanic elders for in-home and community based services.

2. OLDER AMERICANS ACT ELDERCARE VOLUNTEER CORPS

In April 1991, the U.S. Commissioner on Aging announced the establishment of the Eldercare Volunteer Corps. The Corps was established to recognize those persons who have devoted their time as volunteers in Older Americans Act Programs and to encourage the expansion of volunteer efforts. Twenty-eight State Agencies on Aging received fiscal year 1991 project awards in support of the Eldercare Volunteer Corps. Federal funds were used to develop and demonstrate improved methods for recruiting, training, and retaining volunteers. Many States held recognition events for their volunteers, and issued certificates of appreciation especially developed for the Corps.

In fiscal year 1992, 13 new project awards were made to State Agencies on Aging to further expand the Older Volunteer Corps. The newly funded State Agencies on Aging are expected to bring together key actors to examine current volunteer program activities, to prioritize future volunteer efforts and develop an action plan to more effectively recruit, retain, train, and supervise volunteers in Older Americans Act Programs, and to begin to implement the plan. Project awards were made to the following 13 State Agencies on Aging:

Alabama Commission on Aging
California Department of Aging
District of Columbia Office on Aging
Florida Department of Elder Affairs
Indiana Department of Human Services
Kentucky Division for Aging Services
Maryland Office on Aging
Michigan Office of Services to the Aging
Missouri Division of Aging
New Hampshire Division of Elderly and Adult Services
New Mexico State Agency on Aging
Ohio Department of Aging
West Virginia Commission on Aging

3. PROJECT CARE: COMMUNITY ACTION TO REACH THE ELDERLY

The Commissioner on Aging launched Project CARE (Community Action to Reach the Elderly) in May 1991 as a major component of the National Eldercare Campaign. The goal of Project CARE is to tap the expertise, energy, and experience of individuals and organizations and encourage new ideas and approaches for meeting the needs of vulnerable, older Americans through formation of state and local community coalitions. More than 250 eldercare coalitions were initiated in fiscal year 1992 with the assistance of grants awarded in fiscal year 1991 to 16 Area Agencies on Aging and 52 State Agencies on Aging.

On an optional basis, about 30 States started statewide coalitions. The statewide coalitions were formed to support the work of the community coalitions. State coalitions provide a mechanism for building widespread public awareness about the needs of older persons. They also provide a way to focus attention on the need for State level, comprehensive strategies to help vulnerable older persons.

The community coalitions are implementing practical, immediate service projects to help vulnerable older persons. Each is working to broaden the base of support for eldercare concerns by empowering local community leadership to take greater responsibility for their vulnerable older persons. The coalitions include a significant number of nonaging organizations which traditionally have not been involved with aging concerns.

Project CARE coordinators from local coalitions, Area Agencies on Aging, and State Agencies on Aging participated in two orientation and training events sponsored by the Administration on Aging. The first was a National Forum on Eldercare held in Washington, D.C. in December 1991. The second was a training session on coalition development held in each Administration on Aging region during the Spring of 1992. The coalitions were challenged to focus on at least one need and implement a service project to meet that need.

During their first year, the local coalitions were engaged in problem solving and the infusion of new ideas, capacities and resources as part of community solutions for meeting the needs of the vulnerable elderly. In fiscal year 1992, AoA refunded the projects awarded in fiscal year 1991 to continue support of existing coalitions for a second year. AoA provided additional funds for expansion which is expected to result in the formation of 600 new community coalitions. Highlights from the first year include:

Virtually all of the coalitions had organized and met at least once.

Approximately 81 percent had identified a target population.

Approximately 80 percent had selected a priority service need.

An estimated 83 percent had started some level of service planning and 67 percent had started or completed a service project.

4. NATIONAL ELDERCARE CAMPAIGN MEDIA CONTRACT

During 1992, Global Exchange Inc. worked with AoA to develop a series of products to heighten public awareness about eldercare issues. These products have proven useful to the organizations participating in the campaign and have helped them to conduct their own public awareness campaigns at the state and local level.

The products developed include the campaign theme—Community Action Begins With You: Help Older Americans Help Themselves, a poster, a public/press information kit, three issues of a new magazine called Eldercare Today, a National Eldercare Campaign brochure, a brochure highlighting the activities of national organizations, several articles for publication in the press about important eldercare issues, a radio Public Service Announcement on National Caregiver Week, an article for publication in 300 religious publications, a video and a TV Public Service Announcement (PSA) on Project CARE, and a series of traveling exhibits for use at meetings and conferences.

The efforts of AoA and Global Exchange at the national level were supported by media campaigns conducted at the state and local level. State and local entities developed news articles, videos, radio and TV PSAs and special events to promote public understanding and support for eldercare programs and issues.

5. ELDERCARE CONNECTIONS

AoA funded a grant in fiscal year 1992 to the National Association of State Units on Aging to provide Campaign organizations access to a comprehensive repository of information concerning the National Eldercare Campaign. Known as "Eldercare Connections", the services provided include:

Summary information about products produced for the Campaign.

Publication and distribution of a bi-monthly update of all produces received.

Maintaining a computerized bulletin board for quick access to information in the database.

Publication and distribution of a Calendar of Events of important eldercare meetings around the country.

6. NATIONAL CENTER ON COALITION BUILDING

Through support provided by AoA, the National Association of Area Agencies on Aging established the National Resource Center on Coalition Building (NRC). The purpose of the NRC is to provide training, technical assistance and support for State

and Project CARE community coalitions participating in the National Eldercare Campaign.

During 1992 the NRC developed a training program to enhance the capacity of Project CARE community coalitions to develop effective coalitions. A core group of consultants were trained as trainers. Training sessions were held in each of the 10 federal regions for State, Area Agency on Aging and community coalition staff. The NRC also collected information about effective coalition building techniques and synthesized and disseminated these products to participating coalitions. The NRC established a toll free telephone number to provide assistance on a variety of coalition building topics to community coalitions.

NRC also developed resource materials on coalition building and disseminated them to all State, Area Agencies on Aging and community coalitions.

7. NATIONAL ELDERCARE INSTITUTES

As part of the National Eldercare Campaign, the Administration on Aging has supported a number of specialized National Eldercare Institutes located in national organizations and academic institutions. In fiscal year 1991, 12 National Eldercare Institutes were awarded project grants under the terms of a three-year cooperative agreement. In 1992, an additional award was made to establish a second National Eldercare Institute in the area of Long Term Care. Each Institute focuses on a critical substantive area relevant to improving eldercare services, both in the home and community. Each Institute addresses issues vitally important to those older persons struggling to maintain their self-sufficiency. Working in close collaboration with eldercare coalitions across the Nation, the National Eldercare Institutes also undertake a variety of activities designed to support and assist State and Area Agencies on Aging in carrying out their missions as planners and coordinators of aging services within their jurisdictions.

a. Long-Term Care

Two National Eldercare Institutes on Long Term Care are currently supported on the basis of the competition held in fiscal year 1991, although one was first deferred and then later funded in fiscal year 1992.

(1) *The National Eldercare Institute on Long Term Care,* conducted by the National Association of State Units on Aging (Washington, D.C.) in collaboration with Brandeis University (Waltham, Massachusetts), supports the National Eldercare Campaign by being a resource on home and community-based care for the at-risk elderly population. The Institute enhances the capacity of Eldercare coalitions to identify issues relevant to long term care that need to be addressed in their communities through consultation, knowledge synthesis, training, and technical assistance. These activities are assisting community and State coalitions to implement community care agendas and to promote adoption of these agendas by segments of society that can build a broad base of support for Eldercare programs and services. In addition, the Institute supports the community long term care agenda of the Eldercare Campaign by developing informative resource materials.

During the first year of operation, the Institute produced a number of high quality products including issue briefs, reports and guides designed to provide important information to Project CARE coalitions to help them plan, develop, and implement community based service systems. In addition, the Institute has provided extensive telephone technical assistance, on-site technical assistance, and training to local and state coalitions and others. In its second year, the Institute will build upon its accomplishments in Year 1, producing additional information materials, action guides, and reports; providing technical assistance and training; and conducting teleconferences and policy forums.

(2) *The National Eldercare Institute on Long Term Care and Alzheimer's Disease* at the Suncoast Gerontology Center, University of South Florida, was funded May 1, 1992. This Institute has designed activities that will support the National Eldercare Campaign with current, practical information on critical long term care issues, especially Alzheimer's Disease. Other major areas the Institute is focusing on include home and community based model long term care programs and services, and caregivers and caregiving. The Institute has produced several informative briefs and a guide for coalition building at the local level. It has also provided telephone technical assistance and conducted a number of statewide and national training sessions.

b. Elder Abuse and State Ombudsman Services

The National Eldercare Institute on Elder Abuse and State Long Term Care Ombudsman Services is conducted by the National Association of State Units on Aging (Washington, D.C.) in collaboration with the American Public Welfare Association (Washington, D.C.) and the National Citizens Coalition for Nursing Home Reform (Washington, D.C.). The purpose of the Institute is to strengthen community, State and national efforts to combat elder abuse in domestic and institutional settings and to support the development and effective operation of Long Term Care Ombudsman Programs supported under Title III of the Older Americans Act.

In Year One, the Institute increased awareness of the problem among the public and key professionals by (1) providing expert information to local and national journalists and broadcasters and professional groups, including the Advisory Committee of the American Medical Association responsible for development of guidelines for use by physicians in diagnosing and treating elder abuse patients; (2) developing and disseminating educational materials such as "Elder Abuse: Questions and Answers," "Fact Sheets on Domestic Elder Abuse and Institutional Elder Abuse and Ombudsman Services;" and (3) participating in meetings including the National Association of State Adult Protective Service Administrators, American Medical Directors, and the Alzheimer's Association.

The Institute provided training and technical assistance via (1) conferences and workshops such as the 1992 National Training Conference for State Long Term Care Ombudsman and the 1992 Adult Protective Services Conference in Texas; (2) practical guides such as "A Guide to Program Evaluation for the State Long Term Care Ombudsman Program", updates on nurse aide training and quality of care, and patient self-determination for the "Ombudsman Desk Reference," updates to the "Ombudsman Desk Reference," and an addendum for the "Comprehensive Curriculum" on abuse and effective ways for the ombudsman to participate in the survey process; (3) disseminated information on exemplary programs and best practice models to improve elder abuse and ombudsman services, and (4) initiating the gathering of information on the training and technical assistance needs of key professionals working with elder abuse.

In its second year of operation, the Institute will continue providing support activities to the various components of the Eldercare Campaign. The Institute will focus on assessing the training and technical assistance needs of key elder abuse professionals; conducting an elder abuse public education campaign; improving knowledge about elder abuse and ombudsman services by providing training and technical assistance to professionals and community groups at conferences via workshops and panel discussions; and publishing research notes, updates of elder abuse state data reports and state laws, and an analysis of nurse aide registries in three to five states.

c. Older Women

The National Eldercare Institute on Older Women will be directed by the National Council of Negro Women (Washington, D.C.). The Institute is designed to address issues affecting diverse populations of older women with special attention to those most at risk.

During Year One, the institute developed the following products in collaboration with the Older Women's League: "A Profile of Older Women," "Older Women as Caregivers: Responsive Community Programs," and a "Caregiving Best Practice Profile." Additionally, Brandeis University developed three briefing papers: "Income Status of Older Women: A Briefing Paper for the National Eldercare Institute on Older Women," "Caregiving: Challenging Complexity," and "Health and Access to Health Care: The Special Challenge of Older Women." The institute conducted training and technical assistance at a variety of conferences, symposia, forums and workshops. A major focus of the institute was to serve as a catalyst and encourage national women's organizations to adopt an older women's issues agenda in their national and local program activities.

The Institute will continue to be a focal point for collaboration among national women's organizations and national aging organizations on issues and concerns of older women at risk. In addition to the development of model and best practice material, increasing public awareness, and expanding the knowledge base, a major priority for year two will be the convening of a national conference. This conference will provide a setting in which current and future trends for the provision of eldercare services to older women can be analyzed and considered by all types of advocates for the well-being of older women.

d. Multipurpose Senior Centers and Community Focal Points

The National Eldercare Institute on Multipurpose Centers and Community Focal Points is conducted through the National Council on Aging (Washington, D.C.). The Institute's mission is to encourage communities to develop senior centers to serve at-risk older people in their home as well as in congregate facilities, and, conversely, to encourage existing senior centers to expand their services for at-risk elderly and increase their linkages to non-traditional community groups.

During Year One, the Institute developed and published a quarterly newsletter; trained people in the utilization of Senior Center Standards; created a Speakers Bureau, now totalling over 150 experts who have started to offer telephone assistance to coalitions and senior centers; and distributed materials on eldercare and community focal points to over 15,000 Senior Centers. The Institute developed a synthesis of research on senior centers which will result in an agenda for practice-oriented research. It conducted major presentations on senior centers at national meetings and produced a video describing multipurpose senior centers, directed to non-gerontological audiences. The video emphasizes the important role of volunteers and illustrates ways that religious institutions, businesses, etc. can become involved with their local center.

During Year Two, the Institute will develop guides on funding resources, programming for at-risk-populations, development of facilities, and program evaluation. These topics will be the subject of a series of audio teleconferences on meeting the emerging needs of Eldercare Coalitions. The Institute will continue to publish a quarterly bulletin, to train trainers in the utilization of Senior Center Standards, and to expand its Speakers Bureau. Increased emphasis will be placed on helping the State Units on Aging and the Area Agencies on Aging to be resources to those Eldercare Coalitions focusing on multipurpose senior center issues. A national competition highlighting studies of best practices in serving at-risk elderly will be held. Four challenge grants will be provided to researchers to design and conduct senior center program evaluations and other needed studies.

e. Transportation

The National Eldercare Institute on Transportation is conducted by the Community Transportation Association of America, (CTAA, Washington, DC) in collaboration with the National Association of Area Agencies on Aging (NAAA, Washington, DC), the National Center and Caucus on Black Aged (NCBA, Washington, DC) and the National Council on the Aging (NCOA, Washington, DC). The goals of the Institute are to increase public awareness and commitment to the transportation and mobility needs of at-risk older persons; to serve as a resource institute on aging and transportation/mobility issues to the National Eldercare Campaign and its Project CARE coalitions; to gather, analyze and disseminate data on aging and transportation issues; and to provide training and technical assistance on aging and transportation issues.

In Year One, the Institute developed educational materials for improving transportation and increasing public awareness of its role in enhancing and maintaining the quality of life and maintaining the dignity and independence of the elderly. Written products were prepared on (1) "Understanding the Basics of Community Transportation", (2) "The Americans With Disabilities Act and Aging Transit Services", (3) "Coordinating Transportation in Your Community", (4) "Best Practice Profiles for Model Transportation Systems Serving the Elderly" and (5) "Transportation Focus Group Report" on practitioners and elderly issues and concerns. Several workshops and training sessions were held where discussion took place on transportation issues and policies, coordination, ADA, and the National Eldercare Campaign, to name a few. A national toll-free transit hotline was also set up to answer questions on aging and transit issues.

In Year Two, the Institute will continue to develop technical assistance issue briefs, best practice profiles, articles and educational pieces. Issue briefs are proposed on such topics as resource development, insurance for specialized transportation including liability issues as they affect older volunteers involved in specialized transportation, and contracting procedures for transportation. Roundtables, information sharing and efforts to heighten the visibility of the Institute and the National Eldercare Campaign will continue.

f. Housing and Supportive Services

The National Eldercare Institute on Housing and Supportive Services is operated by the University of Southern California (Los Angeles, California) in collaboration

with the National Association of Area Agencies on Aging (Washington, DC) and the Federal National Mortgage Association (Washington, DC). The Institute is continuing to mobilize public, private and voluntary sector resources to better link elderly housing with supportive services and increase supportive housing options for the at-risk elderly population.

The Institute has developed a variety of resource guides, fact sheets, briefing papers and reports on strategies to create housing coalitions and successful housing programs for the at-risk elderly. In addition to giving technical assistance to the State and Area Agencies on Aging and Eldercare coalitions, the Institute will continue to involve traditional aging and housing organizations and new groups in public/private partnerships as one approach to raising public awareness of the need and ways to expand housing and support service options.

Information has been synthesized on recent developments in housing programs that best serve at-risk elderly, including homesharing, accessory units, reverse mortgages, home modification and repair, assisted housing, and the section 202 housing program administered by the Department of Housing and Urban Development. In addition, the Institute has held four teleconferences and numerous presentations at national aging organization meetings and other gathering focused on the elderly's housing and service needs.

g. Nutrition Services

The National Eldercare Institute on Nutrition is a joint effort conducted by the National Association of Nutrition and Aging Services Programs (Grand Rapids, MI) in collaboration with the National Association of Meals Programs (Washington, DC), the National Association of State Units on Aging (Washington, DC), the National Meals on Wheels Foundation (Washington, DC), the DuPont Corporation (Wilmington, DE), Ross Laboratories (Columbus, OH) and the Nestle Corporation (Washington, DC). The Institute is focusing on nutritional issues of the at-risk elderly and their impact on improving nutritional services and product development in community settings.

The Institute, in its first year, developed and began disseminating educational and public information materials which give a basic understanding of the nutrition needs of at-risk older persons, the relationships between nutrition and health, the types of nutrition services that are effective and efficient, and strategies to develop new services or enhance existing ones. Through its private sector collaborators, the Institute has been providing a link between community nutrition services and the food and packaging industry which will enable both to better serve the needs and preferences of the at-risk population.

In the second year of operation, the Institute will sponsor two Futures Forums. Together with the two forums held in the first year, this series is aimed at establishing a strategic plan for aging nutrition services for the rest of the decade. In addition, with the generous support of the Nestle Corporation, the Institute will co-sponsor a scientific conference for nutrition professionals and providers in the Spring of 1993. The Institute will release several issue papers on matters of relevance to the aging network and will provide technical assistance through a series of teleconferences for both State and Area Agency staff and nutrition providers.

h. Human Resource Development

The National Eldercare Institute for Human Resource Development is operated by the Brookdale Center on Aging, Hunter College of the City of New York in collaboration with the American Society on Aging in San Francisco, California. The purpose of the Institute is to help State Units on Aging, Area Agencies on Aging, and eldercare coalitions promote the most effective use of human resources in programs serving the elderly.

Among the Institute's Year One accomplishments were the provision of training and technical assistance in such areas as training techniques, staff recognition, and team building and management; solicitation, evaluation, and dissemination of best practice in human resource development for use in aging programs; presentation of human resource best practice awards to exemplary staff development programs in three health and long term care organizations; and preparation and dissemination of initial Institute training calendars and newsletters.

In Year Two the Institute will continue and expand these Year One activities. It will also initiate a manpower analysis of personnel in the field of aging and work with several national non-profit and business organizations to secure training offerings and human resource best practice information of interest to the aging network.

The institute will publish a new human resource bulletin that addresses timely workforce issues facing those involved in the field of aging.

i. Health Promotion

The National Eldercare Institute on Health Promotion is conducted by the American Association of Retired Persons (Washington, DC) in collaboration with Meharry Medical College (Nashville, TN). The purpose of the Institute is to encourage healthy behaviors among older persons and their caregivers and serve as a knowledge base and program resource on health promotion and disease and disability prevention for vulnerable older persons. The Institute collects and disseminates information about successful health promotion program models which assist older persons in maintaining their well-being and independence and information on overcoming barriers to reaching low income minority populations. Research findings and best practice information on health promotion will be incorporated into technical assistance guides and training materials for use in conjunction with the work of national, State, and community Eldercare Coalitions and disseminated to health care networks.

During the second year, the Institute will develop models of technical assistance to Eldercare Coalitions working through AoA's Regional Offices which will, in turn, work with State and Area Agencies. In addition, the Institute will develop publications on such topics as urinary incontinence and preventions of falls. Their quarterly newsletter, "Perspectives in Health Promotion and Aging" will be distributed to the 17,000 names on the mailing list. A Federal Interagency Taskforce on Health Promotion is also being formed with staff support from the Institute and in collaboration with the Public Health Service and the National Institute on Aging. Meharry Medical College will continue to hold their monthly outreach seminars on health promotion topics.

j. Income Security

The National Eldercare Institute on Income Security is administered by Families USA, Foundation, Inc. (Washington, D.C.). The Institute focuses on the living standards of the low-income elderly and their access to benefits and entitlement programs that meet their needs. It conducts analyses on selected topics related to income security to identify key factors that can serve as the basis for a public awareness campaign and stimulate interest among Eldercare Coalitions, such as examination of the elderly poverty rate, a study of the "Medicaid Gap" as it relates to coverage of health services and nursing home care, the affordability of long term care insurance, and the proportion of out-of-pocket health costs not being paid by Medicare and Medicaid. The Institute works with other interested organizations to promote outreach activities to make low income older persons aware of their possible eligibility as "Qualified Medicare Beneficiaries". Under this program, Medicaid pays their Medicare premiums and deductibles. The Institute also promotes public education to increase participation of low-income elderly in the Supplementary Security Income (SSI) program.

During fiscal year 1992, the Institute will continue to focus on the provision of information to potential and current SSI eligible older persons. It will provide information on benefits and application procedures and various types of coalition activities that have been organized and conducted by them. It will continue to hold press conferences on research reports and findings concerning prescription drug costs and national enrollment efforts aimed at SSI eligible individuals. The Institute will conduct a national health survey on elderly health care and benefits.

k. Employment and Volunteerism

The National Eldercare Institute on Employment and Volunteerism is conducted by the Center on Aging, University of Maryland (College Park, Maryland) in collaboration with the National Council on the Aging (Washington, D.C.), the National Retiree Volunteer Center (Minneapolis, Minnesota), and the American Association of Retired Persons (Washington, D.C.). The Institute's overall mission is to improve the quality of life for older persons by enhancing and increasing volunteer and employment opportunities. The Institute operates a clearinghouse on volunteerism designed to synthesize knowledge and information on curriculum and training models, effective programming, and policy analysis which can enhance the effective use of volunteers in eldercare service organizations.

During the first year, the Institute, at the request of the Administration on Aging, concentrated solely on volunteerism. In addition to making presentations at

the major aging conferences in 1991, the Institute sponsored a workshop on intergenerational volunteerism at the National Points of Light Conference in June. It produced a number of information and technical assistance materials, including seven resource briefs and monographs on topics relating to volunteerism, an annotated bibliography, and a training video and manual on retaining volunteers. The Institute conducted several surveys including one of national voluntary organizations and another of over 200 Volunteer Action Centers and ACTION State Directors. It also sponsored a two-day cluster meeting for AoA/ACTION Senior Companion Program grantees in June. The meeting provided program directors with strategies for developing resources by engaging the larger community in the program's mission.

During the second year, the Institute will continue its focus on volunteerism and begin work in the area of employment. The Institute will again make presentations at all the major national and regional aging conferences, coordinate the Volunteer Track for the 1993 American Society on Aging conference and convene a National Roundtable on the Future of Volunteerism and Aging. It will produce and disseminate several resource briefs, training modules and technical assistance papers. The Institute will also establish an older worker program clearinghouse and resource file. A National Symposium on New Roles for Older Persons is planned for 1992 to increase issues related to an aging workforce.

l. Business and Aging

The National Eldercare Institute on Business and Aging is conducted by the Washington Business Group on Health (Washington, DC) in collaboration with the American Society on Aging (San Francisco, CA). During its first year, the Institute successfully developed and disseminated many useful products and programs to business organizations, foundations, and the aging network, including Project Care Coalitions. These included several publications, a regular newsletter, fact sheets and a board game which teaches the steps in developing public/private partnerships. The Institute also conducted seminars at the major national aging conferences on such topics as public/private partnerships and working with the business community on eldercare programs. In addition, the Institute has gradually increased its role in providing technical assistance through teleconferences, on-site presentations and telephone consultation.

In the coming year the Institute plans additional technical assistance materials on collaboration with the business community and foundations, a quarterly newsletter, conference seminars and telephone technical assistance. The Institute will also implement a Business and Aging Speakers Bureau, special topic teleconferences, a Media Advisory Committee, a Congressional Briefing on business and aging issues and provide assistance to AoA with the 1993 Business and Aging Leadership Awards.

C. Other Title IV Initiatives

Title IV of the Older Americans Act includes language in its provisions which direct the agency and the Commissioner on Aging to support, or consider supporting, activities which improve the quality of personnel in the field of aging; expand access to services with special attention to the most vulnerable elderly; disseminate information to professionals, the elderly, and the lay public; and increase knowledge and the design and implementation of effective services and activities which improve the well-being of older Americans. More than 100 grants and contracts which supported these broad purposes were awarded, continued, or active during 1992. They are described in the following pages of this report.

1. DISSEMINATION AND UTILIZATION

Title IV of the Older Americans Act calls upon AoA to support a broad range of research, demonstration, and training projects to improve the well being of older persons. In order for these efforts to be effective, it is critical that the information developed by Title IV projects be disseminated as widely as possible. In recent years there has been considerable interest in this issue both in the field of aging and in Congress. In response to this interest, AoA has increased its efforts to insure that up-to-date information is as widely available as possible to those involved in making this country a better place in which to age.

a. Division of Dissemination and Utilization

In August, 1992, AoA established a Division of Dissemination and Utilization (DDU) within the Office of Program Development. This Division is responsible for implementing and managing a new system for the collection, analysis and widespread dissemination of knowledge developed about issues of concern to older Americans by title IV grantees. The audience for this information includes State and Area Agencies on Aging, other professionals in the field of aging and other agencies and organizations concerned about America's aging population and older persons. DDU is developing activities designed to capitalize on the resources available to the Administration on Aging to (1) expand its capacity for transmitting information in a timely and useful manner; (2) encourage maximum utilization of best practice program models and research; and (3) encourage maximum interaction and exchange of the most recent information and program expertise.

b. National Eldercare Dissemination Center

Grant and contract activities supported by the Older Americans Act Title IV Discretionary Fund Program have produced a wide range of usable findings and products. For these program results to be appropriately utilized AoA, in fiscal year 1991, supported an initiative that would expand the dissemination capabilities of AoA and AoA's current and future grantees. This initiative established the "National Eldercare Dissemination Center" at the National Association of State Units on Aging in Washington, DC. Through a cooperative agreement, the Center, working in close collaboration with AoA, promotes more effective dissemination of findings and products to a large number of potential users.

The Center engages in a number of activities designed to promote the dissemination of Title IV project findings and products. These activities include: (1) developing a database that contains information on Title IV program projects and products and retrieving this information upon request; (2) selecting some of the most promising projects and providing assistance in disseminating their results to Eldercare coalitions, aging network agencies, national aging organizations, and others; (3) providing technical assistance to Title IV grantees to help them expand their dissemination activities; (4) publishing a yearly compendium of Title IV program products; and (5) developing a range of general dissemination channels which can be used by Title IV grantees.

2. PREPARATION FOR AGING SOCIETY

One of the most dramatic changes in our nation is the rapid aging of our population. Every segment of our society will be influenced by the needs, resources, and expertise of our older citizens, and will need to respond appropriately. To meet today's challenges, and those in the future, the Administration on Aging continues to support education and public information activities which keep the American public and its leadership informed of the nature and implications of this demographic revolution.

a. National Academy on Aging

In 1991, the Administration on Aging entered into a three-year Cooperative Agreement with the Maxwell School of Citizenship and Public Affairs at Syracuse University to establish and carry out the activities of the National Academy on Aging. Howard University and the National Council on the Aging, Inc. are also part of the National Academy on Aging with responsibility, respectively, for the areas of minority aging and information dissemination to the field of aging and the aging network. The Academy also has an office located in Washington, D.C.

The objectives and tasks of the Academy are to: (1) Promote greater national leadership on aging issues and the development of effective strategies to meet the challenges of an aging society; (2) convene leaders from the major sectors of society to identify and debate emerging trends and issues in aging; and (3) encourage discussion and discourse on aging issues between aging and non-aging leaders in American society.

In its role as an impartial national forum for policy analysis and debate on the major policy issues of an aging society, the Academy has a mandate from AoA to conduct executive seminars and conferences for national leaders on matters of critical importance to an aging society. Related tasks of the Academy include policy research and analysis, the commissioning of issue papers, the preparation and publication of reports, and the dissemination of conference/seminar proceedings.

In its first year, the Academy focused on the issue of income security. An executive seminar on Poverty and Income Security was held in early July, followed by an examination of Pension Safety, Equity, and Adequacy on October 27-28. A round table session on Income Security and Aging is projected for mid-March 1993.

The Academy proposes to consider the policy issue of Long Term Care in 1993, with priority emphases on in-home and community-based services, the Medicare/Medicaid system, and the pivotal place of long term care in the current debate over health care reform. With the choice of long term care as the focus for 1993, the Academy will maintain its principal role as a national forum on policy issues of pressing importance to the older population while bringing it closer to the concerns of the Aging Network and of practitioners.

b. National Leadership Institute on Aging

The National Leadership Institute on Aging directed by the University of Colorado in Denver provides quality leadership development opportunities to executives in the aging network in order to improve their leadership capabilities. These executives include representatives from State and Area Agencies on Aging, tribal units, national aging organizations, and other national organizations and private and nonprofit organizations that have responsibility for developing and implementing service systems for older persons and their caregivers. The Institute increases the capacity of these individuals to better design and deliver strategic and innovative services and stimulate changes in the system in order to enhance family and community-based care.

Residential leadership programs are the primary method which the Institute uses to meet its objectives. These intensive programs, led by expert faculty, are generally 10 days in length. The Institute has, thus far, implemented 10 programs, with additional ones planned for the future. Participants have come from almost every State in the Union. The success of these programs has been well documented and the Institute has achieved national recognition. In addition, the Institute provides technical assistance and consultation to aging network agencies and others, nationwide, relevant to the development of plans which can enhance the leadership skills and abilities of their executives.

c. Collaboration With the National Institute on Aging

In 1992 the Administration on Aging and the National Institute on Aging (NIA) signed a Memorandum of Understanding to further advance their joint efforts to help maintain the independence of the nation's elderly, to improve their health and well-being, and to enhance their quality of life.

The new Memorandum of Understanding is intended to cover AoA/NIA joint priorities and collaborative activities through at least fiscal year 1993. The priority areas are: (1) Racial/Ethnic Minority Elderly, (2) Health Promotion and Disease Prevention, and (3) Elder Abuse. Implementation of the broad objectives and priority areas of the Memorandum of Understanding will be accomplished through specific Interagency Agreements, which are subject to approval by the Commissioner on Aging and the Director of NIA.

The Commissioner on Aging is an ex-officio a member of the Task Force on Aging Research, which is legislatively mandated to make recommendations to the Secretary of the Department of Health and Human Services regarding directions in aging research; to prioritize research needs; and to develop a budget to carry out the research. The Director of the National Institute on Aging has been designated by the Secretary as the Chair of the Task Force.

AoA staff have served as Chairpersons and members of a number of the Task Force subcommittees. The subcommittees have reviewed recommendations from over 70 Federal government aging research policy and planning reports issued during the last 12 years. An interim report, collating and summarizing these volumes of recommendations, has been completed and distributed to the Task Force in preparation for its deliberations and action on a proposed Federal aging research agenda which will be submitted to the Secretary in 1993.

d. Coming of Age in America

AoA provided grant support in fiscal year 1990 to the Coming of Age in America Association (Seattle, Washington) for the planning phase of Coming of Age in America, a national traveling exhibit that celebrates aging. Preliminary plans for the exhibit have been completed with funding currently being sought from government, business, and foundation sources for implementation. When completed, the exhibit,

developed in association with the Smithsonian Institution and the American Association of Retired Persons, will visit shopping centers, libraries, museums and community centers across the country. The project will help build a positive image of aging, provide information for younger people that will help them age positively, and give older people information that will help them access local services, helping them to remain as independent as possible.

e. Public Elementary and Secondary Education

AoA funded three State Education Agencies in Fiscal Year 1990 to integrate concepts about aging into the public school curriculum. The objectives included developing materials, designing activities using older volunteers, and training teachers to incorporate information about aging into the curricula of elementary and secondary school programs. These projects completed their activities in 1992 and are actively disseminating materials developed during their grants:

The Connecticut State Department of Education (Hartford, Connecticut) produced a series of guides for secondary school teachers in health, home economics, language arts, and social studies and produced resource guides for school administrators and guidance counselors.

The Missouri Department of Elementary and Secondary Education (Jefferson City) in collaboration with the Center for the Study of Aging at the University of Missouri (Jefferson City) prepared aging resource materials for use in grades three, seven and ten and an annotated bibliography on children's books that convey positive images of aging.

The Mississippi State Department of Education (Jackson), in cooperation with the University of Mississippi Geriatric Education Center, developed teaching modules for grades seven to twelve as an addendum to the new Mississippi Comprehensive Health Curriculum for Secondary Schools which teaches fundamental concepts of aging.

3. MULTIDISCIPLINARY CENTERS AT HISTORICALLY BLACK COLLEGES AND UNIVERSITIES

The Administration on Aging initiated support, in fiscal year 1992, to establish Multidisciplinary Centers of Gerontology at Historically Black Colleges and Universities (HCBU's). Preference was given to institutions that had not previously had an organized campus unit or program focus on aging. This support responds to Executive Order No. 12677. The Executive Order encourages the Department of Health and Human Services to support the involvement of HCBU's in the health and social service concerns of low income, socially disadvantaged and minority older persons by initiating efforts to increase the number of minorities trained in the health, allied health and supportive services professions.

The Centers are asked to assist AoA in the execution of its mandated responsibilities as they relate to improving the quality of life for the minority elderly, especially the Black elderly, including collaboration with the National Network on Aging and participation in the National Eldercare Campaign.

The Administration on Aging's Historically Black College and University Initiative awarded three project grants in late fiscal year 1992. The three-year projects were selected from 25 proposals submitted in response to a national proposal competition sent to the more than 100 recognized Historically Black Colleges and Universities established before 1962. The Administration on Aging expects that the three Centers will be self-sufficient by the end of the third year.

The Multidisciplinary Centers are:

Howard University (Washington, DC) is establishing its Multidisciplinary Center of Gerontology in the School of Social Work. Center efforts will focus on education, training, curriculum development, research, information dissemination and development of a repository of information on minority elders, especially the African American Elderly. The Center's first year activities will concentrate on education and training. During years two and three, a research agenda will be developed and a campaign for sustained support of the Center's operation initiated. Anticipated products include models for a multidisciplinary center on gerontology at an Historically Black College or University; curricula for professionals and service providers; a directory of gerontological courses and curricula offered at Washington area colleges and universities, public service announcements and a research agenda for HBCUs.

Lincoln University (Philadelphia, PA) is establishing a Multidisciplinary Center of Gerontology to be coordinated through the Master of Human Services Program. Center activities will be concentrated in the areas of: (1) gerontology faculty and curriculum development; (2) development of an advanced certificate

in gerontology; (3) establishment of gerontology and geriatrics continuing education institutes; (4) research in gerontology and geriatrics; and (5) restructuring the undergraduate certificate in gerontology as a formal undergraduate program. The Center plans to serve a resource center for professionals and aging service providers in the Mid-Atlantic region by providing training and technical assistance and disseminating information. Anticipated products include a model for a multidisciplinary center on gerontology at an HBCU and curricula for professionals and services providers and other technical assistance materials.

Morehouse School of Medicine (Atlanta, GA) is establishing a Multidisciplinary Center of Gerontology that will serve as Coordinator of a Consortium of HBCUs in Georgia. Particular attention will be paid to the needs of the rural elderly. Center activities will be concentrated on: (1) developing an infrastructure for interdisciplinary collaborative efforts; (2) faculty development in curriculum and clinical skills; (3) continuing education with a rural focus; (4) stimulating research on minority aging issues to provide technical assistance to policy makers and service producers; and (5) establishing a clearinghouse and resource center. Anticipated products include a model consortium approach for establishing a multidisciplinary center on gerontology at an HBCU and curricula for professionals and services providers that focus on the rural minority elderly and other technical assistance materials.

4. FY 1992 DISCRETIONARY FUNDS PROGRAM ANNOUNCEMENT

The majority of new project grant awards are made as a result of a competitive review of applications submitted under an annual AoA Discretionary Funds Program Announcement. The announcement, published in the Federal Register, includes a range of priority areas which are responsive to the broad purposes of the Older Americans Act, the goals of the National Eldercare Campaign, and specific mandates identified in Title IV, such as promoting the continued strengthening of comprehensive and coordinate community service systems and making them accessible and acceptable to older persons.

The fiscal year 1992 Discretionary Funds Program Announcement was published on April 30, 1992, with an application deadline of June 30, 1992. Over 200 eligible applications were received for competition in eight priority areas. A review of applications by panels of gerontologists, Aging Network representatives, and officials of national aging organizations was conducted in July. Based on the results of the review process, the Commissioner on Aging awarded 59 grants in August and September. Grants for three of the priority areas—national aging organizations, national non-aging organizations, and the National Eldercare Volunteer Corps were described earlier in this report. New projects awarded under the other priority areas as well as other Title IV projects which received continuation support in fiscal year 1992 or remained active in 1992 are described below.

a. Targeting Eldercare Support to Minorities

The Older Americans Act specifies that special preference be given in its programs to make services accessible to low-income and minority elderly. Although this preference is given consideration in making all discretionary grant awards, the Administration on Aging often sets aside support for project grants that seek to improve minority access to services as their primary goal. Five new project awards to target resources to the minority elderly were made to national minority organizations in fiscal year 1992 under the Discretionary Funds Program Announcement and work continued on seven project awards funded in earlier years. The National Resource Center on Minority Populations also continued its work throughout the year.

(1) Targeting Eldercare Resources

The National Eldercare Campaign underscores the issue of the low-income minority elderly's need to access needed benefits and eldercare services. The following five national minority organizations were funded in fiscal year 1992 to develop outreach methods and strategies that target the at-risk elderly through their membership activities:

The National Hispanic Council on Aging (Washington, DC) proposes to improve the Hispanic elderly's access to entitlement and aging services programs through the development and testing of a comprehensive set of outreach strategies in seven cities and through a national media campaign.

The National Pacific/Asian Resource Center on Aging (Seattle, WA) proposes to empower its target population to gain access to the current service system by examining this service system and designing and distributing tools to enable majority/minority-based organizations and agencies to serve minority clientele more effectively.

The National Caucus and Center on Black Aged (Washington, DC) will focus on improving the health status of African American elderly by increasing their access to information on health promotion and disease prevention and through a comprehensive set of outreach strategies.

The National Indian Council on Aging, Inc. (Albuquerque, New Mexico) has been convening focus groups and meetings with national organizations to prepare an agenda for Indian elders. In addition, it has been encouraging proposals to increase the participation of Indian elders in SSI and other programs through an enrollment and outreach campaign to both rural and urban Indians.

The Asociacion Nacional Por Personas Mayores (Los Angeles, CA) will carry out a project designed to improve the targeting of services to older Hispanics by increasing the numbers of Hispanic service providers that participate actively in the aging services network.

(2) Minority Elderly Agendas

Seven national aging and minority organizations, originally funded in Fiscal Years 1989 and 1990, completed their projects in Fiscal Year 1992. These projects developed or enhanced their knowledge of minority aging issues and broadened their capacity to deal with the concerns of low income minority elderly on an ongoing basis. During fiscal year 1992, these organizations continued to be engaged in the following activities:

The National Council of La Raza (Washington, D.C.) developed a national network of Hispanic and non-Hispanic community-based groups committed to serving low-income Hispanic elderly; a number of guides to help Hispanic and non-Hispanic groups become involved in elderly services; and several resource guides.

The National Caucus and Center on Black Aged (Washington, D.C.) in collaboration with the American Association of Retired Persons (Washington, D.C.) conducted activities in six cities to increase participation of the Black elderly in Older American Act programs and worked together to stimulate low income minority elderly agendas in other national organizations.

The Gerontological Society of America (Washington, D.C.) strengthened its commitment to minority concerns by increasing the number of sessions on minority aging issues at its annual conference; creating a society-wide task force; giving presentations at national organizations on minority issues; conducting student and faculty research workshops; and placing minority post-doctoral fellows in community-based agencies serving minority elderly.

The National Association of State Units on Aging (Washington, D.C.) promoted the use of State minority task forces by developing a technical assistance manual on minority aging; established eight pilot projects to develop activities focusing on minority elderly; and increased its internal organizational commitment to minority elderly concerns.

The American Society on Aging (San Francisco, California) increased the visibility of minority elderly concerns by conducting eight leadership roundtables in various locations throughout the Nation, implementing a National Fellows/Mentors Program, and conducting a minority membership campaign.

The National Association of Area Agencies on Aging (Washington, D.C.) created a Minority Targeting Technical Assistance Center for its member agencies and developed and tested a self-assessment and training package to improve the responsiveness of Area Agencies on Aging to minority issues.

The National Indian Council on Aging (Albuquerque, New Mexico) has been convening focus groups and meetings with national organizations to prepare an agenda for Indian elders. In addition, it has been encouraging the formation of Indian Councils on Aging in several States and a multistate region.

(3) Resource Center on Minority Aging Populations

The National Resource Center on Minority Aging Populations was established in Fiscal Year 1989 as a collaborative effort between San Diego State University in California, and the University of Southern California at Los Angeles. The Center has served as a national focal point for technical assistance, training, information dissemination, and short-term research. In Fiscal Year 1992, the Center continued

to provide the Aging Network with technical assistance via telephone, conferences, and written materials. Four quarterly newsletters were published in addition to "Resource Materials From Administration on Aging Discretionary Grants on Minority Aging: An Indexed Descriptive Catalogue". This important document was disseminated through the Aging Network to assist in searching for available resource materials produced through AoA grants. A number of monographs from the June 1990 symposium entitled "Diversity in an Aging America: Challenges for the 1990s," were disseminated to State Units on Aging and Regional Offices. The Center continued to collaborate with a number of national aging organizations on conferences, publications and resource sharing.

Through an extension to the project, the Center participated in sponsoring an "International Conference on Population Aging" in San Diego, California in September 1992. The Conference highlighted aging among contrasting cultures and helped to deepen understanding about the cultural origins of minority elderly in this country. Conference recommendations will be shared with the United Nations for upcoming UN assemblies to consider.

b. Supporting Resources for Eldercare Legal Assistance

The new Title VII, established by reauthorization of the Older Americans Act on the last day of the Fiscal Year, mandates support for legal assistance programs funded through State and Area Agencies. This mandate was previously included under the Title III provisions which authorize grants to State and Area Agencies for nutrition and community support services. Section 424 of Title IV remains unchanged by the Amendments. It has required the Administration on Aging to establish a national legal assistance support system that provides State and Area Agencies and local legal assistance programs with case consultations, training, legal advice, and assistance in the design and implementation of delivery systems by local providers. Under this mandate, the Administration on Aging has supported technical assistance grants to national, nonprofit legal assistance organizations for a number of years through multi-year grant projects on the basis of periodic national competitions. In fiscal year 1992, eight new awards were made to fulfill this mandate, replacing the supportive services provided during much of the year by eight earlier grants.

Continuation funding was also awarded in fiscal year 1991 to three demonstrations of state-wide legal hotlines initially supported in fiscal year 1992. Two other demonstration grants funded in fiscal year 1991—one to resolve conflicts between Federal Indian policy and the policies of general entitlement programs and the other to develop and implement demonstration programs using State criminal history records as background checks on potential representative payees—were active throughout the year.

(1) Grants to Build a National System of Legal Assistance Activities for the Elderly

In Fiscal Year 1992, AoA made three-year project awards to eight national legal assistance organizations. These grants are designed to contribute toward building a national system of legal assistance activities in support of the National Eldercare Campaign, with special emphasis on enhancing the capability of State and Area Agencies on Aging and legal services providers to plan for and deliver legal assistance to those vulnerable elderly at risk of losing their independence. All projects will emphasize four activities to improve the quality and accessibility of legal services for older persons: (1) case consultations; (2) training; (3) the provision of substantive legal advice and assistance; and (4) assistance in the design, implementation, and administration of legal assistance delivery systems to local legal assistance providers for older individuals. These projects are:

The National Senior Citizens Law Center (Washington, DC). The Center will provide legal assistance support services to State and local legal assistance programs for the elderly, legal assistance developers, ombudsmen, and State and Area Aging Agencies. Assistance will be provided through case consultation, legal assistance, technical assistance (TA), training, and joint sponsorship of the National Conference on Law and Aging. Products will be produced on such subjects as the new Americans With Disabilities Act. The products will include newsletters (NSCLS Washington Weekly); memoranda (Nursing Home Law Letter, Law and Aging Memorandum, Memorandum to Aging Advocates); Disability Advocates Mailings and others related to age discrimination, in-home support, food stamps, home health, and housing; and other training materials (updates of COBRA Manual, and SSI Manual). The Center will continue to

assist legal assistance systems with Technical Assistance on standards and assist them in dealing with the impact of Title VII.

The Commission on Legal Problems of the Elderly of the American Bar Association (Washington, DC) will strengthen the capacity of State and Area Aging Agencies and legal services providers to develop accessible and responsive systems of legal assistance for older persons. The Commission will provide technical assistance on legal assistance systems related to subjects such as private bar involvement, senior attorney pro bono services, aging network linkages with disability networks, offices of attorney generals, and eldercare coalitions. The major anticipated products and outcomes include: (1) co-sponsorship of the Joint Conference on Law and Aging, (2) a national symposium on ethical issues in elder law, (3) development and implementation of a training module on home equity conversion issues, (4) preparation of a briefing paper on home care liability issues, (5) publication of a provider guide to compliance with the Patient Self-Determination Act, (6) issuance of a quarterly newsletter, and (7) updates of existing publications including Effective Counseling of the Elderly, Where the Nation Stands, Law and Aging Resource Guide.

The Mental Health Law Project of Washington, D.C. will provide training, technical assistance, and case consultation to advocates to meet the legal needs of elders with mental disabilities. It will emphasize protection of the rights of elders to age in place and promote community-based alternatives to nursing homes and appropriate care for the mentally disabled in nursing homes and hospitals, including options for community placements.

The Pension Rights Center (Washington, DC) will expand its Legal Outreach Program, targeted to the needs of at-risk elderly and the legal services providers that serve them. The Center will also develop new case consultation, training and pro bono resources. The outcomes and products of its legal assistance activities will include an advanced pension law seminar, a pro bono pension clinic model, a private bar-sponsored case consultation panel, a lawyers network directory, three issues of a newsletter, and a self-help pamphlet in English and Spanish. The Center will also establish a Clearinghouse to collect and disseminate pension information to eldercare providers. Clearinghouse outcomes and products include a "Pension Packet for Caregivers"; a survey and summary of examples of companies that have modified their pension plans to insure that employees who serve as family caregivers do not lose their pension credits due to absences from work; and a data base of information for pension fund managers about "eldercare investment opportunities."

The Legal Counsel for Elderly of the American Association of Retired Persons (Washington, DC) will provide training and technical assistance to past recipients of "training the trainers" on substantive law and advocacy skills in 20 States. The project will provide training to volunteers, staff of legal assistance and aging advocacy agencies, substantive experts who want to become trainers, and advocates in multidisciplinary coalitions who will, in turn, serve as trainers. It will provide training and assistance to States interested in passing new protective services legislation (guardianship, health care decision-making, durable powers of attorney, living will) and to States interested in expanding legal services programs for Disability, Medicare and Veterans benefits based on documents maintained in its clearinghouse for these topics. It will continue previous activities to test, and, if successful, replicate methods for providing free legal assistance through (1) use of private practice paralegals as volunteers, (2) use of retired and semi-retired attorneys as volunteers, and (3) use of bar-sponsored lawyer referral programs to provide low cost wills and advance directives.

The National Clearinghouse for Legal Services (Chicago, IL) will provide a full range of publications and information services to agencies funded through AoA to provide legal assistance to older persons. Services include: computer-assisted legal research, Clearinghouse Review, Brief Bank services, and a computer newsletter. New services to be developed include the collection and organization of documents relating to elder law into a specialized electronic brief bank (instantly accessible through computers to AoA funded legal projects and services) and a searchable electronic index of the documents available in the electronic brief bank.

The Center for Social Gerontology (Ann Arbor, MI) will involve Title III legal providers and legal assistance developers in the National Eldercare Campaign by providing technical assistance (TA) to Eldercare Institutes, Project Care Coalitions, State and Area Aging Agencies, legal providers, legal services developers, ombudsman, and non-traditional groups such as the National Association of Women Lawyers. Outcomes will include a monograph and special working ses-

sions to educate members of the law and eldercare networks about the legal aspects of eldercare issues. A newsletter, the 5th, 6th and 7th National Conference on Law and Aging, and an update of the Comprehensive Guide and Evaluation Manual, incorporating provisions of the Older Americans Act reauthorization, including the new Title VII on Elder Rights, will also be developed.

The National Consumer Law Center, Inc. (Boston, MA) will provide legal support to local practitioners (attorneys, legal services providers, legal service developers and eldercare advocates) in applying consumer law to resolve legal problems facing elderly clients. It will develop a series of educational materials and guides, including model pleadings and defenses, model legislation, legal practice guides, newsletters and consumer education materials, with a special focus on threats to loss of shelter and financial exploitation.

Eight 2-year legal assistance support grants, which began in fiscal year 1990, were active in fiscal year 1992. These projects and their area of expertise were:

The Commission on Legal Problems of the Elderly of the American Bar Association (Washington, D.C.) strengthened State legal assistance systems by linking and integrating them with other segments of the legal and judicial service systems and provided assistance and training in legislative tracking, model legal assistance standards, and private bar involvement.

The National Senior Citizens Law Center (Washington, D.C.) provided technical assistance, training and consultation to legal assistance providers funded under the Older American Act on Federal beneficiary programs and legal areas such as nursing home law, pension and retiree health care, protective services and age discrimination.

The Mental Health Law Project (Washington, D.C.) provided training and technical assistance on legal matters relating to mental disabilities and protection available to older persons confined in nursing homes and psychiatric hospitals including case and non-litigation consultation.

The Pension Rights Center (Washington, D.C.) developed a National Lawyers Network which included lawyers in every State willing to assist older people receiving pensions; established pilot pension assistance projects in New York City, Philadelphia, Atlanta, Chicago, and San Francisco; and gave technical assistance to State legal assistance service systems and the private bar.

The Legal Counsel for Elderly of the American Association of Retired Persons (Washington, D.C.) trained experts in various areas of legal assistance; supplemented State systems of legal assistance with the support of Statewide volunteer networks and local volunteer programs; sponsored training workshops on protective services; and provided technical assistance on the formation and operation of legal hotlines.

The National Clearinghouse for Legal Services (Chicago, Illinois) provided a full range of legal information and research services to State Legal Services Developers and Title III funded legal service providers based on its computer-assisted legal research data base and published the Clearinghouse Review as a service to all Title III legal assistance providers.

The Center for Social Gerontology (Ann Arbor, Michigan) provided in-depth support, often on-site, to individual States to strengthen their leadership capacity and service delivery system capability to provide accessible and efficient legal assistance.

The National Bar Association (Washington, D.C.) worked with State Agencies on Aging to help them meet the legal assistance needs of low income, minority elderly through linkage and referral to members of minority bar associations, publications, and sponsorship of orientation and training programs.

(2) Improvement of Access to Legal Assistance

The current legal assistance network for older persons has been operational for a number of years and proved effective for persons who have used it. Experience has indicated, however, that barriers persist in reaching selective populations of older persons who are at-risk for a variety of reasons and could be aided if access were improved.

(a) Statewide Legal Hotlines

In fiscal year 1990, the Administration on Aging entered into a memorandum of understanding with the American Association of Retired Persons (AARP), Washington, D.C., to expand the availability of Legal Hotlines for older people. The agreement followsup on earlier cooperative efforts which awarded seed money to develop hotlines in the District of Columbia, Florida, and Texas. Under the new agreement, AARP provided seed money for two additional hotlines (Ohio and Michigan) and

AoA for three new hotlines which it funded with two-year project grant support in fiscal year 1991.

With the operation of legal hotlines in nine states (Pennsylvania served as the model for replication), nearly one-third of the nation's older people have free access to legal advice. When an older person with a legal problem calls the Hotline specially-trained lawyers either provide step-by-step advice on how to resolve their problems immediately, or on more difficult issues, consult with local legal aid specialists or a panel of attorneys in private practice who agree to charge reduced fees. More than the three AoA projects awarded in fiscal year 1991 and which receive continuation funding in fiscal year 1992 are:

The Maine hotline, operated by the Legal Services for the Elderly (Augusta, Maine) is serving as the primary intake mechanism for their Statewide network of legal assistance offices.

The Arizona hotline, operated by Southern Arizona Legal Aid (Tucson, Arizona), is testing new strategies for outreach to the State's Native American and Hispanic populations.

In New Mexico, the hotline is operated by the State Bar of New Mexico (Albuquerque, New Mexico) which is expanding and improving their current pro bono program.

(b) Entitlement Benefits for Tribal Elders

In Fiscal year 1990, the Administration on Aging funded the Washington State Indian Council on Aging (Wapato, WA) to examine and resolve, through advocacy and casework, the problems faced by tribal elders in the application of Federal entitlement programs, primarily SSI, Medicaid, and VA Pension benefits. These entitlements are often found to be in conflict with health care, in-home health services, and Indian Trust income benefits, and other tribal benefit programs. The project has completed a survey and analyzed data from 11 tribes which document areas of concern. Products developed under the grant include a videotape of the congressional hearings on Native American conditions, the survey, and a Legal Practice Manual on Indian Entitlements.

(c) Representative Payees

In 1991, the Administration on Aging entered into a cooperative agreement with the Social Security Administration (SSA) (Baltimore, MD) to jointly fund the National Criminal Justice Association (Washington, DC) to develop and implement ten demonstration programs for using State criminal history records to conduct criminal history background checks on potential representative payees. Under the representative payee program, SSA appoints a person other than the beneficiary to receive social security checks whenever it determines an entitled individual is incapable of managing or directing the management of his or her monthly benefit payment. The representative payee program is less costly and less intrusive in its oversight of an individual's affairs than court appointment of a guardian.

Under the terms of the agreement between AoA and the Social Security Administration (SSA), each agency alternates award of financial support to the grantee. Initial funding awarded in fiscal year 1990 was provided by SSA. AoA provided second year support with continuation funding in early fiscal year 1992 with an active project period extended into mid-1993. Under the terms of its extension, The National Criminal Justice Association continues to work with the Social Security Administration and various State Agencies, primarily in the criminal justice area, to determine if potential representative payees can be checked for criminal records before they are approved. SSA gave permission to include fingerprinting as part of criminal background checks, with the exclusion of family members who are representative payees. Demonstrations have been on-going or completed in various locations in Florida, New Jersey, Idaho, California and Missouri.

c. Improving Preparation of Practitioners and Professionals

The Administration on Aging is keenly aware of the continuing need to attract and adequately prepare qualified personnel for the field of aging. The quality of care provided through service programs in local communities, as well as professional services rendered by individuals in private practice and in institutions, is highly associated with the quality of education and training preparation. AoA has provided project support for improvements in specialized training for aging since its first year of operation and in recent years given emphasis to the development of training and placement programs for minority professionals and practitioners.

(1) Academic Training to Provide Better Eldercare Services

In fiscal year 1992, AoA awarded nine new grants for education and training in response to a priority area for this purpose in the Discretionary Funds Program Announcement. These projects are:

The Aging Studies program at the University of Iowa (Iowa City, IA) will work with the University of Northern Iowa and Iowa State University to conduct a series of training activities on-campus and throughout the State. Activities will include development of a rural peer counseling program, a weekly radio show, and a series of workshops for community volunteers and community coalition members.

The Bureau of Geriatric Psychiatry at the Alabama Department of Mental Health and Mental Retardation (Montgomery, AL) will develop and implement a training program for public health nurses and social workers on recognition and management of dementia in rural communities. The Gerontology Center at the University of Alabama will assist in the development of educational materials which will be shared with staff of the Area Agency and Community Mental Health Center serving a six county area.

The Center on Aging at San Diego State University (San Diego, CA) is conducting a series of activities involving collaboration between faculty, interns and community organization representatives on low-income, minority issues affecting service planning and effectiveness. Faculty from colleges and universities in the San Diego region will serve as mentors to students who will work as interns in community agencies and use materials developed during the project to improve course work at their institutions.

The Jacob D. Fuchsberg Law Center at Touro College (Huntington, NY) will use clinical interns and faculty advisors in development of an elderlaw specialty that offers pro-bono legal advice to low-income and minority elderly. The project has the cooperation and involvement of existing legal service programs and the local Area Agency on Aging.

The Virginia Center on Aging at Virginia Commonwealth University (Richmond, VA) will be working with local chapters of the Alzheimer's Association, several State Agencies, and two minority enrollment academic institutions to develop and pilot test a program assisting Black and rural family caregivers of elderly with dementia. The Virginia Center on Aging is authorized by the State Legislature to serve as its policy research and development resource on aging issues.

The University of San Jose (San Jose, CA) is developing a program in which upperclass students can fulfill their required community service credits with aging agencies and organizations. The University is one of the few institutions in the United States that makes community service a requirement for graduation in a number of their undergraduate programs.

The University of Kansas (Manhattan, KS) will increase the supply and quality of community-based workers that serve the Indian elderly and increase public awareness, organizational outreach and coalition building through the mobilization of resources at six American Indian Colleges on behalf of at-risk Indian elders. The project will replicate a proven home care worker curriculum at each college, train students and evaluate each program.

Shaw Divinity School (Raleigh, NC) will continue to develop a continuing certificate program in eldercare ministries at Shaw Divinity School. At the end of the grant the faculty will have the expertise to conduct the academic program modeled and tested under this grant.

Tougaloo College (Tougaloo, MS) will contribute to the development of strategies and systems addressing the needs of "at-risk" elderly, through training of students and faculty, increasing public awareness of the National Eldercare Campaign, and identifying resource gaps that must be considered as Mississippi formulates its "aging agenda."

(2) Minority Management Training Program

In fiscal year 1992 AoA funded eight special training projects in support of the National Eldercare Campaign under its continuing Minority Management Training Program to increase the number of qualified minorities in key management/administrative positions in State and Area Agencies and other agencies. The goal is to increase the professional credentials of minority trainees to help those individuals make the transition from a staff level to a managerial and administrative position. Projects awarded were:

The Asociacion Nacional Por Personas Mayores (Los Angeles, California) to select, train, and place six (6) Hispanic graduates/professionals in six-month managerial traineeships in public and private aging-related agencies.

National Caucus and Center on Black Aged (Washington, DC) to secure the cooperation of four long term care facilities to train four African Americans in all phases of nursing home operation; prepare the trainees to pass State nursing home administrators licensure examinations; obtain permanent placement positions for the participants; and expand the network of minority administrators nationwide.

The National Hispanic Council (Washington, DC) to increase the pool of Hispanic administrators/managers with the skills and capacity to work in the aging network. Trainees will be placed in a range of host agencies, including State and Area Agencies on Aging and public and private aging service agencies.

Detroit Area Agency on Aging (Detroit, Michigan) to provide management training and employment for Hispanics to serve the Hispanic elderly who are 20% of Detroit's elderly.

National Council of La Raza (Washington, DC) to recruit, train and place Hispanics in managing and administrative positions of community-based aging service organizations.

Hunter College, CUNY (New York, NY) to enhance minorities' professional career mobility in aging through aging, management and minority specialized social work education.

National Hispanic Council on Aging (Washington, DC) to increase the number of Hispanics with skills to function at the management level in Aging Network organizations.

National Association of Area Agencies on Aging (Washington, DC) to train and place minorities in leadership positions within the Aging Network, especially Area Agencies on Aging.

In fiscal year 1991 AoA funded five projects operational in 1992 which carried out the following activities:

Florida Agricultural and Mechanical University (Tallahassee, FL) has been engaged in recruiting, training, and placing minority interns in aging network agencies throughout the State of Florida.

The Asociacion Nacional Por Personas Mayores (Los Angeles, CA) has been successful in recruiting, training, and placing nationwide, Hispanic graduates in public and private aging-related agencies.

The National Caucus and Center on Black Aged, Inc. (Washington, DC) has focused its efforts on black health care management graduates, placing them in long term care facilities to enable them to complete State required management training programs and to pass State licensure examinations.

Boston College (Boston, MA) has recruited minority persons for graduate training in social work and in the management planning of elder services followed by field placement in management positions in eldercare agencies and other parts of the aging network.

The Association for Gerontology and Human Development in Historically Black Colleges and Universities (Washington, DC) has developed a model Minority Management Training Program in rural Eldercare service delivery.

(3) Promoting Eldercare Concepts in Academic Institutions

In September 1991, eight awards were made under the Discretionary Funds Program Announcement to encourage faculty in academic institutions to incorporate concepts of the National Eldercare Campaign in their instructional programs. The grants were also designed to encourage faculty to work cooperatively with community planning and service organizations to develop student placements in roles that would give them experience with the concerns and needs of vulnerable older persons. Grants which were active throughout 1992 are:

The University of North Texas (Denton, TX) established linkages between faculty/student teams in colleges and universities, Area Agencies on Aging, and service provider contract agencies to build a cadre of academic faculty involved in eldercare coalitions.

Shaw Divinity School (Raleigh, NC) initiated a continuing certificate program in eldercare ministries which will require students to participate in an off-campus assessment of the needs of 65+ Black elders in two rural counties.

Portland State University (Portland, OR) trained faculty in coalition building, and involved them in development of eldercare coalitions.

Hunter College of the City University of New York (New York, NY) linked the community college system with service agencies on behalf of the Eldercare Campaign.

Tougaloo College (Tougaloo, MS) conducted research, training and information dissemination to improve the full spectrum of eldercare training and services in the State.

Baylor College of Medicine (Houston, TX) performed in-service faculty development in eldercare for key field placement site coordinators and added aging content to courses taken by 1,000 students.

Marygrove College (Detroit, MI) expanded its gerontology curriculum and involved students and faculty in the operations of its on-campus senior housing complex.

The State University of New York Health Sciences Center (Syracuse, NY) trained faculty from institutions throughout up-state New York in topics regarding the at-risk elderly and methods for coalition building, then paired them with local aging service planners and providers to involve campus resources in Eldercare coalitions.

(4) Dissertations

In Fiscal Year 1991 AoA made four grant awards to support doctoral dissertations, and project activities are still on-going. The dissertations focus on the eldercare needs of at-risk older persons and the care provided such persons through home and community-based services. Awards were made to specific doctoral candidates at the following institutions:

The University of Minnesota in Minneapolis for a study of "Innovative Long-Term Care Programs For The Elderly;"

The University of California at San Francisco for a survey and review of "Adult Day Care Funding Strategies;"

Brandeis University (Waltham, MA) for a study of the "Massachusetts Adult Foster Care Program;" and

The University of Denver (Colorado Seminary) for an exploration of "Self-Neglect Among Elders In the Community."

(5) Recruitment, Training, and Retention of Homecare Workers

To help meet the need to increase and improve the supply of paraprofessional home care workers, AoA, in Fiscal Year 1991, funded four projects to test new, collaborative approaches for recruiting, training, and retaining in-home workers. These projects, which continued in operation in fiscal year 1992, are:

The University of Kansas in Lawrence—to design and implement a model home care worker training program appropriate for American Indian settings;

The Denver Department of Social Services (Denver, CO)—to demonstrate a program which provides job training skills and cash and supportive service incentives to prepare and hire Aid to Families with Dependent Care clients as home care workers;

The Marin County Area Agency on Aging (San Rafael, CA)—to develop a model home care training and placement demonstration; and

The Council for Jewish Elderly (Chicago, IL)—to develop training programs for: independent home care workers, family caregivers, and home care providers and to create a State coalition to improve conditions for home care workers.

d. Linking Older Volunteers With Community and In-Home Service Programs

The use of older volunteers in Older Americans Act programs at the State and local level has been a vital part of the success in reaching and giving assistance to millions of older persons through community and in-home service programs. Recognition of their service and encouragement to increase their commitment to volunteer service is a major component of the National Eldercare Volunteer Corps program, part of the National Eldercare Campaign. The Administration on Aging recognizes, however, that the volunteer interests of older Americans extend far beyond the service programs supported by the Older Americans Act. In recent years, AoA has supported a series of project grant clusters to demonstrate the effectiveness of older volunteers in other service programs, always keeping in mind that truly effective programs reward and bring satisfaction to those who volunteer their time and effort. Four of these project clusters are described below.

(1) Eldercare Volunteer Service Credit Demonstrations

Fiscal Year 1992 project awards were made to test new models and replicate existing models of the volunteer service credit concept. The basic service credit concept is to give volunteers a credit unit for each service hour performed, regardless of the type of service, in the expectation that accrued credits will be redeemed in services by the volunteer at some future time of need.

The Five model volunteer service credit projects funded were:

Alliance For Aging (Miami, FL) is an Area Agency on Aging in South Florida which is proposing to expand the service credit concept through community-based organizations including: an interfaith council of churches and synagogues serving their congregants; The Dade County Housing and Urban Development Senior Housing Authority which will serve the elderly in public housing; the Dade County Public Schools which will establish day care centers manned by Senior Aides; and the South Florida AFL–CIO which will recruit service credit volunteers from its membership.

The University of Pittsburgh (Pittsburgh, PA) will expand services to homebound elderly through a intergenerational approach. Older persons and young adults will provide services to homebound elderly and earn volunteer service credits. Young mother/older mother teams will contribute credits in return for child care. The project will target an African American community in Pittsburgh.

Sutter Hospital Foundation (Sacramento, CA) will adapt its' experience in providing a volunteer service credit program for middle class older persons to the needs of a low-income, minority community in Sacramento, California.

Delaware Division on Aging (New Castle, DE), which is responsible for serving a single state-wide planning and service area, is working with a church related service provider to develop and test a volunteer service credit program operating through black churches to reach the minority elderly population in Wilmington, Delaware.

Our Lady of Lourdes Associates Foundation (Camden, NJ) is testing the service credit concept in the business/industry setting by assisting employers in setting up service credit banking programs for employees with caregiver responsibilities in a large company. During year two the project will expand to at least three additional business sites.

In addition to the five projects, an award was made to provide technical assistance, training, and capacity-building services to the demonstration projects:

The Time Dollar Network (Washington, DC) will accelerate the start-up and implementation of the approved demonstrations through the provision of cluster meetings, teleconferences, and site visits; promote the concept of volunteer service credit programs throughout the country by working with other organizations interested in the concept and by giving presentations at national conferences; and promote replication of the basic model in other communities.

(2) Volunteer Senior Aides

In Fiscal Year 1991, AoA implemented Section 10404 of the 1989 Omnibus Budget Reconciliation Act which authorized a community-based, intergenerational, demonstration program. The purpose of the program is to determine to what extent basic medical assistance and support, provided by volunteer senior aides, can reduce the costs of care for disabled or chronically ill children. The prototype program upon which the authorizing provisions were based is "Family Friends," an intergenerational program established in 1986 by the National Council on the Aging (NCOA), with funding support provided by the Robert Wood Johnson Foundation.

To implement the Volunteer Senior Aides Program, AoA awarded demonstration grants to six Area Agencies on Aging to collaborate, over a three-year period, with local organizations in their respective communities to: (1) determine the impact of the older volunteers' services on the costs of care for disabled/chronically ill children; (2) promote the self-sufficiency of individuals and families vulnerable to a loss of independence; and (3) increase the volunteer senior aides' feelings of self-worth. Increased collaboration is expected among private, voluntary, and public sector organizations in establishing and operating programs from which children, families, and older persons gain mutual support and benefits.

In Fiscal Year 1992, AoA awarded continuation grants to all six projects to continue these demonstrations for a second year. AoA is also providing support to NCOA to provide technical assistance, based upon their "Family Friends" expertise, to the Volunteer Senior Aides grantees in implementing these demonstrations. In addition, a summary evaluation of outcomes has been designed and is being conducted by one

of the grantees, the Mid-America Regional Council Commission on Aging (Kansas City, Missouri). The following projects, demonstrating the value of Volunteer Senior Aides, are in progress:

The Los Angeles County Area Agency on Aging (Los Angeles, CA) is collaborating with Jewish Family Services of Los Angeles and Huntington Memorial Hospital of Pasadena so that senior volunteer aides can provide assistance to the families of low-income and minority children who are ill or disabled. Included are families in which grandparents are raising disabled or ill grandchildren who have been adversely affected by their mothers' drug abuse and/or have Acquired Immune Deficiency Syndrome (AIDS).

The CrossRoads of Iowa Area Agency on Aging (Des Moines, IA), in collaboration with the Easter Seal Society of Iowa, has and is recruiting and training senior volunteers from a primarily rural area to serve disabled or ill children. Through prevention, the project is expected to reduce the risk of placement outside the home which can result when families have neither supportive services nor anyone to turn to. This voluntary assistance is expected to result in a 25 percent decrease in the cost of care.

The Mid-America Regional Council Area Agency on Aging (Kansas City, MO) is collaborating with the Children's Mercy Hospital in Kansas City and the University of Missouri's University Affiliated Program for Developmental Disabilities to significantly expand upon an existing Family Friends Program. This project is assisting families in an inner-city area and developing replicable models to benefit special needs populations. Trained volunteers are currently assisting foster/adoptive families of infants who are medically fragile (including those exposed to cocaine before birth).

The Region IV Area Agency on Aging (St. Joseph, MI), in collaboration with the local Foster Grandparents Program, is placing volunteer senior aides with families of children who have special physical or emotional needs. For each placement, it is expected that the volunteer will become a standard component of the family's treatment plan.

The Philadelphia Corporation for Aging (Philadelphia, PA), in cooperation with Temple University's Center for Intergeneration Learning and the Institute on Disabilities, is recruiting, training, and supervising volunteer aides to provide in-home support to disabled children and their families. Through this program, the health and social service delivery systems will gain a pool cadre of carefully trained older volunteers who can provide needed support to children with special needs and their families.

The County of Riverside Office on Aging (Riverside, CA) is currently linking older volunteers with at-risk families of disabled/chronically ill children to increase the availability of respite care and domestic management training for caregiving families.

(3) Senior Home Companion AoA/ACTION Projects

In 1990, AoA and ACTION jointly initiated a three-year demonstration program to expand the number of Senior Companion volunteers providing in-home services to the frail, homebound elderly with award of 11 grants. These grants received continuation support from both agencies in fiscal year 1992.

AoA in conjunction with ACTION sponsored a major training conference of the project directors in June, 1992 for information sharing, networking and skill development in gaining private sector support for the senior companions. ACTION and AoA have cooperatively undertaken an evaluation of the program's effectiveness and applicability nationwide. Outcomes achieved to date include the addition of a minimum of five additional senior volunteers in each demonstration and in one or more projects, new Alzheimer's respite care services, new services in low-income senior housing, new services to Native Americans, and establishment of new volunteer stations and services in new geographical areas. The on-going projects are administered by the following State Agencies on Aging:

The Vermont Department of Aging and Disabilities (Waterbury, VT)

The Pennsylvania Department of Aging (Harrisburg, PA)

The Virginia Department of the Aging (Richmond, VA)

The Florida Department of Health and Rehabilitative Services (Tallahassee, FL)

The Georgia Department of Human Resources (Atlanta, GA)

The Kentucky Department for Social Services (Frankfort, KY)

The Wisconsin Bureau of Aging (Madison, WI)

The Minnesota Board on Aging (St. Paul, MN)

The New Mexico State Agency on Aging (Santa Fe, NM)
The Missouri Department of Social Services (Jefferson City, MO)
The Nevada Department of Human Resources (Las Vegas, NV)

(4) Use of Older Volunteers in Head Start Programs

The Administration on Aging and the Head Start Program of the Administration for Children and Families jointly funded two-year project demonstrations of the use of older volunteers in Head Start Agencies. In most projects, Head Start Program grantees were paired with local aging organizations and agencies which use older volunteers in their own activities to assist in recruitment, training, and placement for eventual placement in such Head Start Program roles as family mentors, classroom aides, and program management assistants.

Projects received funding for their last year in late fiscal year 1991 and were operational throughout fiscal year 1992. Documentation of procedures, practices and materials used for recruitment, orientation and training of volunteers were being prepared for submission with final reports due late in the year. A synthesis report of the accomplishments of these projects will be prepared by the Head Start Program for distribution in calendar year 1993. Head Start Program agencies and their collaborating aging organizations were:

Hawkeye Area Community Action Program (Cedar Rapids, IA), Heritage Agency on Aging, and Retired Senior Volunteer Program of Lynn County;

Chautauqua Opportunities, Inc. (Mayville, NY), Chautauqua County Office for Aging, and Retired Senior Volunteer Program;

Coastal Community Action Program (Aberdeen, WA), and Grays Harbor Retired Senior Volunteer Program;

Bi-County Community Action Council, Inc. (Bemidji, MN) and Beltrami and Cass County Senior Citizen Councils on Aging;

Community Action Inc. of Hayes, Caldwell and Blanco Counties (San Marcos, TX) and American Association of Retired Persons (San Marcos, Blanco, and Lockhart Chapters);

Cen-Clear Child Services, Inc. (Philipsburg, PA) and Clearfield County Area Agency on Aging;

Central Nebraska Community Services, Inc. (Loup City, NE) and South Central and Northeast Nebraska Area Agencies on Aging;

Community Action Agency of Somerville, Inc. (Somerville, MA) and Somerville Council on Aging;

Mahube Community Council, Inc. (Detroit Lakes, MN) and Retired Senior Volunteer Program; and

Board of County Commissioners Hillsborough Head Start Department (Tampa, FL).

e. Reaching the Most Vulnerable

The primary goal of the National Eldercare Campaign and the major mandate of the Older Americans Act is to develop and improve access to community and in-home services for the most vulnerable elderly in our society—individuals who without the support of family caregivers and supportive service programs are in danger of losing their independence and are at-risk of institutionalization. Three of these vulnerable sub-populations, persons victimized by abuse, individuals afflicted with Alzheimer's Disease and related disorders, and families headed by older adults caring for children with disabilities, have been the focal point of recent Administration on Aging demonstrations.

(1) Elder Abuse Initiative and Activities

The Administration on Aging (AoA) is the lead agency of Department of Health and Human Services Elder Abuse Task Force as established by Secretary Louis Sullivan. The Elder Abuse Task Force consists of the top leadership of AoA, the Office of the Assistant Secretary for Planning and Evaluation, the Health Care Financing Administration, the Public Health Service, and the Social Security Administration. In July 1991, the Secretary approved the Task Force's recommended elder abuse strategy which addresses elder abuse in both institutional and residential (home) settings. The elder abuse strategy is made up of three components:

The production of research data that will contribute to better understanding of the nature and scope of the problem;

The promotion of training and technical assistance activities that enable states and localities to respond to these problems; and

A focus on public education activities to better inform both professionals and voluntary groups who are responsible for and concerned about how to combat elder abuse.

AoA has made available the resources of the National Eldercare Institute for Elder Abuse and State Long Term Care Ombudsman Services to assist the Task Force in carrying out the training and technical assistance component. By spring 1993, an assessment will be completed of what elder abuse network agencies need in the form of information, training, and capacity building. AoA will then consider strategies, including activities, to respond to identified priority needs. Such activities may include workshops and seminars, grant announcement priority areas, information packets, training and technical assistance materials. The Institute will assist in carrying out the training and technical assistance plan of action when approved by AoA for implementation in Fiscal Year 1994.

To move forward to implement the public education component, AoA has discussed with the National Eldercare Institute on Elder Abuse and State Long Term Care Ombudsman Services collaborative activities to complement the Secretary's Elder Abuse Task Force's priorities in this area. The following actions are under consideration: a national event to announce an elder abuse public education campaign; regional follow-up meetings; and dissemination of best practices in State/local elder abuse systems to enhance service systems coupled with increased public and professional awareness resulting from public education activities. In addition, AoA plans to devote the complete winter issue of Aging to elder abuse issues.

(2) Improving Services to Older Persons With Developmental Disabilities

As increasing numbers of older persons with developmental disabilities are aging while living at home with their families, the capacity of their elderly parents to continue as caregivers is at risk. Effective coordination and delivery of supportive services to these individuals is crucial. To help address these needs, in fiscal year 1990, AoA awarded four (4) grants for projects to be carried out jointly by State Agencies on Aging and State Developmental Disabilities Planning Councils to develop aging/Developmental Disabilities State and local planning linkages. These projects continued through fiscal years 1991 and 1992. The Administration on Developmental Disabilities (ADD) co-funded three (3) of these projects. These collaborative models demonstrated—and fostered the replication of—improved delivery of services to older persons with DD and their aging family caregivers:

The New York State DD Planning Council (Albany, NY), in collaboration with the New York State Office of Mental Retardation and DD and the State Office for the Aging, produced and disseminated technical "how-to" manuals based on cross-network integration and assisted other States with implementation. Technical assistance was given via: national, formal, workshops; ad hoc workshops; and a national telephone line. The project provided national leadership, ultimately helping to integrate older persons with DD into aging programs in communities across the country.

The Missouri Department of Social Services' Division of Aging (Jefferson City, MO), in cooperation with the Missouri Planning Council for DD and the University of Missouri's Interdisciplinary Training Center on Gerontology and Developmental Disabilities, established: a centralized resource center for older persons with DD, their caregivers, and professionals; a caregivers' network and protective services hotline; and an ongoing mechanism for Statewide planning and collaboration.

The Wisconsin Council on DD (Madison, WI) and the Wisconsin Bureau on Aging, in cooperation with the Center on Mental Retardation and Human Development at the University of Wisconsin, promoted life-long planning and established new linkages between the aging and DD service sectors (both formal and informal) to improve opportunities for older persons with DD. This project focused on case-finding, identifying the unserved, particularly in rural areas, and targeted older American Indians with developmental disabilities. Issue papers on needs for legislative change and expansion of services were developed; findings will be incorporated into a legislative package for the next biennial State budget.

The Virginia Department for the Aging (Richmond, VA), the Board for the Rights of Virginians with Disabilities, and the Virginia Center on Aging and the Virginia Institute on DD at Virginia Commonwealth University, worked in partnership to enhance the community-based, long-term care system for older persons with developmental disabilities and their aging parents. This partnership resulted in: recommendations to reduce regulatory, programmatic, budget-

ary, and personnel barriers to services; a core of 243 cross-trained personnel; a National directory on aging and developmental disabilities; and tested local strategies to identify and assist older adults with developmental disabilities.

(3) Supporting Alzheimer's Disease Victims and Their Family Caregivers

The recent Amendments to the Older Americans Act give the Administration an additional mandate to focus attention on the unmet needs for home and community based services of at-risk older people and their caregivers. The most recently supported activity, support of the new National Eldercare Institute on Long Term Care and Alzheimer's Disease at the University of South Florida and a grant to the Alzheimer's Association, both awarded in fiscal year 1992, are described in an earlier portion of the Title IV section of this report.

AoA previously awarded three projects grants in fiscal year 1990 which were designed to help improve access to services by minority persons with Alzheimer's Disease and their family caregivers. These projects were still active earlier in fiscal year 1992. Each project focused on a different minority group of older people and demonstrated innovative and effective ways to meet such persons special information needs. These projects and their achievements are:

Morehouse School of Medicine, Department of Community Health and Preventive Medicine (Atlanta, GA) designed and implemented a model community-based information and service program for Blacks with Alzheimer's Disease and their family caregivers.

Institute for Community Research (Hartford, CT) developed and disseminated educational materials on Alzheimer's Disease for Puerto Rican elderly, their caregivers, and social and health service providers.

Hawaii Executive Office on Aging (Honolulu, HI) developed, tested and evaluated a multilingual, multimedia outreach campaign on information and support services for Alzheimer's patients and families of Japanese, Korean, Chinese, Filipino, Hawaiian, Samoan and Southeast Asian ethnicity.

f. Improving Supportive Service System Visibility and Coordination

Another major theme of Title IV projects in recent years has been support of demonstrations and developmental efforts which improve coordination among supportive services supported by Older Americans Act program agencies and other systems. Three recent efforts with this common goal have been in areas of housing, long term care, and use of a national 800 number for long distance caregiving.

(1) Information and Referral Services

Information and referral (I&R) service which link persons in need with appropriate service to meet or alleviate that need has been a priority of Older Americans Act programs since 1973 when the reauthorization amendments required State and Area Agencies on Aging to establish them within convenient access to all older persons. Since the mandate was given, AoA has worked with a number of organizations to establish policies and develop technical assistance handbooks promoting I&R services. Although much has been accomplished, the dramatic increases in the older population and introduction of new technologies, AoA recognized that improvements in such areas as training, technical assistance, and standards of operation (last revised in 1983), were required.

a. Eldercare Locator

In fiscal year 1990, a three-year grant was awarded to the National Association for Area Agencies on Aging (Washington, D.C.) to establish a national locator service. The Eldercare Locator features a national 800 number through which callers can locate the name, address, and the information and referral telephone number for an Area Agency on Aging anywhere in the country. A major effort of the project is to develop financial support for the locator system from the private sector especially corporate sponsorship. Anticipated results of this locator system include:

—greater recognition of the need for and existence of eldercare and the at-risk elderly;

—greater national recognition of existing community I&R systems through a national toll-free telephone number providing callers with referrals to local Area Agencies on Aging and/or their I&R providers;

—a consistent and uniform identity for the Aging Network as a result of a public information campaign announcing the locator service; and

—reduction of the difficulties faced by long-distance caregivers in linking their older parent or relative with appropriate supportive services.

The locator system was implemented nation-wide effective November 1992. Over 12,200 calls were handled by the locator system since it was first implemented in May 1991 and October 1992. Now that the system is nationwide, it is expected that the call volume will increase substantially. The National Association of Area Agencies on Aging launched a major publicity campaign for the locator during the week of Thanksgiving, 1992 in conjunction with National Family Caregivers Week. This should also increase the volume of calls for the locator.

NATIONAL INFORMATION AND REFERRAL CENTER

In fiscal year 1990, a three year project grant was awarded to the National Association of State Units on Aging (Washington, D.C.) who will work with the National Association of Area Agencies on Aging (Washington, D.C.) and the Alliance of Information and Referral Systems (Bethesda, Maryland) to establish a National Information and Referral Center to enhance the capacity of State aging Information and Referral systems.

The Center will assist I&R providers to participate in Eldercare Coalition by contributing their knowledge of aging needs and establish standards for Information and Referral systems which help older people. The Center will promote I&R systems improvement as a priority with the Aging Network, in part by establishing a national information exchange to provide access to existing I&R training materials, experts and best practices and providing training and technical assistance. It will also help individual States and Area Agencies on Aging facilitate the development of I&R systems improvement plans;

During fiscal year 1992, the I&R Center disseminated over 3000 quarterly issues of its newsletter, the "I&R Reporter," throughout the aging network to States and Area Agencies on Aging, Title III funded I&R providers and other aging and I&R professionals. Six I&R Mini Grants were awarded to assist States to implement their I&R systems improvement plans, test innovative approaches to improve I&R provision and replicate good I&R models. Standards for Older Americans I&R Programs were completed and sent to the aging network as well as and OAA Standards Implementation Guide which will offer incremental steps for compliance with the standards. A training curriculum to assist States to implement these standards as well as model I&R programs was developed and tested. The I&R Center also assisted the National Association of Area Agencies on Aging in planning and training sessions for Regional and State I&R personnel to assist them in implementing the Eldercare Locator.

(2) Housing and Supportive Services

Five (5) State Housing Finance Agencies and four (4) State Agencies on Aging (funded in fiscal year 1990 and 1991) continued to design or to expand the availability of supportive services to moderate and low income frail elderly in federally-supported facilities. These projects have been quite successful and have developed a number of products, including training manuals, videos, functional assessment tools and survey instruments, directories of services and pilot projects. In November 1991, AoA conducted a two day workshop bringing the nine grantees together with representatives of national housing organizations. In August 1992, AoA, with the assistance of the National Eldercare Institute on Housing and Supportive Services, sponsored a cluster meeting with the grantees. Both sessions enabled the grantees to further share their experiences with each other and to discuss strategies for product dissemination at the end of the grants. Project staff have also shared their successes at several national conferences. Many of these projects will become institutionalized at the end of the grant period. The projects are:

The New York State Office for the Aging (Albany, NY) has facilitated access to community services for residents of up to fifteen (15) community State-assisted rental housing programs.

The Colorado Housing and Finance Authority (Denver, CO) coordinated an array of support services to sight impaired, low-income and minority elderly residents in State financed Section 8 housing throughout the State.

The Connecticut Housing Finance Authority (Rocky Hill, CT) assisted private management companies who hire social service staff to work directly with elderly residents in six housing developments.

The Ohio Department of Aging (Columbus, OH) developed a model supportive services program for demonstration at two (2) sites with Statewide training for

housing managers on use of an assessment screening tool to determine the service needs of frail elderly residents.

The Vermont Housing Finance Agency (Burlington, VT) established a five region, State-wide, supportive service system for elderly in subsidized housing, including seniors living in over 84 State subsidized housing developments.

The New Hampshire Housing Finance Authority (Bedford, NH) collaborated with the State Department of Human Services to develop a referral, advocacy and training program for housing managers and supporting three pilot projects addressing supportive service needs.

The Minnesota Board on Aging (St. Paul, MN) developed training materials and offering financial incentives to communities to hire senior housing on-site coordinators who will help elderly tenants arrange for supportive services.

The New Jersey Housing and Mortgage Finance Agency (Trenton, NJ) developed a referral network and services resources directory with education of housing managers, families and tenants on the need for and availability of supportive services.

The Arkansas Department of Human Services (Little Rock, AK) formed a state-wide commission of housing and aging professionals to promote support service resources and the training of housing unit managers to be more responsive to the needs of elderly residents.

(3) State Long Term Care Projects

In fiscal year 1990 nine grants were awarded to assist State Agencies on Aging develop collaborative efforts with other State Agencies, Area Agencies on Aging, and others to plan and implement specific improvements in State long term care systems. These grants, still active in fiscal year 1992, were made to the following State agencies:

The Older Alaskans Commission (Juneau, AK) coordinated interagency efforts to include those elderly not eligible for medicaid as well as those eligible for medicaid in the states system of long term care.

The Arizona Department of Economic Security/Aging and Adult Administration (Phoenix, AZ) demonstrated approaches to linking Older Americans Act and Medicaid systems in 13 rural counties.

The Colorado Department of Social Services/Medical Services (Denver, CO) linked State aging, social service, Medicaid and vocational rehabilitation agencies to address Statewide case management practices.

The Florida Department of Health and Rehabilitation Services/Aging and Adult Services (Tallahassee, FL) demonstrated the extent to which enhanced hospital-based pre-admission screening and improved aging network and institutional linkages may affect community placements of older persons.

The Hawaii Office on Aging (Honolulu, HI) in conjunction with key State agencies, Area Agencies on Aging, and other segments of the aging network, developed a comprehensive long term care plan required by the State legislature.

The Missouri Department of Social Services/Division on Aging (Jefferson City, MO) implemented a comprehensive long term care planning process in cooperation with Area Agencies on Aging and other State agencies.

The Ohio Department on Aging (Columbus, OH) developed an interagency plan for home and community-based care to provide a policy framework for recent "Eldercare" initiative approved by the State legislature.

The West Virginia Commission on Aging (Charleston, WV) planned and carried out several State long term care system improvements in cooperation with other State agencies and Area Agencies on Aging.

The Wisconsin Department of Health and Social Services/Bureau of Aging is demonstrating the extent to which more effective case management and improved linkages between community-based and acute care providers will improve services for older persons.

(4) National Long Term Care Resource Centers

Six (6) National Aging Resource Centers on Long Term Care were supported by the Administration on Aging in fiscal year 1989, 1990, and 1991 under three year cooperative agreement awards to provide training and technical information to State and Area Agencies on Aging to assist them in developing community-based long term care service systems. Each Center focused on a specific set of topics within the broad scope of long term care. All Centers were active for some portion of calendar year 1992. Two university-based Center grantees successively competed

for National Eldercare Institute grants in 1991—the University of South Florida and the University of Southern California. Two other organizations, Brandeis University and the National Association of State Units on Aging, which individually had Long Term Care Centers are partners in one of the two National Eldercare Institutes on Long Term Care.

The National Long Term Care Resource Center on State Management of Community-Based Care Systems operated by the National Association of State Units on Aging (NASUA) (Washington, DC) assisted State Units on Aging in design and management of community based care systems with emphasis on policy, operation, and management issues. Issues areas addressed in its publications include case management, targeting criteria, State and local administrative structures, financing mechanisms, quality assurance, supportive in-home services, and linkage of long term care systems to systems delivering acute, primary and institutional care. These topics are currently addressed by the National Eldercare Institute on Long Term Care conducted by NASUA with participation of Brandeis University.

The Bigel Institute at Brandeis University (Waltham, MA) directed the National Aging Resource Center: Long Term Care from fiscal year 1989–1992. It provided training and technical assistance to State and Area Agencies on Aging in the areas of community-based long term care, public and private partnerships, and cultural diversity and other emerging issues related to the long term care workforce.

The Long Term Care National Resource Center at UCLA/USC was a collaborative effort between the Division of Geriatric Medicine and Gerontology at the University of California, Los Angeles, and the Andrus Gerontology Center at the University of Southern California (Los Angeles, California). The Center focused on five long term topics in the area of housing and health systems development, including: home repair and modification, assisted-housing alternatives, respite care, discharge planning, and geriatric assessment. Publications of the Center are available through the new National Eldercare Institute on Housing and Supportive Services at the Andrus Center and through the Division of Medicine and Gerontology at UCLA.

The National Resource Center on Alzheimer's Disease managed by the Suncoast Gerontology Center, University of South Florida (Tampa, FL), focused on activities and programs affecting the care of Alzheimer's patients and their family caregivers. Among the publications available through the new National Eldercare Institute on Long Term Care and Alzheimer's Disease at the Suncoast Center, are training syllabi, technical assistance manuals and guides for reaching minority caregivers, caring for Alzheimer's patients, establishing respite care and registry programs, and designing special care units in nursing homes.

The Long Term Care DECISIONS Center established at the School of Public Health, University of Minnesota (Minneapolis, Minnesota), focused on the development of case management systems and the ethics of management and caregiving of long term care services. Publications of the Center, including issue papers developed for working conferences on family care giving, assessment of value and preferences of clients, ethics and case management, and the rights of elderly to assume risk in choosing formal care options, and an ethics catalog for long term care practitioners is available from the School of Public Health.

The Heartland Center on Aging, Disability and Long Term Care sponsored by the National Center for Senior Living (South Bend, IN) and located at the School of Public and Environmental Affairs, Indiana University at Indianapolis, focused on needs assessment and data analysis in the Aging Network, with special emphasis on documenting the unmet needs of special sub-populations of the elderly, and functional disabled. Publications of the Center, which include user-oriented descriptions of national data sets and manuals on development and use of needs assessment instruments, are available through the School of Public and Environmental Affairs.

(5) Reaching the Elderly in Rural Areas

The National Resource Center for Rural Elderly conducted by the University of Missouri (Kansas City, MO) provided technical assistance training, information dissemination, and short-term research and developmental efforts to support States, communities, educational institutions, professionals in the field and the public in understanding and responding to issues affecting the rural elderly. The Center identified best-practice programs and services for the rural elderly in three primary focus areas—access/transportation, health/care coordination, and housing/assisted

living alternatives. Publications on such topics as advocacy and fundraising, housing programs, the future of aging in rural America, cooperative extension network and the rural elderly; and caregiving for frail elders in rural America are available through the university.

g. Encouraging Business to Address Needs of the Vulnerable Elderly

The aging of our society has not gone unnoticed by the business community. The mature market for consumer goods and services is one of the most rapidly expanding areas of our economy. The Administration on Aging maintains an active interest in this discovery of aging by private enterprise and solicits their participation in the goals of the National Eldercare Campaign to encourage a focus on development of goods and services supporting the needs of the more vulnerable elderly. In addition to support of the National Eldercare Institute on Business and Aging described earlier, has recently supported research and innovation projects in small business and continued its participation in the National Energy and Aging Consortium.

(a) Small Business and Aging

The market for goods and services for vulnerable non-institutionalized elderly is especially suited for small businesses who are willing to take risks that larger companies will not until market information supports their capital investment. The Administration on Aging has been a participant in Small Business Innovation Research Program coordinated by the U.S. Small Business Administration since fiscal year 1990 and was active in its support in 1992.

In fiscal year 1992, support was given to three new contracts under the Small Business Innovative Research Program, an activity coordinated by the U.S. Small Business Administration. These Phase I contracts address applications of technology to meet the needs of older persons for devices which assist them to perform tasks of daily living. Projects supported are as follows:

TechnoView, Inc. (Newport Beach, CA) to establish the technical feasibility for developing an Intravenous Drug Delivery Monitor for use by elderly patients being treated for serious diseases at home via home health care service providers and family members when nurses are not present.

American Research Corporation of Virginia (Radford, VA) is developing the specifications for a personal communication system to permit caregivers to monitor the well-being of homebound elderly family members.

Kinophase, Inc. (Nashua, NH) is developing a visual/audio system that will investigate the use of a kinoform lens to overcome the effects of macular degenerative visual problems often found among the elderly.

Also in fiscal year 1992, grant award support was given to the Delaware Division of Aging (New Castle, DL) to establish a partnership with the Delaware Development Office to better address the eldercare needs of small businesses in rural Delaware. By establishing a network at the community level with small businesses, the project will channel eldercare information to employers and employees and to advocate for the development of work/family policies within small businesses.

In fiscal year 1991, support was given for Phase II contracts under the Small Business Innovative Research Program following-up on Phase I contracts awarded by AoA in fiscal year 1990. These contracts are as follows:

Gil-Mart Enterprises (San Antonio, TX) for the continued development of an affordable personal hygiene system which will enable the disabled elderly to maintain personal cleanliness independently of the caregiver.

Triangle Research and Development Corporation (Research Triangle Park, NC) for the construction of a unique air-mattress system for the prevention of decubiti and the enhancement of blood circulation.

Gibson-Hunt Associates (Washington, DC) for a detailed plan for educating professionals on the need for self-help devices for the elderly will continue with a national, live interactive teleconference on independence of the elderly and a video edited from the teleconference, along with study materials for publication and dissemination.

(b) Public Private Partnerships

AoA has been engaged for a number of years in promoting public/private partnerships. In late fiscal year 1990 AoA made thirteen (13) awards to State and Area Agencies on Aging to generate new resources or to expand existing resources to meet the needs of older persons by supporting the development of new or expanded public/private partnerships. Support was sought to enhance or sustain community agencies and programs in areas of senior employment and training, work site Elder-

care programs, adult day, medication management, and rural health services. A grant to the Washington Business Group on Health (Washington, D.C.) which now serves as the National Eldercare Institute on Business and Aging was supplemented to give these projects technical assistance.

Sonoma County Area Agency on Aging (Santa Rosa, CA) expanded its Older Worker Network by establishing a senior mentor program which will match retired volunteers with job seekers over age 55 who have basic educational deficiences and language barriers.

Fairfax County Area Agency on Aging (Fairfax, VA) added private sector job placements to its existing public sector job placement program of its Senior Training Employment Program and developing written and audio-visual materials documenting supervision, data collection and evaluation instruments used in operating the program.

New York City Department for the Aging (New York, NY) with support from the International Business Machines Corporation expanded an existing senior employment services program by offering underemployed or unemployed older workers basic computer and office skills training and placement.

Philadelphia Corporation for Aging (Philadelphia, PA) developed a coalition of local companies and the Chamber of Commerce to assist older workers and retirees with the goal of increasing corporate involvement in issues and in programs of the aging workforce and marketplace.

Suffolk County Department for the Aging (Hauppauge, NY) formed a partnership of corporations and unions to develop and operate two model elderly social day-care centers with intergenerational programming.

Westchester County Office for the Aging (White Plains, NY) worked with the International Business Machine Corporation to establish a tax exempt, non-profit organization to raise revenues; and to develop and operate a service delivery model for the rural portion of the county that includes support services and transportation for isolated home-bound frail elderly.

Southern Maine Area Agency on Aging (Portland, MA) enrolled ten area businesses to support an Eldercare Specialist to expand the capacity of private sector employers to support working caregivers.

Maryland Office on Aging (Baltimore, MD) added to its Senior Reach Partners Program, a coalition of corporate and private non-profit organizations, a family care network program to assist employees and retirees in caring for acutely or chronically ill family members.

Jefferson County Office of Senior Citizens' Activities (Birmingham, AL) worker with a coalition of academic, corporate, voluntary, and government organizations to demonstrate a medication management systems for elderly residents of forty-four (44) county domiciliary houses.

Los Angeles Department of Aging (Los Angeles, CA) formed a coalition of corporate and public organizations to create an Eldercare program which will provide training, referral, and structuring of employee benefit packages as services to employees caring for frail elderly.

Delaware Department of Health and Social Services (New Castle, DL) worked with the State Chamber of Commerce to develop information packages, employees seminars, and employer workshops to increase access of employees and their families to community and in-home services.

Puerto Rico Governor's Office of Elderly Affairs (San Juan, PR) and Smith, Kline and French Pharmaceutical collaborated to offer health evaluation and referral services in eight (8) rural areas and give supportive services to heath promotion self-help groups.

County of Orange Area Agency on Aging (Santa Ana, CA) revitalized a non-profit foundation devoted to supporting nutrition and supportive services by assisting fund solicitation and public education.

(c) National Energy and Aging Consortium

The National Energy and Aging Consortium (Washington, DC) is a coalition of national public and private sector organizations concerned about the energy related needs of the elderly. Energy related needs are defined in the broadest terms to include such issues as housing, assistive devices in the home, and low income energy assistance. AoA continues to take an active role in the Consortium and serves as a member of the Steering Committee. Technical assistance materials funded under a fiscal year 1990 grant to the University of Oklahoma (Norman, Oklahoma) were distributed during 1992 and a January 1992 Dissemination Conference was held.

h. Sharing Experiences With the International Community

During 1992, the Administration on Aging continued to participate in international aging activities, including the following:

Participation in planning for the newly created United States-Japan Commission on Aging established by the United States and the Japanese Governments. This Commission will address a wide range of long-term care issues of interest to both countries.

Cooperation with the U.S. State Department, the National Institute on Aging, and other national organizations, in serving as a host to a number of individual and group delegation visits from other countries interested in U.S. aging policies, including Canada, Mainland China, Japan, South Africa, and Sweden.

Partial funding support and participation in the International Conference on Population Aging, held in San Diego, California in September 1992. The Conference was co-organized by various United Nations divisions in response to the Tenth Anniversary of the Vienna International Plan of Action on Aging. AoA support was provided through the San Diego State University Center on Aging which has served as the AoA supported National Aging Resource Center on Minority Populations. The Conference was a forum for policy makers, planners and scholars around the world to discuss issues on population aging and to present conclusions and recommendations for upcoming United Nations assemblies to consider. The Deputy Commissioner on Aging addressed the Conference which was attended by over 350 individuals, including United Nations officials.

SOCIAL SECURITY ADMINISTRATION

Programs Administered by the Social Security Administration—Fiscal Year 1992

The Social Security Administration (SSA) administers the Federal old-age, survivors, and disability insurance (OASDI) program (title II of the Social Security Act). OASDI is the basic program in the United States that provides income to individuals and families when workers retire, become disabled, or die. The basic idea of the cash benefits program is that, while they are working, employees and their employers pay Social Security taxes; the self-employed also are taxed on their net earnings. Then, when earnings stop, or are reduced because of retirement in old-age, death, or disability, cash benefits are paid to partially replace the earnings that were lost. Traditionally, current taxes have largely been paid out in current benefits. Social Security taxes are deposited to the Social Security trust funds and are used only to pay Social Security benefits and administrative expenses of the program. Amounts not currently needed for these purposes are invested in interest bearing obligations of the United States. Thus, current workers help to pay current benefits and, at the same time, build rights to future benefits.

SSA also administers the Supplemental Security Income (SSI) program for needy aged, blind, and disabled people (title XVI of the Social Security Act). SSI provides a federally financed floor of income for eligible individuals with limited income and resources. SSI benefits are financed from general revenues. In about 52 percent of the cases, SSI is reduced due to individuals' having countable income from other sources, including Social Security benefits.

SSA shares responsibility for the black lung program with the Department of Labor. SSA is responsible, under the Federal Coal Mine Health and Safety Act, for payment of black lung benefits to coal miners and their families who applied for those benefits prior to July 1973 and for payment of black lung benefits to certain survivors of miners.

Local Social Security offices process applications for entitlement to the Medicare program and assist individuals with questions concerning Medicare benefits. Overall Federal administrative responsibility for the Medicare program rests with the Health Care Financing Administration, HHS.

Following is a summary of beneficiary data and selected administrative activities for Fiscal Year 1992.

I. OASDI Benefits and Beneficiaries

At the beginning of 1992, about 96 percent of all jobs were covered under the Social Security program. It is expected that, under the present law, this percentage of jobs will remain constant through the end of the century. The major groups of workers not covered under Social Security are Federal workers hired before Janu-

ary 1, 1984 and State and local government employees for whom the State has not elected Social Security coverage.

At the end of September 1992, 41.3 million people were receiving monthly Social Security cash benefits, compared to 40.4 million in September 1991. Of these beneficiaries, 25.7 million were retired workers, 3.5 million were dependents of retired workers, 4.8 million were disabled workers and their dependents, 7.3 million were survivors of deceased workers and about 4,000 were persons receiving special benefits for uninsured individuals who reached age 72 some years ago. (The cost of these special benefits for aged uninsured persons is financed from general revenues, not from the Social Security trust funds.)

The monthly amount of benefits paid for September 1992 was $23.9 billion, compared to $22.5 billion for September 1991. Of this amount, $16.4 billion was paid to retired workers and their dependents, $2.6 billion was paid to disabled workers and their dependents, $4.9 billion was paid to survivors, and $1 million was paid to uninsured persons who reached age 72 in the past. (The cost of these special benefits for aged uninsured persons is financed from general revenues, not from the Social Security trust funds.)

Retired workers received an average benefit for September 1992 of $632 (up from $605 in September 1991), and disabled workers received an average benefit of $607 (up from $587 in September 1991). Retired workers newly awarded Social Security benefits for September 1992 averaged $600, while disabled workers received an average initial benefit of $601.

During the 12 months ending September 1992, $282 billion in Social Security cash benefits were paid, compared to $263 billion for the same period last year. Of that total, retired workers and their dependents received $193.9 billion, disabled workers and their dependents received $30.4 billion, survivors received $57.4 billion, and uninsured beneficiaries over age 72 received $9 million. (The cost of these special benefits for aged uninsured persons is financed from general revenues, not from the Social Security trust funds.)

Monthly Social Security benefits were increased by 3.7 percent for December 1991 (payable beginning January 1992) to reflect a corresponding increase in the Consumer Price Index (CPI).

Monthly Social Security benefits increase by 3 percent for December 1992 (payable beginning January 1993) to reflect a corresponding increase in the CPI.

II. Supplemental Security Income Benefits and Beneficiaries

In January 1992, SSI payment levels (like Social Security benefit amounts) were automatically adjusted to reflect a 3.7-percent increase in the CPI. From January through December 1992, the maximum monthly Federal SSI payment level for an individual was $422. The maximum monthly benefit for a married couple, both of whom were eligible for SSI, was $633. In January 1993, these monthly rates increase to $434 for an individual and $652 for a couple, to reflect a 3-percent increase in the CPI.

As of June 1992, 5.4 million aged, blind, or disabled people received Federal SSI or federally administered State supplementary payments. Of the 5.4 million recipients on the rolls during June 1992, about 2.1 million were aged 65 or older. Of the recipients aged 65 or older, about 623,600 were eligible to receive benefits based on blindness or disability. About 3.3 million recipients were blind or disabled and under age 65. During June 1992, Federal SSI benefits and federally administered State supplementary payments totaling nearly $1.9 billion were paid.

For fiscal year 1992, an estimated $21.3 billion in benefits (consisting of $17.8 billion in Federal funds and $3.5 billion in federally administered State supplementary payments) were paid.

III. Black Lung Benefits and Beneficiaries

Although responsibility for new black lung miner claims shifted to the Department of Labor (DOL) in July 1973, SSA continues to pay black lung benefits to a significant, but gradually declining, number of miners and survivors. (While DOL administers new claims taken by SSA under part C of the Federal Coal Mine Health and Safety Act, SSA is still responsible for administering part B of the Act.)

During September 1992, about 184,000 individuals (143,000 age 65 or older) received $67 million in black lung benefits which were administered by the Social Security Administration. These benefits are financed from general revenues. Of these individuals, 37,000 miners received $14.5 million, 106,000 widows received $43 million, and 41,000 dependents and survivors received $9.5 million. During fiscal year

1992 SSA administered black lung payments in the amount of $826 million. About 37,000 miners and 106,000 widows and wives were age 65 or older.

Black lung benefits increased by 4.2 percent effective January 1992 due to an automatic general benefit increase adjustment under the law. The monthly payment to a coal miner disabled by black lung disease increased from $387.10 to $403.30. The monthly benefit for a miner or widow with one dependent increased from $580.60 to $605.00 and with two dependents from $677.40 to $705.80. The maximum monthly benefit payable when there are three or more dependents increased from $774.10 to $806.60.

IV. Communication and Services

In 1992, SSA continued to direct public information efforts to both its 45 million beneficiaries and the 135 million workers currently paying into the system. SSA emphasized how the programs work, the benefits and services available, and the financial soundness of Social Security.

In 1992, SSA released a multi-media public information campaign to help instill public confidence in Social Security. Public Service Announcements (PSA's) were sent to about 675 television stations, 5,000 radio stations, and 3,000 national consumer magazines across the country. Using the tagline, "Social Security . . . there's safety in our numbers," the campaign stresses the financial soundness of the system and encourages people to learn more about what their Social Security tax dollars are buying.

SSA also produced and distributed nationally television and radio PSA's that addressed such topical concerns as Social Security benefits for people with AIDS and HIV disease, Supplemental Security Income (SSI) benefits for children with disabilities, and the SSA toll-free telephone service.

A series of "live-read" radio spots in 60-, 30-, and 15-second formats called "Just a Minute . . . With Social Security," was inaugurated in 1992 and distributed to 5,000 radio stations twice during the year. The spots cover a variety of Social Security topics and will be released three times a year.

In 1992, SSA launched an outreach campaign designed to stress to farmers, crew leaders, and farm labor contractors their responsibility to match farmworkers' FICA taxes and to make accurate wage reports to SSA for the farmworkers they hire. Working with IRS and the Department of Labor, SSA prepared and distributed two bilingual (English and Spanish) booklets—one targeted to farmers and farm labor contractors and the other directed to farmworkers.

Also in 1992, SSA launched a newsletter for major employers called "The Social Security Reporter." When the premier edition met with much success, SSA and IRS collaborated to produce a joint newsletter—the "SSA/IRS Reporter." The publication is intended to keep employers up to date on Social Security and IRS policies and procedures that affect them—especially their personnel and payroll departments. It will be sent twice a year to 6 million employers who file quarterly taxes.

SSA also produced two posters that were distributed to major employers across the country. One poster, intended to be displayed in payroll divisions, reminds them of the importance of accurate wage reporting. The other poster, geared to employees, encourages them to use SSA's "Personal Earnings and Benefit Estimate Statement" service to regularly check the wages reported to SSA by their employers.

A third poster was produced to remind new brides that if they change their name, they should report that change to Social Security to ensure that their earnings will be properly recorded. They were distributed to county courthouses for display in marriage license bureaus and to SSA field offices for them to arrange displays at businesses that cater to brides.

SSA continues to produce a wide range of publications for the public. About 50 "consumer" booklets and factsheets keep the general public informed of the various Social Security programs and policies that may affect them. Most of these are also available in Spanish. SSA produces about 40 "administrative" publications (many in Spanish) that are sent with notices to Social Security beneficiaries. These pamphlets contain information the beneficiary needs to know so that the official notice can be kept shorter and easier to understand. To help people familiarize themselves with the publications available, two publications catalogs—one geared to external groups and intergovernmental organizations, the other toward Social Security field offices—were distributed, Social Security's Public Information Distribution Center, which was created in 1991 to facilitate access to SSA publications, responded to more than 16,800 requests for publications in 1992.

In 1992, SSA broadened its outreach to non-English speaking populations by producing a series of three program factsheets in five Pacific-Asian languages (Cambodian, Japanese, Korean, Mandarin Chinese, and Vietnamese).

SSA continues to publish the "Social Security Courier," a free monthly camera-ready newsletter available in English and Spanish. More than 15,000 nonprofit and governmental organizations subscribe to it and reproduce and disseminate pertinent articles to their constituencies.

Each year, SSA offices across the country answer millions of Social Security inquiries. Additionally, many inquiries are directed to SSA's Office of Public Inquiries (OPI). Among these are inquiries to the President, Congress, the Secretary of HHS, and the Commissioner of Social Security. In FY 1992, OPI received almost 100,000 inquiries, primarily about disability, SSI, and hearings and appeals. OPI also processed more than 12,000 Freedom of Information Act requests.

In 1992, SSA continued aggressive efforts to counter misleading advertising and deceptive marketing practices under the provisions of Section 1140 of the Social Security Act, which prohibits misuse of symbols, emblems, or names referencing Social Security or Medicare. Legislation to strengthen Section 1140 was passed by both Houses of Congress, but was not signed into law.

V. Summary of Legislation that Affects SSA, 1991-92

Emergency Unemployment Compensation Act of 1991 (H.R. 3575), P.L. 102-164, signed November 15, 1991

Contains a provision that requires all Federal agencies to disclose to the Department of Education, on a reimbursable basis, the most recent address in agency files of former students who have defaulted on repayment of a federally sponsored educational loan and the name and address of the students' employer.

Departments of Labor, Health and Human Services, and Education and Related Agencies Appropriations Act, FY 1992 (H.R. 3839), P.L. 102-170, signed November 26, 1991

Provides FY 1992 funding for SSA's Limitation on Administrative Expenses account of $4.482 billion, with an additional contingency reserve of $100 million. The appropriation for SSI program costs is $13.929 billion, including $6 million for SSI outreach.

The House Appropriations Committee report encourages SSA to determine which outreach approaches are most effective in reducing barriers to participation in the SSI program among people who are SSI-eligible. Additionally, the House report expresses concern that SSA employ a sufficient number of bilingual staff in field offices to meet the needs of non-English-speaking clients. The Senate Appropriations Committee report urges that the outreach funded by this appropriation include efforts to increase enrollment in the Qualified Medicare Beneficiary program.

The reports of both the House and Senate Committees on Appropriations direct SSA to continue to update guidelines for disability claims involving chronic fatigue syndrome and to take steps to facilitate a consistent national policy for resolving these claims.

Aroostook Band of Micmacs Settlement Act (S. 374), P.L. 102-171, signed November 26, 1991

Provides Federal recognition to the Aroostook Band of Micmacs, provides to members of the Band services that the United States provides to Indians because of their status as Indians, and establishes a $900,000 land acquisition and property tax fund.

Payments made by the State of Maine to the Band, or any member of the Band, under this law are excluded from consideration in determining eligibility for, or computing payments under, any Federal financial aid program, including the Supplemental Security Income program.

Tax Extension Act of 1991 (H.R. 3909), P.L. 102-227, signed December 11, 1991

Extended until June 30, 1992, certain tax provisions that were scheduled to expire for tax years beginning after December 31, 1991. (For tax years beginning in 1992, only amounts paid before July 1, 1992 may be excluded.)

Employer-provided educational assistance.—Extended the exclusion for income tax and Social Security purposes of amounts paid, or expenses incurred, by an employer under a qualified educational assistance program.

Group legal services plans.—Extended the exclusion for income tax and Social Security purposes of amounts contributed by an employer to, services received by an employee from, or amounts paid to an employee under, a qualified group legal services plan.

Older Americans Act Amendments of 1992 (H.R. 2967), P.L. 102-375, signed September 30, 1992

Contains a "Sense of the Congress" provision that the next White House Conference on Aging (to be convened not later than December 31, 1994) consider the impact of the retirement earnings test on older individuals who are employed.

Treasury, Postal Service and General Government Appropriations Act, FY 1993 (H.R. 5488), P.L. 102-393, signed October 6, 1992

Establishes a "Commission on the Social Security 'Notch' Issue". The 12-member Commission is to be made up of 4 members appointed by the President, and 2 members each appointed by the Majority and Minority Leaders of the Senate and the Speaker and Minority Leader of the House. The Commission is to conduct a comprehensive study of the notch issue and to report to the Congress by December 31, 1993.

Departments of Labor, Health and Human Services, and Education and Related Agencies Appropriations Act, FY 1993 (H.R. 5677), P.L. 102-394, signed October 6, 1992

Limitation on Administrative Expenses (LAE).—The $4,899,142,000 included in the FY 1993 appropriations bill language for the LAE account was reduced $86,041,000 to $4,813,101,000, in accordance with sections 216, 511 and 512 of P.L. 102-394. The program level funding of $4,813,101,000 includes a contingency reserve of $198,400,000, which is $148,400,000 more than had been requested.

The report of the Senate Appropriations Committee:

Directs SSA to provide by March 15, 1993 a comprehensive report addressing the following issues with respect to SSA's planning for future systems: the status of the 13 current intelligent workstation/local area network pilot projects, including an evaluation of the need for changes in work processes; evaluation costs and benefits; new approaches considered to improve services; and a timetable for completing the evaluation and expert advice obtained from the General Accounting Office (GAO), the Office of Inspector General, and the National Academy of Sciences in developing evaluation methodology and criteria;

Directs SSA to explore and report to the Committee by March 30, 1993, on the feasibility of establishing a partnership with a not-for-profit educational entity to foster hands-on employee training in state-of-the-art computer information systems;

Expresses concern that SSA has not taken more steps to ensure safe and healthful working conditions in the Security West Building, and directs the Commissioner of Social Security to place a high priority on improving working conditions and implementing an effective safety and health program for SSA employees;

Directs that $650,000 be used by SSA to install telephone devices for the deaf in local Social Security offices, in an effort to provide equal access for deaf individuals; and

Requests that a collaborative team of chronic fatigue syndrome (CFS) patients, scientists, and SSA officials meet and review current medical information about CFS and SSA procedures for processing CFS cases.

The report of the House Appropriations Committee:

Urges the Commissioner to establish a task force to address the problems of bilingual staffing, bilingual interpreters, assessment of bilingual service needs and Spanish language notices. The Committee requests that SSA report no later than February 1994 with recommendations and implementation plans for the development of a nationwide bilingual service policy and programs.

Expresses concern that SSA has not provided future year cost estimates related to the Information System Plan (ISP)—the implementation plan for automation improvements, directs that this information be submitted to the GAO for review, and directs that an updated ISP containing future year cost estimates be submitted along with the 1994 Budget Justification.

Energy Policy Act of 1992 (H.R. 776), P.L. 102-486, signed on October 24, 1992

Establishes a new United Mine Workers of America Combined Benefit Plan, as a successor to current health benefits plans for certain retired coal mine workers. The Secretary of Health and Human Services must: (1) assign each coal industry retiree who is eligible for benefits under the new Combined Benefit Plan to a current coal mine operator, (2) notify the fund of the operator to which each retiree is assigned, and (3) notify the operator (who may request reconsideration of the assignment). The assignment of eligible retirees must be completed before October 1, 1993.

The Secretary also must calculate the per beneficiary premium to be paid by the assigned operators for each "plan year" beginning on or after February 1993.

The legislation does not include language authorizing HHS/SSA to use current appropriated funds to carry out the new responsibilities, such as the costs HHS/SSA would incur to search its records to identify eligible retirees' coal mine employers and their periods of coal mine employment.

Housing and Community Development Act of 1992 (H.R. 5334), P.L. 102-550, signed on October 28, 1992

Provides for the establishment of a demonstration program, the "Safe Havens for Homeless Individuals Demonstration Program," under the Stewart B. McKinney Homeless Assistance Act. The demonstration project will provide housing for homeless mentally ill/drug-dependent individuals. The provision prohibits reduction of SSI benefits because of in-kind support and maintenance received through the demonstration program.

OFFICE OF INSPECTOR GENERAL

Introduction

The mission of the Office of Inspector General (OIG) is to prevent and detect fraud, waste, and abuse in the Department of Health and Human Services (HHS) programs and to promote efficiency and economy in its operations. It is the Inspector General's responsibility to report to the Secretary and the Congress any deficiencies or problems relating to HHS programs and to recommend corrective action, where appropriate.

As a result of a congressional oversight initiative into disclosures of fraud and waste in Federal/State Medicaid and welfare programs, Public Law 94-505 was passed, creating the statutory Inspector General in HHS. Enacted in 1976 the law placed equal emphasis on the Inspector General's obligation to detect wrong-doing and to make recommendations for changes and improvements in HHS programs.

The OIG works in a coordinated, cooperative way with other departmental components to accomplish its mission, except when the Inspector General believes that such a relationship would compromise the integrity and independence of the office. Close working relationships are established with the Social Security Administration (SSA), the Health Care Financing Administration (HCFA), the Administration for Children and Families (ACF) and the Public Health Service (PHS) and with other major Federal agencies, such as the Department of Justice (DOJ) and the Government Accounting Office (GAO), to maximize resources devoted to common problems. Governmentwide problems are addressed with other Government agencies through the President's Council on Integrity and Efficiency (PCIE).

The OIG is divided into three components: The Office of Audit Services (OAS), the Office of Investigations (OI), and the Office of Evaluations and Inspections (OEI). The OAS is responsible for conducting audit services for HHS and overseeing audit work done by others. This component also examines the performance of HHS programs and/or its grantees and contractors in carrying out their respective responsibilities.

The OI reviews and investigates all allegations of a potentially criminal, civil, or administrative nature involving HHS programs or beneficiaries. In addition, OI is responsible for imposing administrative sanctions, including civil monetary penalties, on health care providers participating in the Medicare and Medicaid programs. Also, OI monitors the State Medicaid Fraud Control Unit (SMFCU) program, which was created to improve detection and eliminate fraud in the State run Medicaid programs.

The OEI conducts evaluations and inspections of Department programs and operations. These are usually short-term studies designed to focus on issues of current interest to Department officials or Members of Congress which highlight a program's efficiency or effectiveness. The Immediate Office of the Inspector General is responsible for setting OIG policy and direction, handling budgetary and administrative functions, reviewing and developing legislative and regulatory proposals and carrying out public affairs and Congressional Liaison responsibilities.

These audit, inspection and investigative activities focus on:

—Seeking ways to improve fiscal controls in benefit payment processes;

—Seeking ways to enhance trust fund financial management and accounting operations;

—Identifying more efficient and economical improvements in programs, procurement and service delivery, including reviews of the appropriateness of Federal payments of services provided and for the quality of care received; and

—Reducing the incidence of fraud, waste, and abuse in the Department's programs and to the Department's beneficiaries.

ACTIVITIES

Over the past 5 years the OIG has obtained over $29.8 billion in settlements, fines, restitutions, receivables, and savings from its activities and implementation of its recommendations. In fiscal year 1992 alone, these types of savings exceeded $5.9 billion. In addition, a total of 1,893 individuals and entities were convicted for engaging in crimes against HHS programs or beneficiaries and 1,739 health care providers and suppliers or their employees were administratively sanctioned in fiscal year 1992.

In addition to audit and investigative work, the OIG reviewed 211 departmental draft regulations, commented on 393 legislative proposals and testified on 17 occasions before congressional committees.

Following under the headings, Health Care, Social Security, and Administration on Aging, are examples of OIG reviews conducted in fiscal year 1992 that have substantial impact on the elderly:

OFFICE OF THE ASSISTANT SECRETARY FOR PLANNING AND EVALUATION

The Office of the Assistant Secretary for Planning and Evaluation (ASPE) serves as the principal advisor to the Secretary on policy and management decisions for all groups served by the Department, including the elderly. ASPE oversees the Department's legislative development, planning, policy analysis, and research and evaluation activities and provides information used by senior staff to develop new policies and modify existing programs.

ASPE is involved in a broad range of activities related to aging policies and programs. It manages grants and contracts which focus on the elderly and coordinates other activities which integrate aging concerns with those of other population groups. For example, the elderly are included in studies of health care delivery, poverty, State-Federal relations and public and private social service programs.

ASPE also maintains a national clearinghouse which includes aging research and evaluation materials. The ASPE Policy Information Center (PIC) provides a centralized source of information about evaluative research on the Department's programs and policies by tracking, compiling and retrieving data about on-going and completed HHS evaluations. In addition, the PIC database includes reports on ASPE policy research studies, the Inspector General's program inspections and investigations done by the General Accounting Office, the Congressional Budget Office and the Office of Technology Assessment. Copies of final reports of the studies described in this report are available upon completion from PIC.

During 1992, staff of the Office of the Assistant Secretary for Planning and Evaluation undertook or participated in the following analytic and research activities which had a major focus on the elderly:

1. POLICY DEVELOPMENT—AGING

TASK FORCE ON ELDER ABUSE

During 1992, ASPE and the Administration on Aging (AoA) co-chaired the Secretary's Task Force on Elder Abuse that also includes the Health Care Financing Administration, the Public Health Service and the Social Security Administration. The Task Force developed a Departmental plan to promote the prevention and improved reporting, investigation and follow-up of elder abuse.

The plan recommended that the Department implement the following strategies: (1) Develop and fund a national research and data collection strategy on elder abuse, (2) Develop and fund a technical assistance and training program on elder abuse, and (3) Develop and promote targeted public education activities on elder abuse. The Task Force began to implement these activities throughout 1992.

TASK FORCE ON ALZHEIMER'S DISEASE

As a member of the DHHS Council on Alzheimer's Disease, each year ASPE helps prepare the annual report to the Congress on selected aspects of caring for persons with Alzheimer's disease. The report focuses on the Department's current and planned services research initiatives on Alzheimer's disease.

FEDERAL INTERAGENCY FORUM ON AGING-RELATED STATISTICS

ASPE is a member of the Federal Interagency Forum on Aging-Related Statistics (the Forum). The Forum was established to encourage the development, collection, analysis, and dissemination of data on the older population. The Forum seeks to extend the use of limited resources among agencies through joint problem solving, identification of data gaps and improvement of the statistical information bases on the older population that is used to set the priorities of the work of individual agencies.

DEPARTMENTAL DATA PLANNING AND ANALYSIS WORKING GROUP

The Data Planning and Analysis Working Group chaired by ASPE analyzes Departmental data requirements and develops plans minimizing barriers to full utilization of such data. The Group identifies needs for data within HHS, evaluates the capacity of current systems to meet these needs and prepares recommendations for ensuring effective and efficient performance of HHS data systems.

LONG-TERM CARE MICROSIMULATION MODEL

During 1992 ASPE continued to use extensively the Long-Term Care Financing Model developed by ICF, Inc. and the Brookings Institute. The model simulates the utilization and financing of nursing home and home care services by a nationally representative sample of elderly persons for the period 1986 to 2020. It gives the Department the capacity to simulate the effects of various financing and organizational reform options on future public and private expenditures for nursing home and home care services. During 1992, ASPE continued work on making the model available to the general research community.

2. Research and Demonstration Projects

Institute for Research on Poverty, University of Wisconsin

Robert M. Hauser, Principal Investigator.

A research agenda of diverse but interrelated two-year studies concerned with the relationships between poverty and family structure, education and social welfare, child support and paternity, labor force behavior, and welfare dependence. In the 1991-93 biennium there are no projects dealing exclusively with the elderly. However, the Institute does do a number of activities and publishes a number of materials on poverty which include the elderly as an important subgroup.

Funding: Fiscal years 1991-1993—$3,000,000; End Date: June 1993.

Panel Study of Income Dynamics

University of Michigan, Institute for Social Research, James N. Morgan, Greg J. Duncan, and Martha S. Hill, Principal Investigators.

Through an interagency consortium coordinated by the National Science Foundation (NSF contributes approximately $1.5 million per year), ASPE assists in the funding of the Panel Study of Income Dynamics (PSID). This is an ongoing nationally representative longitudinal survey that began in 1968 under the auspices of the Office of Economic Opportunity. The PSID has gathered information on family composition, attitudes, employment, sources of income, housing, mobility, and a host of other subjects every year since then on a sample of approximately 5,000 families and has followed all original sample members that have left home. The current sample size is over 7,000 families. The data files have been disseminated widely and are used by hundreds of researchers both within this country and in numerous foreign countries to get an accurate picture of changes in the well-being of different demographic groups including the elderly.

Funding: ASPE (and HHS precursors)—FY67 through FY79—$10,559,498; FY80—$698,952; FY81—$600,000; FY82—$200,000; FY83—$250,999; FY84—$550,000; FY85—$300,000; FY86—$225,000; FY87—$250,000; FY88—$250,000; FY89—$250,000; FY90—$300,000; FY91—NA.

Survey of Consumer Finances

University of Michigan, Survey Research Center, Richard Curtain, Principal Investigator.

The Survey of Consumer Finances interviewed a representative sample of U.S. families in the spring of 1983 gathering a detailed accounting of family assets and liabilities; questioning also covered financial behavior and attitudes, work status, job history, and expected benefits from pensions and Social Security. A supplemental

instrument gathered information on the pension entitlement of individuals in the sample. Detailed descriptions of pension plans are being linked to household files.

Data from the survey are expected to be widely used for investigation of the distribution of holdings on various assets and liabilities, of net worth, and of entitlement to pension and Social Security benefits. In addition, these data will support research on financial behavior of individuals and on the effect of Social Security and pensions on the holdings of other assets.

The survey was jointly sponsored by the Board of Governors of the Federal Reserve System, the Department of Health and Human Services, the Department of the Treasury, the Federal Deposit Insurance Corporation, the Federal Trade Commission, and the Department of Labor.

The Survey Research Center completed the second wave of the survey. Follow-up telephone interviews with respondents from the first survey were conducted updating basic information from the original wave and adding new areas of questioning. Data from this wave will be available winter 1988. A third in-person wave will be conducted in 1989 to obtain another household balance sheet for those in the original sample, supplemented by an additional sample of households.

Funding: ASPE—$1,012,096; Total—$1,711,983; Funding by FY: 82—$750,000; 83—$132,096; 84—$130,000; 89—$50,000; 90—$50,000; 91—$50,000.

Research to Improve the Accuracy of Long-Term Forecasts of the Social Security and Medicare Trust Funds

Unicon Research Corp., Finis Welch and Kevin Murphy, Principal Investigators.

The research consists of two related projects. The first will estimate historical real wage growth using household data for the Current Population Survey for the period 1964 to 1987 and forecast future growth. The goals is to decompose past wage growth into growth in the wages of workers with fixed characteristics and changes in aggregate wage levels generated by changes in the composition of hours worked. The project will also forecast the future distribution of workers across groups (distinguished by sex, race, age, education, and labor force status) which will be combined with estimated relative wage patterns to forecast the composition component of future wage growth.

The second project extends the analysis to evaluate the impact of changes in the relative earnings of husbands and wives on the solvency of the Social Security system. The goal is to provide estimates of the tax contributions and benefits payments of women eligible for both primary and spouse benefits. Although preliminary work indicates that increases in earnings and labor force participation of women will contribute to the solvency of the Social Security Trust Fund, the magnitude depends on how the increased earnings are distributed among those already working and previous nonparticipants.

Funding: FY 1989—$87,600; End Date: March 1992.

Pensions, Savings, Health Expenditures, Long-Term Care, and Retirement

1. "Retiree Health Insurance: A Research Proposal."

National Bureau of Economic Research, Principal Investigators: Alan L. Gustman and Thomas L. Steinmeier.

The researchers will use several data sets to estimate the change in the value of health insurance resulting from retirement. Using these estimates the investigators will expand their previous work on the effects of pensions and Social Security on retirement to include the effect of retiree health benefits on the retirement decision.

Funding: FY 1990—$89,827; End Date: September 1992.

2. "Retiree Health Benefits and the Retirement Decision."

North Carolina State University, Principal Investigators: Robert L. Clark and Alvin E. Headen, Jr.

The researchers will use data from the 1988 Employee Benefits Survey and the 1988 Current Population Survey to examine the decision of employers to provide retiree health insurance and pensions plans. They will explore the potential tradeoffs between the two fringe benefits. An economic model of why workers and firms negotiate retiree health care plans will be developed and used in the derivation and analysis of employer-sponsored retiree health insurance coverage rates for retirees and for older active workers by various worker and firm characteristics.

Funding: FY 1990—$77,429; End Date: September 1992.

3. "Retiree Health Benefits: An Analysis of Access and Participation."

The Urban Institute, Principal Investigator: Shiela Zledewski.

The researchers will use the August 1988 Current Population Survey to examine the distribution of employer-based retiree health insurance benefits (by occupation, income, health, location, family status etc.) and examine the determinants of retiree participation in employer-based plans. The project will also estimate the value of

the employer-provided health benefits and examine their effect on retirement income security and government programs.

Funding: FY 1990—$120,395; End Date: September 1992.

Policy Aspects of Intergenerational Support for Elderly Persons

Brown University, Principal Investigator: Alden Speare, Jr.

The researchers will study the determinants of financial flows between elderly persons and children outside the household, determine the extent to which shared living helps the elderly avoid poverty, and examine how intergenerational transfers are affected by government policy. The investigators will use the Survey of Income and Program Participation and the Survey of Consumer Finances.

Funding: FY 1990—$63,426; End Date: September 1992.

Health and Retirement Study

University of Michigan, Survey Research Center, Principal Investigator: Tom Justen.

The Survey of Health and Retirement is a new nationally representative longitudinal survey that will gather data on health and retirement issues from U.S. households. In addition, financial and background histories will be gathered. Data from the survey are expected to be used for investigating how changes in the Social Security system and private pension systems have affected retirement plans. These data will support research on health care needs and costs. The survey was jointly sponsored by the Department of Health and Human Services and the National Institute on Aging (NIA).

Funding: NIA—FY91—$2,500,000; FY92—$2,500,000; FY93—$2,500,000.

Funding: ASPE—FY90—$200,000; FY91—$200,000; FY92—$100,000.

Characteristics of the Elderly Long-Term Care Population and Its Service Use

Duke University, Center for Demographic Studies, Ken Manton, Principal Investigator.

The project is organized into two phases. In the first year there will be an analysis of the 1982–84 National Long-Term Care Survey and the National Long-Term Care Channeling Demonstration data sets. The focus will be on functional transitions at advanced ages and the impacts of long-term care services on these transitions. In the second phase, additional national data bases like the Longitudinal Supplement on Aging will be examined to refine and extend the understanding of health and functional status changes among the impaired elderly as well as trends in service use.

Funding: FY 1987—$56,933; End Date: December 1992.

1988 National Long-Term Care Survey—Additional Activities

Duke University, Center for Demographic Studies, Ken Manton, Principal Investigator.

Under a grant from the National Institute on Aging (NIA), Duke University (through the Census Bureau) is conducting the 1988 National Long-Term Care Survey. Duke will produce a data file consisting of the 1982, 1984 and 1988 surveys linked to Medicare bill records. An additional grant jointly administered by NIA and the Office of the Assistant Secretary for Planning and Evaluation will support three supplementary activities: (a) a survey of informal caregivers, (b) a follow-back survey of institutionalized persons, and (c) an analysis of the effects of supply factors on respondent use of services.

Funding: FY 1987—$300,000; End Date: June 1992.

Analysis and Comparison of State Board and Care Regulations and Their Effects on the Quality of Care in Board and Care Homes

Research Triangle Institute, Catherine Hawes, Principal Investigator.

As the Nation's long-term care system evolves, more emphasis is being placed on home and community-based care as an alternative to institutional care. Community-based living arrangements for dependent populations (disabled elderly, mentally ill, persons with mental retardation/developmental disabilities) play a major role in the continuum of long-term care and disability-related services. Prominent among these arrangements are board and care homes.

There is a widespread perception in the Congress and elsewhere that too often board and care home residents are the victims of unsafe and unsanitary living conditions, abuse and neglect by operators, and fraud. There is also the perception that an increasing number of board and care residents are so disabled that they require a level of care greater than board and care operators are able to provide.

This project will analyze the impact of State regulations on the quality of care in board and care homes and document characteristics of board and care facilities, their owners and operators, and collect information on the health status, level of dependency, program participation, and service needs of residents.

Funding: FY 1989—$350,000; FY 1990—$300,000; FY 1991—$400,000; End Date: November 1993.

Informal Caregivers Conference

SysteMetrics, Inc., Brian Burwell.

This project brought together public and private sector experts to analyze research on informal caregiving, and examine public and private sector policy development.

Funding: FY 1992—$200,000; End Date: November 1992.

Descriptive Analysis of Licensed Board and Care Homes

Department of Health and Human Services Office of the Assistant Secretary for Planning and Evaluation

Robert F. Clark, Joan Turek-Brezina.

In 1991, the National Health Provider Inventory (NHPI) included licensed board and care homes for the first time. This project provides preliminary findings about licensed board and care homes from the NHPI data including: (a) number of homes, (b) ownership types, (c) number and characteristics of residents and, (d) use of services.

Funding: FY 1992—$50,000; End Date: November 1993.

Post-Acute Care for Medicare Patients

University of Minnesota, Robert Kane, Principal Investigator.

The primary objective of this study is to describe the "natural history" of care received by patients with five different impairments (identified by DRG) in three post-acute care modalities. These modalities include home health care, skilled nursing care, and rehabilitation. This study will not only provide a history of what care was delivered in which settings, but will also assess and compare outcomes and costs of care across settings and impairments. In addition, the study will determine the factors that influence hospital discharge decision-making. This study's findings may then be used to construct a revised payment method for post-acute care in the Medicare program.

Two sets of data will be collected. The first set will contain information from hospital discharge records and pre- and post-discharge client interviews in three U.S. cities. The second set will include a 20 percent national sample of Medicare acute care discharges to be linked with the utilization files of Medicare covered services provided in post-acute care settings. Data collection has been completed, and the analysis phase is currently underway.

Funding: FY 1987—$500,000, FY 1988—$727,000, FY 1989—$695,335; End Date: March 1993.

Evaluation of an Approach to Maintaining the Medical Currency of Rural Physicians and Hospitals

Texas Tech, A. Bryan Spives, MD.

OBRA '87 required the Department to explore and to test the feasibility of "requiring instructions and oversight of rural physicians . . . through use of video communications between rural hospitals and teaching hospitals" to maintain and improve the quality of delivered medical care with special emphasis of Medicare beneficiaries." This activity is to be supported jointly by HCFA and PHS, with ASPE responsible for support of necessary evaluation activities. This project will support the evaluation component.

A two-part, 3 year effort, totaling $350,000 in evaluation, is envisioned. The first component, internal evaluation, will be supported through partial funding of the OBRA '87-required project(s). The second component, external evaluation, will be supported through consortium funding by PHS, HCFA, and ASPE of an independent evaluation contract.

Funding: FY 1991—$125,000, FY 1992—$125,000; End Date: June 1993.

Extension of 100 Percent State Longitudinal Medicare Part B Data to 1990

The Circle, Inc., Howard West, Principal Investigator.

ASPE has collected 100 percent Part B data from six carriers representing 10 States beginning in 1983. The States included are Washington, South Carolina, North Dakota, South Dakota, Minnesota, Indiana, Pennsylvania, Washington, D.C., Delaware, and parts of Maryland. The data are cleaned in a common format and

can be linked to 100 percent Part A MEDPAR data to create analytical files that contain both hospital and physician reimbursement. The data can support detailed analysis of individual procedures and can support analyses of such issues as physician DRG's; the effects of bundling diagnostic procedures prior to the hospital stay into the DRG payment and others. The project adds 1988 data for all carriers to the longitudinal data series.

Funding: FY 1990—$75,000, FY 1991—$20,000; End Date: June 1992.

Assessment of the Effects of Reimbursement Policy on the Utilization of Clinical Laboratory Testing and the Contribution of That Testing in Patient Care

Abt Associates, Steven T. Mennemeyer, Ph.D., Principal Investigator.

This research project is designed to study the effect of reimbursement policies on the volume of clinical laboratory services delivered and on the propensity of physicians to perform testing in their own offices. In addition, this research project is intended to stimulate the development of methods for monitoring laboratory performance in terms of patient care. At present the effects of reimbursement policy on laboratory utilization and the role of these laboratory services in the quality of patient care is poorly understood. There is widespread concern generated by media coverage and anecdotal evidence that the utilization of clinical laboratory services is not meeting patient needs during a period in which laboratory technology has improved dramatically. Addressing some of these concerns, Congress passed the "Clinical Laboratory Improvement Amendments of 1988" (CLIA-88). Although financial issues such as physician ownership of labs and direct payment were much debated, Congress did not act on these financial matters in the final bill. An assessment of data concerning the utilization of laboratory services is necessary for policymakers to identify strategies that best promote advances in laboratory services in order to enhance patient care and maximize the effectiveness of health care expenditures.

Funding: Fiscal year: 1889—$510,000; End Date: January 1992.

Analysis of Multiple Surgical Bills on the Day of Surgery

Center for Health Economics Research, Janet Mitchell, Principal Investigator.

Medicare statistical files (BMAD) data for 1985-1988 will be examined to identify patients who have received bills for more than one surgery on the same day for 15 or more high Medicare outlay surgical procedures. The contractor will first eliminate duplicate claims. The remaining claims will be sorted into three types with the aid of a medical consultant: (1) claims by the same surgeon for procedures made through the same incisions the principal procedure which are properly paid but a reduced rate (50%); (2) claims by the same surgeon for related procedures to the principal procedure which under the carrier's global fee policy should not have been billed separately (e.g., billing both for a hysterectomy and sewing up the wound); (3) claims by a different surgeon for a related procedure which could have been billed as an assistant-at-surgery claim; and (4) a second procedure through a separate incision. Estimates will be made based on this topology, and with the aid of medical advice as to when billing patterns appear inappropriate of Medicare overpayments for both potential overbillings or apparent "unbundling" from surgical global fees.

Funding: Fiscal year 1990—$90,000; End Date: June 1992.

OFFICE OF THE SURGEON GENERAL

The Surgeon General joined with the American Medical Association to produce their report "Diagnostic and Treatment Guidelines on Elder Abuse and Neglect," released in November 1992. The report was issued as part of the AMA's domestic violence initiation, for which the Surgeon General served as spokesperson. Other topics included in the initiative were child and spousal abuse.

PUBLIC HEALTH SERVICE—CENTERS FOR DISEASE CONTROL

National Center for Chronic Disease Prevention and Health Promotion

The combined Health Information Database (CHID)—a Public Health Service information resource—contains health information that pertains to aging. The database includes disease prevention, health promotion, and health education information on eye diseases and disorders, Alzheimer's disease, arthritis and musculoskeletal diseases, diabetes mellitus, cholesterol, high blood pressure, digestive diseases, kidney and urologic disease, injury prevention, exercise, weight management, and stress management. Because of the nature of the subject areas, CHID is a valuable resource for health providers working with the elderly. CHID can be accessed through most library and information services. Persons who wish to access the data-

base directly can obtain a password from MAXWELL Online, BRS Division, Latham, NY, 1-800-345-4BRS.

In 1990, the Aging Studies Branch in the Division of Chronic Disease Control and Community Intervention was established to: (1) conduct epidemiologic research, investigations, and surveillance of selected chronic diseases and conditions in older adults; (2) develop and evaluate prevention strategies and demonstration projects; and (3) provide consultation and technical assistance to States and other agencies. Research and programmatic efforts are focused on musculoskeletal diseases (osteoarthritis, osteoporosis), chronic neurological disease (Alzheimer's disease, Parkinson's disease), urinary incontinence, depression, developing measures of health status and quality of life, and promoting/supporting State efforts in these areas.

Musculoskeletal diseases are prevalent and disabling chronic diseases, affecting approximately 37 million persons in the United States. Data indicate that 40 percent of persons 65 years and older have symptomatic musculoskeletal diseases and 60 percent have clinical evidence of disease. Data are needed to describe the natural history of disease as well as to direct development of effective intervention efforts. CDC has three projects underway addressing these issues related to osteoporosis and one project in arthritis.

Chronic neurological diseases, conditions common among the elderly, rank high in measures of morbidity, disability, family stress, and economic burden. For example, the costs due to dementias alone were estimated at $24-48 billion in 1985, and will increase as the population ages. However, the epidemiology of these conditions is poorly understood. CDC is conducting a number of research studies to better understand the epidemiology of Alzheimer's disease and Parkinson's disease.

Urinary incontinence (UI), the involuntary loss of urine so severe as to have social or hygienic consequences, affects 15-30 percent of community-dwelling older people and at least half of all nursing home residents. UI costs are conservatively estimated at $10.3 billion annually. UI goes largely untreated in millions of people, although a third of cases can be cured and another third helped significantly. CDC has determined incidence, prevalence, and remission rates for different types of UI in those 65 and older using National Health and Nutrition Examination Survey-Epidemiologic Follow-up Study. CDC has recently funded intervention demonstration projects in two states and 1 university to develop and evaluate strategies to decrease disability due to this cause among older individuals.

Quality of life is often thought to be more valuable than quantity of life. DCDCCI is working in concert with panels of experts to develop methods to assess quality of life in the general population. Several of these measures have been included in the Behavioral Risk Factor Surveillance System to access quality of life in the 48 participating states.

The CDC-funded center for Health Promotion in Older Adults (CHPOA) at the School of Public Health, University of Washington, is focusing on the health of older Americans and has as its theme "Keeping Healthy Older People Healthy." The Group Health Cooperative Demonstration Project is evaluating a nurse, educator health assessment followed by up to six intervention activities for those at risk. The Case-Control Analysis of Hip Fractures study showed cognitive dysfunction to be a major risk factor for hip fractures, along with poor tandem gait, poor balance, and impaired recovery after a displacement of balance; an intervention study of the effects of proper footwear is currently underway. The Movement Intervention Trial (MOVE-IT) is comparing the effect on gait and balance of three exercise interventions in those with mild to moderate movement impairments. A final project surveys the health care needs of older adults in Seattle Housing Authority public housing; these data will help allocate County Health Department resources. The core funding provided by CDC has helped support other studies by CHPOA staff on physical frailty, osteoporosis, and self-efficacy (the concept that one can successfully execute the behavior required to produce a desired outcome).

CDC provides technical and financial assistance to State health agencies for a wide variety of chronic disease prevention and control program activities. One of these programs targets the elderly in Flathead County, MT. The Successful Aging Program enables senior citizens to participate in planning risk factor screening and educational activities. The program has implemented interventions that target nutrition, exercise, weight control, and stress reduction. As a result of the positive results from these activities, the program is being disseminated throughout the State.

Diabetes is a major contributor to morbidity and morality among persons 65 and older. An estimated 2,898,000, or 10 percent, of all Americans 65 years of age and older have diagnosed diabetes, compared with about 2 percent of all Americans below age 65. Each year, about 290,000 new cases of diabetes are identified among those who are 65 and older. In 1987, diabetes contributed to over 119,000 deaths and

an estimated 1,507,000 hospitalizations among Americans 65 and older. About $5.2 billion in direct medical costs can be attributed annually in the United States to diabetes among persons 65 and older.

During 1991, CDC's efforts have focused on the prevention of eye disease and cardiovascular disease associated with diabetes. All diabetes control programs funded through cooperative agreements with 27 state and territorial health departments currently address visual impairment associated with diabetes, and at least one of the following complications: adverse outcomes of pregnancy, lower extremity disease, and cardiovascular disorders associated with diabetes. In 1987, among Americans with diabetes age 65 and older, there were 38,000 hospital discharges for nontraumatic amputations, and 2,720 individuals who began treatment for end-state renal disease. Decisions about diabetes control program directions reflect state judgments about disease burden, past program direction and interests, and existing resources within the departmental of health.

Breast cancer is the most commonly diagnosed cancer and the second leading cause of death from cancer among American women. Breast and cervical cancer tend to be diagnosed in advanced stages relative to advancing age. In 1991, it is projected that 44,500 women will die of breast cancer and over half of breast cancers occur in older women. Breast cancer mortality could be reduced up to 30 percent, among women over age 50, if currently recommended screening guidelines, including mammography and clinical breast examinations were followed (PHS 1991). Cervical cancer mortality rates continue to decrease from 14.8/100,000 in 1973/74 to 8.3/100,000 in 1987/88. However, in those women 50 and older, the rates are still significantly higher than those of women under the age of 50, 2 and 1.3, respectively. Recent data indicate that older women have not been receiving routine screening for cervical cancer.

Current American Cancer Society screening recommendations for breast cancer in women 50 and older include annual mammography screening, annual clinical breast examination, and monthly self breast examination. For cervical cancer screening in women 50 and older, it is recommended that after three consecutive normal Papanicolaou tests with pelvic examinations have been conducted with normal results, then screening should be done based on physician discretion.

Currently, CEC is funding eight states (California, Colorado, Michigan, Minnesota, New Mexico, South Carolina, Texas, and West Virginia) through the Breast and Cervical Cancer Mortality Prevention Act of 1990. These states target older women for education and screening efforts. Along with this, marketing of new Medicare benefits which support funding for Papanicolaou smears and screening mammography will occur through various channels at Federal, State, and local levels.

National Center for Environmental Health

The National Center for Environmental Health (NCEH) is completing a five-year observational study of women experiencing the climacteric. Risk factors for osteoporosis are being studied. The study has shown that women have hormone-dependent bone loss before menopause and that androgens as well as estrogens may be important in maintaining bone density in women. Data analysis for publication is in progress and will be completed in fiscal year 1993.

CDC also maintains the national accuracy base for the standardization of lipid and lipoprotein measurements by maintaining reference methods for cholesterol, triglyceride, and HDL. In collaboration with the National Heart, Lung, and Blood Institute, CDC provides standardization service to 150 domestic and international lipid laboratories participating in longitudinal studies and clinical trials involving lipid metabolism and the assessment of risk factors associated with coronary heart disease. CDC has also established a national reference method laboratory network for cholesterol. This network standardizes clinical laboratories and manufacturers of diagnostic products to assist in meeting the Healthy People 2000 objective that a least 90% of clinical laboratories measure cholesterol within the recommended national standard for accuracy.

National Center for Health Statistics

BACKGROUND

The National Center for Health Statistics (NCHS) is the Federal Government's principal health statistics agency. The NCHS data systems address the full spectrum of concerns in the health field from birth to death, including overall health status, life style, the onset and diagnosis of illness and disability, and the use of health care.

The Center maintains over a dozen surveys that collect health information through personal interviews; physical examination and laboratory testing; review of hospital, nursing home, and physician records; and other means. These data systems, and the analysis and reports that follow, are designed to provide information useful to a variety of policy makers and researchers. NCHS frequently responds to requests for special analyses of data that have already been collected and solicits broad input from the health community in the design and development of its surveys.

Since most of the data systems maintained by NCHS encompass all age groups in the population, a broad range of data on the aging of the population and the resulting impact on health status and the use of health care are produced. For example, NCHS data have documented the continuing rise in life expectancy and trends in mortality that are essential to making population projections. Data are collected on the extent and nature of disability and impairment, limitations on functional ability, and the use of special aids. Surveys currently examine the use of hospitals, nursing homes, physicians' offices, home health care and hospice, and are being expanded to cover hospital emergency rooms and surgi-centers.

In addition to NCHS surveys of the overall population that produce information about the health of older Americans, a number of activities provide special emphasis on the aging. They are described below.

A FOCAL POINT FOR DATA ON AGING

In 1989, NCHS established a focal point for data on aging by creating a position of Coordinator of Data on Aging. Joan F. Van Nostrand is the Coordinator. This focal point cuts across the Center's data systems to coordinate:

—the collection, analysis and dissemination of health data on older Americans
—international research in data on aging
—measurement research in aging in such areas as development of a uniform data set for long-term care and assessment of disability

The Coordinator provides information to the general public about NCHS activities and data on aging Americans. For more information contact: Joan F. Van Nostrand, NCHS Coordinator of Data on Aging, National Center for Health Statistics, 6525 Belcrest Road, Room 1120, Hyattsville, Maryland 20782.

INTERNATIONAL COLLABORATIVE EFFORT ON MEASURING THE HEALTH AND HEALTH CARE OF THE AGING

NCHS launched the International Collaborative Effort on Measuring the Health and Health Care of the Aging (abbreviated as the ICE on Aging) in 1988. The purpose of the ICE on Aging is to join with international experts in conducting research to improve the measurement of health and health care of the aging. Research results will be applied to the Center's programs to strengthen the collection, analyses and dissemination of data on older persons. Results also will be disseminated widely to encourage their international application. The international emphasis of the research permits the exchange of perspectives, approaches and insights among nations facing similar situations and challenges.

The first International Symposium on Data on Aging was held in late 1988 to develop proposals for research in selected areas. Proceedings from the 1988 Symposium were published in 1991 in the Center's "Vital and Health Statistics Series." The following research projects began in 1989:

—Comparative Analysis of Health Statistics for Selected Diseases Common in Older Persons—Hip Fracture: USA and Hong Kong.
—Measuring Outcomes of Nursing Home Care: USA, Australia, Canada, The Netherlands, Norway.
—The Measurement of Vitality in Older Persons: USA, Italy and Israel.
—Health Promotion and Disease Prevention Among the Aged: USA and the Netherlands.
—Functional Disability: USA, Canada, and Hungary.

A second International Symposium presenting interim results of these research projects was held in 1991. Proceedings will be available in early 1993. A third and final international symposium is planned for 1994-95 to present final research results.

NCHS has issued several "Information Updates for the ICE on Aging." They described each research project in depth and detail progress.

FEDERAL INTERAGENCY FORUM ON AGING-RELATED STATISTICS

The NCHS, in conjunction with the National Institute on Aging and the Bureau on the Census, co-chairs the Federal Interagency Forum on Aging-Related Statistics. The Forum encourages communication and cooperation among Federal agencies in the collection, analysis, and dissemination of data on the older population. The Forum membership consists of over twenty Federal agencies that produce or analyze data on the aging population.

Recently, the Forum prepared the following outputs. Copies are available from the NCHS Coordinator of Data on Aging:

—PC lotus disk of tables from "Health Data on Older Americans, United States: 1992."
—Pocket edition of "Health Data on Older Americans, United States: 1992."
—Symposium on health of the elderly at the 1992 annual meeting of the American Public Health Association and a symposium on the rural elderly at the 1992 annual meeting of the Gerontological Society of America.
—Measuring the Activities of Daily Living: Comparison Across National Surveys by Wiener, Hanley, Clark and Van Nostrand in "Journal of Gerontology," Vol. 45, No. 6.
—Survey Assessment of Cognitive Impairment and Its Impact on Disability: Recommendations for Research.
—Data Resources in Gerontology: A Directory of Selected Information Vendors, Databases, and Archives (with the Gerontological Society of America).
—Directory of Federal Contacts About Older Americans in Rural Areas.
—Presentation of an informal briefing on older Americans in rural areas to members of Congress and their staff. This was conducted under the auspices of the Senate Committee on Aging.
—Synthetic State Estimates of the Health of Older Persons.

Forum activities for 1993 include:

—Publication of a comprehensive analytic report "Health Data on Older Americans, United States: 1992."
—Publication of "Chartbook on Health Data on Older Americans, United States: 1992" as a companion to the comprehensive analytic report.
—Publication of a report "Common Beliefs About The Rural Elderly: What Do National Data Tell Us?"
—Development of a prototype report on "Trends in Health of Older Americans."

VITAL STATISTICS ON AGING

Mortality statistics from the national vital statistics system continue to play an important role in describing and monitoring the health of the elderly population. The data include measures of life expectancy, causes of death, and age-specific trends in death rates. The basis of the data is information from death certificates, completed by physicians and funeral directors, used in combination with population information produced by the U.S. Bureau of the Census.

At NCHS two efforts are currently underway to both assess and improve mortality data for the elderly. NCHS is looking into the possibility of increasing the level of age detail shown in tabulations of mortality for the elderly, focussing on the age group 85 years and over, which is often treated in tabulations as an aggregated category. As life expectancy has increased, the need for detailed mortality data for the "extreme aged" has increased accordingly. Current efforts involve assessing both the availability and quality of mortality and population data for more detailed age groups among the elderly.

Also under study is the process by which medical information on the death certificate is collected, including issues related to the format of the case-of-death section. The format presently in use, prescribed by the World Health Organization, requests that the certifying physician report a single causal chain of medical events that led to death, initiated by an "underlying" cause of death. The single sequence concept presents difficulties in certification for some elderly deaths which may reflect the consequences of several concurrent disease processes. These and other issues related to certification are now under study.

NATIONAL HEALTH INTERVIEW SURVEY (NHIS): SPECIAL TOPICS

The NHIS continues to collect data on a wide range of special health topics for the civilian, noninstitutionalized population, including the aging population. The special health topics for 1992 were:

—AIDS knowledge and attitudes (same sample adult);

—income and program participation (all family members);
—cancer epidemiology and cancer screening.
For 1993 and 1994 the special topic is disability.
Data collection for an NHIS data year begins in January of that year and ends in December. Public-use data tapes are usually available about one year after the end of the data collection.

National Mortality Followback Survey: 1986 and 1993

The 1986 National Mortality Followback Survey was the first such survey in 18 years. Already, 43 papers and publications have used the data. The followback survey broadens the information available on the characteristics of mortality among the population of the United States from the routine vital statistics systems by making inquiry of the next of kin of a sample of decedents. Because two-thirds of all deaths in the Nation in a year occur at age 65 or older, the 1986 survey focussed on the study of health and social care provided to older decedents in the last year of life. This is a period of great concern for the individual, the family and community agencies. It is also a period of heavy care use. Agency program planning and national policy development on such issues as hospice care and home care can be enlightened by the data from the survey. A public use data tape from the next-of-kin questionnaire was released in 1988. A second tape, combining data from the next-in-kin and hospitals and other health facilities, was available in 1990. Several survey reports focused on the aging. They were about persons dying of diseases of the heart and of cerebrovascular disease. A 1993 National Mortality Survey is currently being planned.

National Health and Nutrition Examination Survey III

The National Health and Nutrition Examination Survey (NHANES) provides valuable information available through direct physical examinations of a probability sample of the population. The third cycle of this survey, NHANES III, went into the field in 1988. NHANES III will provide a unique data base for older persons, as a number of important methodologic changes have been made in the survey structure. There is no upper age limit (previous surveys had an age limit of 74 years), and the sample has been selected to include approximately 1,300 persons aged 80 or older. The focus of the survey includes many of the major chronic diseases of aging which cause morbidity and mortality including cardiovascular disease, osteoarthritis, osteoporosis, pulmonary disease, dental disease and diabetes.

In addition to the focus on nutrition, information on social, cognitive and physical function in incorporated into the survey. Data from home examinations will be available for those unable or unwilling to come to the central examination site, the Mobile Examination Center. The major activity in 1992 was the fielding of the survey. It is anticipated that in 1993 content development for the longitudinal followup will begin, with data collection commencing in FY 1995.

NHANES I Epidemiologic Followup Study

The first National Health and Nutrition Examination Survey (NHANES I) was conducted during the period 1971–75. The NHANES I Epidemiologic Followup Study (NHEFS) tracks and reinterviews the 14,407 participants who were 25–74 years of age when first examined in NHANES I. NHEFS was designed to investigate the relationships between clinical, nutritional, and behavioral factors assessed at baseline (NHANES I) and subsequent morbidity, mortality, hospital utilization, as well as changes in risk factors, functional limitation and institutionalization. Followups were conducted in 1982–84, 1986 (limited to persons age 55 and over at baseline) and 1987. A fourth wave of data collection is underway (June 1992–May 1993).

While persons examined in NHANES I were all under age 75 at baseline, by 1987 more than 3,600 subjects were over 75, providing a valuable study group to examine the aging process. Public use data tapes are available from the National Technical Information Service for the first three waves of followup. Each set of four tapes contain information on vital and tracing status, subject and proxy interviews, health care facility stays in hospitals and nursing homes, and mortality data from death certificates. All NHEFS Public Use Data Tapes can be linked to the NHANES I (baseline) Public Use Data Tapes.

Longitudinal Study on Aging

The Longitudinal Study on Aging (LSOA) has been a collaborative effort of the National Center for Health Statistics and the National Institute of Aging. The base-

line information for the LSOA came from the Supplement on Aging (SOA), a supplement to the 1984 National Health Interview Survey (NHIS).

The SOA included 16,148 persons 55 years of age and over living in the community in 1984. The Supplement obtained information on housing, including barriers and ownership; support, including number and proximity of living children and recent contacts in the community; retirement, including reasons for retirement and sources of retirement income; and measures of disability, including activities of daily living, instrumental activities of daily living and ability to perform work-related activities.

The sample for the LSOA came from the 7,541 persons who were 70 years of age and older at the time of the SOA in 1984. The survey was designed to measure changes in functional status and living arrangements, including institutionalization. Reinterviews were conducted in 1986, 1988 and 1990. The recontacts were primarily by telephone using Computed Assisted Telephone Interviewing (CATI); however, when the telephone contact was not feasible, a mail questionnaire was sent to the sample person. In addition, to the three reinterviews, permission was obtained from the sample person or proxy to match their records with other records maintained by the Department of Health and Human Services.

The fourth version of the LSOA public use data tape was released in October 1991. The information for the Version 4 files was obtained from:

—1984 NHIS, SOA, and Health Insurance Supplement to the NHIS
—1986, 1988, and 1990 telephone interviews with mail follow-up
—1984-1989 National Death Index (NDI) match
—1984-1990 Medicare records match

The public use data tape includes three files—one for persons, one for Medicare hospitalizations, and one for other Medicare use. Each file includes the information obtained in the previous reinterviews. A diskette containing detailed multiple cause of death data for the LSOA sample is available. The diskette complements the Version 4 public use data tape. Future releases of the LSOA public use data tape will include information from additional matches to the NDI and Medicare files.

The LSOA Version 4 public use data tape is available from three sources: the National Technical Information Service (NTIS), The Division of Health Interview Statistics, NCHS, and the National Archives of Computerized Data on Aging. The diskette is available from NTIS.

National Health Care Survey (NHCS)

In order to provide more comprehensive data describing the Nation's use of health care providers into an integrated family of surveys, collectively called the National Health Care Survey (NHCS). The objectives of the NHCS are to provide national data describing the utilization of services in ambulatory, hospital and long-term care settings; to provide these data on an annual basis using an integrated cluster sample design; and to develop the capability of conducting patient follow-up studies.

Currently, the NHCS includes five ongoing national data collection activities:

—the National Ambulatory Medical Care Survey—visits to non-Federal, office-based physicians;
—the National Home and Hospice Care Survey—patients of hospices and home health agencies;
—the National Hospital Discharge Survey—discharges from non-Federal, short-stay hospitals;
—the National Hospital Ambulatory Medical Care Survey—visits to emergency and outpatient departments of non-Federal, short-stay hospitals;
—the National Health Provider Inventory—a national listing of nursing homes, hospices, home health agencies and licensed residential care facilities.

Details on specific surveys relevant to the elderly are presented below. Plans call for the implementation of the National Survey of Ambulatory Surgery and the National Nursing Home Survey in 1994-96.

National Home and Hospice Care Survey

The National Home and Hospice Care Survey (NHHCS) is a national probability sample survey of home health and hospice care agencies, their patients and staff. The 1992 NHHCS, the first of an annual survey, will collect data from a nationally representative sample of 1,500 hospices and home health agencies. All agencies providing home health and hospice care will be included in the survey without regard to licensure or to certification status under Medicare and/or Medicaid. Information about the agency will be collected through personal interview with the administrator. Information will also be collected about a sample of six current patients and six

discharged patients through personal interview with designated agency staff. Data from the NHHCS will allow analysis of the relationships that exist between utilization, services offered, and charges for care, as well as provide national baseline data about home health and hospice care agencies, their patients and staff.

Data from the NHHCS will be analyzed and published in NCHS Advancedata reports and in Series 13 Vital and Health Statistics. In addition, data will be released in the form of public use computer tapes and in the form of special tabulations prepared for individual requestors.

National Health Provider Inventory (NHPI)

NCHS conducted the NHPI, formerly called the National Master Facility Inventory, in the spring of 1991. This mail survey includes the following categories of health care providers: nursing and related care homes, licensed residential care facilities, facilities for the mentally retarded, home health agencies, and hospices. Data from the 1991 NHPI will be used to provide national statistics on the number, type, and geographic distribution of these health providers and to serve as sampling frames for future surveys in the Long-Term Care Component of the National Health Care Survey. The 1991 NHPI public-use tapes are expected to be released in December 1992.

National Nursing Home Survey

During 1985, NCHS conducted the National Nursing Home Survey (NNHS) to provide valuable information about older persons in nursing homes. The NNHS was first conducted in 1973–74 and again in 1977.

Preliminary data from the 1985 survey were published in 1987 and 1988 about nursing home characteristics, utilization, discharges and registered nurses. A summary report, which integrated final data from the various components of the survey, was published in 1989. Also published were analytical reports on: diagnostic related groups, utilization, discharges, current residents and mental health status. Public-use computer tapes are available through the National Technical Information Service.

National Nursing Home Survey Followup

The National Nursing Home Survey Followup (NNHSF) is a longitudinal study which follows the cohort of current residents and discharged residents sampled from the 1985 NNHS described above. The NNHSF builds on the data collected from the 1985 NNHS by extending the period of observation by approximately 5 years. Data collection has been completed. Wave I was conducted from August through December 1987, and Wave II was conducted in the fall of 1988. Wave III began in January of 1990 and continued through April. The study is a collaborative project between NCHS, HHS and the National Institute on Aging (NIA). The followup was funded primarily by NIA and was developed and conducted by NCHS.

The NNHSF interviews were conducted using a computer-assisted telephone interview system. Questions concerning vital status, nursing home and hospital utilization since the last contact, current living arrangements, Medicare number, and source of payment were asked. Respondents included subjects, proxies, and staff of nursing homes.

The NNHSF will provide data on the flow of persons in and out of long-term care facilities and hospitals. These utilization profiles will also be examined in relation to information on the resident, the nursing home and the community. Public-use computer tapes are available through the National Technical Information Service.

Improving questions on functional limitations

The National Laboratory for Collaborative Research in Cognition and Survey Measurement of NCHS conducted several cognitive research projects with old (65–74), very old (75–84), and oldest (85+) respondents. The objectives were to test the adequacy and suggest improvements to existing survey questions for collecting information on functional limitations (e.g., limitations on bathing, dressing, transferring), life history events (education, employment, residence, onset of health conditions) and falls.

National Center for Infectious Diseases

Infectious diseases have a disproportionate impact on older Americans. Pneumonia and influenza remains the sixth leading cause of death in the United States and

septicemia has risen dramatically during the past three decades to become the 13th leading cause of death. Pneumonia and septicemia are also contributing and precipitating factors in the deaths of many Americans with other illnesses, especially cardiovascular diseases, cancer, and diabetes. The morbidity caused by infectious diseases is a major detriment of quality of life for millions of older Americans. By preventing and controlling these diseases, we will greatly enhance and extend their lives.

CDC's efforts to prevent and control nosocomial infections in elderly patients have been through training of infection control practitioners working in nursing homes and conducting surveillance on elderly patients in hospitals. Members of the CDC staff periodically present lectures on infection control in nursing homes at various conferences to train individuals assigned to infection control to focus on patient care areas and procedures that are associated with the highest risk of infection. Through the National Nosocomial Infections Surveillance (NNIS) system, the special infection risks of elderly patients have been identified. According to NNIS, over half of the nosocomial infections occur in elderly patients, although these patients represent only about one-third of all discharges from hospitals. The use of certain devices, such as urinary catheters, central lines and ventilators, are associated with high risk of infection in all types of patients. In elderly patients, the risk of infection is high even when a device is not used, suggesting that infection control must address other risk factors in addition to device use, such as poor hygiene and nutrition and lack of mobility.

Although delivering influenza vaccine to persons at risk is a critical step in preventing morbidity and mortality from influenza, it is only part of the prevention equation. CDC's efforts to combat influeza in the elderly include: conducting immunological studies involving laboratory and clinical evaluation of inactivated and live attenuated influenza vaccines in an effort to identify improved vaccine candidates; increasing surveillance of influenza in the People's Republic of China and other countries in the Pacific Basin to better monitor antigenic changes in the virus; improving methodologies for rapid viral diagnosis; and using recombinant DNA techniques to develop influenza vaccines that may protect against a wider spectrum of antigenic variants.

Pneumococcal pneumonia causes an estimated 40,000 deaths each year; 80–90 percent of these are in persons ≥ 65 years old. Prevention of pneumococcal disease in the elderly requires widespread application of effective immunization. However, the currently formulated vaccine covers only certain serotypes. CDC is working to develop and promote the widespread use of an improved pneumococcal vaccine with expanded coverage and enhanced efficacy. This will substantially decrease mortality and morbidity from pneumococcal infections in the elderly. Cost-benefit analyses, which are favorable for the current vaccine, would be more heavily weighted in favor of a more effective vaccine.

Group B streptococcus (GBS) is a major cause of invasive bacterial disease in elderly persons in the United states. To document the magnitude of GBS disease in the elderly and develop preventive measures, CDC established population-based surveillance for GBS disease and case control studies to identify risk factors for GBS disease in the elderly. The impact of preventive measures will be measured through surveillance, and an evaluation of potential utility and cost effectiveness of vaccines will be performed. The project will result in a prevention program for GBS disease which will include evaluation of the role for vaccination based on the risk factor study, incidence data, and efficacy trial results.

Recent studies have suggested that noninfluenza viruses such as respiratory syncytial virus and the parainfluenza viruses may be responsible for as much as 20% of serious lower respiratory tract infections in the elderly. These infections can cause outbreaks that may be controlled by infection control measures and be treated with antiviral drugs. Consequently, it is important to define the role of these viruses and risk factors for these infections among the elderly population. CDC plans to set up collaborative studies with State public health departments to do surveillance on outbreaks of respiratory illness in nursing homes and assess transmission patterns and efficacy of prevention programs.

Studies using information from national data bases show that of all age groups, the elderly (≥ 70 years) have the greatest number of hospitalizations and deaths associated with diarrhea in the United States. To evaluate more precisely the public health significance and potential prevention and treatment modalities of diarrhea in the elderly, the CDC plans to initiate prospective multi-center studies in high risk groups such as the elderly in nursing homes and hospitals as well as prospective studies on incidence and impact of diarrhea in elderly outpatients.

Efforts to control this important cause of morbidity will also require further study of the agents involved and their transmission. The recent identification of rotavirus as a cause of epidemic diarrhea in the elderly suggests that one approach to control may involve use of vaccines currently being developed for young children.

The causes of the steady increase in deaths due to septicemia have not been fully explained by existing studies. CDC plans to examine in depth the issues related to this rise in septicemia mortality and assess the relative contributions of various potential risk factors, including changes in population, impact of newer medical therapies, and other currently undefined factors. Studies of the cost-benefits of preventing these infections will also be done.

National Center for Injury Prevention and Control

Several CDC-funded Injury Research and Capacity Building Grants have focused on injury prevention in the elderly. In September 1989, CDC awarded 15 capacity-building grants to state and local health departments. The following capacity-building grants have components to assist the elderly:

Colorado's South West Improvement Council (SWIC), a community-based organization, has developed a fall prevention program for the elderly. The program involves volunteer home audits, maintenance and repair.

In North Carolina, as the objective of the fall prevention program, assessments in homes of elderly persons were conducted and home assistive devices were installed.

In Rhode Island, a program supporting senior centers and community action programs was funded to do home assessments, environmental modification and educational presentations to high risk groups (i.e., elderly persons already using canes and walkers).

New York State has supported prevention of fall injuries among the elderly in two counties. The projects will provide education and safety devices and will include an evaluation component.

In Florida, two counties have selected interventions addressing injuries from falls. Both counties will provide education programs and workshops to increase awareness about the prevention of falls.

Research in Washington has found that two-thirds of the falls resulting in hip fracture occurred while the elderly person was wearing an unsturdy shoe. The Washington State Injury Prevention Program has contracted with the Harborview Injury Prevention and Research Center to conduct a pilot project to reduce falls in older adults through public education and promotion of safe and sturdy shoes.

Research grants to study problems affecting the elderly include:

Determinants of Outcome in Elderly Burn Patients: Investigators will develop a system for assessment of thermal injury in patients aged 45 years and older. They will examine mortality, morbidity, including complications, rehabilitation status, and cost of care.

Biomechanics of Hip Fractures Risk: The goals of this project are to understand the biomechanics of hip fractures among the elderly. CDC-supported researchers are investigating the suitability of various materials for hip pads and will construct prototype pads and initiate a preliminary acceptance and compliance study in nursing home and community dwellers.

Benzodiazepines and Motor Vehicle Crashes in the Elderly: Investigators will create a surveillance system in a defined population of persons over 65 years old, so that epidemiologic studies of the influence of prescribed medications on the risk of motor vehicle crashes can be conducted.

Preventing Falls in the Nursing Home: This study seeks to evaluate an intervention to reduce falls among nursing home residents by comparing rates of falls between intervention and control nursing homes. The intervention targets environmental safety, caregiving practices, medications, resident activity, and resident and staff education.

Dually Stiff Floors for Injury Prevention of the Elderly: Investigators are developing an intervention to reduce injuries from falls based on dually stiff flooring. This project offers the possibility of a significant advance in protection from injuries due to falls and the proposed intervention could have wide application in living areas for the elderly.

Spectral Signature as a Predictor of Falls in the Elderly: Researchers will develop a method to identify elderly individuals that may be at risk of falling. This method will involve the use of the spectral signature of force plate data obtained from postural sway to predict the potential of falls among elderly patients. Data from this study will augment existing knowledge in the area of biomechanical prevention of falls.

National Center for Prevention Services

IMMUNIZATION

CDC is continuing its efforts to increase the awareness of adults to be immunized against the vaccine-preventable disease of influenza, pneumococcal disease, hepatitis B, measles, mumps, rubella, tetanus, and diphtheria. As a liaison with outside organizations that promote adult immunization activities, such as the Administration on Aging, the American College of Physicians, and the American Hospital Association, CDC provides speakers for conferences and technical review of documents. CDC responds to public inquiries and has available a booklet for the lay public, Immunization of Adults: A Call to Action, which promotes immunization of adults in the community. CDC is also continuing assistance to State and local health systems in expanding immunization program coverage of adult populations through promotion of the Recommendations of the Advisory Committee on Immunization Practices (ACIP). These recommendations were revised and published in November, 1991.

CDC continues to include adult immunization issues in its annual National Immunization Conferences. In the 25th Conference held in Washington, D.C. in June 1991, there was one poster and two oral presentations concerning adult immunization. In the 24th and 26th Conferences held in Orlando, FL in May 1990, and in St Louis, MO in June 1992, respectively, at least one poster and eight oral presentations addressed various adult immunization issues. The proceedings from the 24th and 25th Conferences have been published; those from the 26th Conference will be published and distributed in early 1993.

A 3-year cooperative agreement was completed with a health maintenance organization (HMO) trade organization to measure vaccine use and develop procedures to increase acceptance of adult vaccines by HMO subscribers. The major accomplishments under this commitment include: (1) an assessment of HMO policies and practices regarding adult immunization; (2) an assessment of vaccine-preventable disease morbidity and mortality in five HMOs; (3) aggressive promotion of influenza vaccine in the fall of 1989 by the five HMOs; (4) documented reduction of morbidity among older persons who received influenza vaccine as compared to unvaccinated persons after the vaccine promotion, as well as reduction in medical costs of the vaccinated persons; and (5) distribution of a summary report about the agreement to the HMO industry, and publication of a synopsis of the report in an HMO trade publication.

CDC continues to participate in the National Coalition for Adult Immunization (NCAI), a network of 63 private, professional, and volunteer organizations, and public health agencies with the common goal of improving immunization status of adults. Each year during the last week of October, the NCAI promotes National Adult Immunization Awareness Week to emphasize the importance of vaccinating all adults. To unify the diverse interests of the member organizations and offer a foundation of common goals, the NCAI has developed and adopted the *Standards for Adults Immunization Practice.* The standards outline basic strategies that, if fully implemented, would improve delivery of vaccines to adults and help achieve the Year 2000 National Health Objectives. The objectives of the NCAI are accomplished by three working Action Groups—Influenza/Pneumonia, Measles-Mumps-Rubella, and Hepatitis B—that conduct disease-specific informational and educational activities for health care providers and the public. To combat influenza and pneumococcal disease as leading causes of morbidity and mortality for persons over age 64 and to increase the number of health care providers who offer these immunizations, the Influenza/Pneumonia Action Group has formed eight State and locally based coalitions across the United States. In the first year of the coalitions' activities, they documented increases in overall influenza vaccine delivery in five of the eight sites; in the three sites with decreases in overall vaccine delivery, public clinic influenza vaccine delivery rose between 9 percent and 15 percent.

CDC and the Health Care Financing Administration (HCFA) have completed a jointly conducted demonstration project to determine the cost-effectiveness for Medicare to cover the use of influenza vaccine. This project involved the administration of influenza vaccine to Medicare Part B recipients in 10 sites for cost-effectiveness studies, and in an additional 10 statewide sites to assess three levels of vaccine promotion and the effectiveness of vaccine delivery by simply making it a covered benefit under Medicare Part B. Vaccine doses delivered in the cost-effectiveness sites exceeded 995,000 in 1991-92, up from approximately 786,000 in 1990-91, and reached 50 percent of the Medicare Part B population in those sites. Almost 1,700,000 doses of vaccine were distributed in the 10 statewide sites in 1991-92 reaching 37 percent of the Medicare Part B population. The demonstration was completed in September, 1992 and a final report will be submitted to Congress in September, 1993. If the

project successfully demonstrates cost-effectiveness, influenza vaccine will become a routine covered expense under the Medicare Part B program.

CDC and the Health Care Financing Administration are also participating in an interagency agreement, begun in 1989, to study the effectiveness of pneumococcal vaccine in preventing morbidity and mortality among the Medicare Part B beneficiaries in Hawaii. Medicare records are being used to: (1) Evaluate the clinical effectiveness of pneumococcal vaccination in preventing hospitalization and death of Medicare beneficiaries; (2) describe medical care utilization patterns of vaccinated and unvaccinated persons; (3) evaluate hospital care patterns of vaccinated and unvaccinated persons; and (4) evaluate long-term outcomes of individuals in relationship to vaccination status. The interagency agreement will be concluded in 1993.

TUBERCULOSIS

Tuberculosis (TB) among the elderly is an important problem in that TB cases rates among the elderly are higher than in any other age group. during 1991, 6,068 TB cases were reported among persons 65 and older—the case rate for persons of all ages was 10.4 per 100,000 population while the rate for persons age 64 and older was 19.1.

Elderly residents of nursing homes are at even higher risk for developing TB than elderly persons living in the community. According to a CDC-sponsored survey of 15,379 reported TB cases in 29 States, the incidence of TB among elderly nursing home residents was 39.2 per 100,000 person-years while the incidence of TB among elderly persons living in the community was 21.5 per 100,000 person-years. Investigators have also documented transmission of tuberculosis infection to residents and staff in nursing homes during TB outbreaks.

During 1990, the CDC and the HHS Advisory Council for Elimination of Tuberculosis published recommendations for controlling TB among nursing home residents and employees. The recommendations call for TB screening of nursing home residents upon admission and employees at entry, annual rescreening for employees, attention to timely case-finding among symptomatic elderly persons, and the use of appropriate precautions to prevent the spread of TB in facilities providing residential care for elderly persons.

ORAL HEALTH AND DENTAL DISEASE PREVENTION

CDC and the National Institute of Dental Research, NIH, have developed a plan to achieve functional and healthy oral conditions for all Americans. The U.S. Public Health Service (PHS), through its Oral Health Coordinating Committee, is taking steps to implement the PHS Oral Health 2000 Adult Initiative. This initiative, viewed as a decade-long commitment, represents the collective effort of PHS agencies to accelerate improvement in oral health for adult Americans—particularly those at increased risk of oral diseases including older adults. The private and voluntary sector will also be involved to facilitate comprehensive approaches to reduce the occurrence and severity of oral diseases; prevent the unnecessary loss of teeth in the U.S. population; and alleviate physical, cultural, racial/ethnic, social educational, economic, health care delivery, and environmental barriers that prevent adults from achieving good oral health.

Persons are at higher risk for oral cavity and pharyngeal cancer as their age increases. Approximately 95 percent of oral cavity and pharyngeal cancer occurs in persons aged 40 and over, with 60 years as the average age at diagnosis. Individuals aged 65 and over experience poorer survival rates from these cancers.

CDC has developed liaisons with Federal and state agencies to (1) assess the magnitude of the disease burden from cancers of the oral cavity and pharynx; (2) determine the extent of programs currently in place that address the problem; and (3) begin development of a comprehensive public health strategy to reduce incidence and mortality rates in the United States. CDC and NIH have developed a monograph on oral cavity and pharyngeal cancers to provide public health, research, education, and health care provider communities with detailed information on the incidence, mortality, and 5-year relative survival rates for oral and pharyngeal cancer in the United States. This publication was published in November 1991.

A work group composed of representatives from Federal agencies, academic institutions, private dentistry, and state health departments was convened by CDC in early December to begin developing a national strategy.

FOOD AND DRUG ADMINISTRATION

As the percentage of elderly in the Nation's population continues to increase, the Food and Drug Administration (FDA) has been giving increasing attention to the

elderly in the programs developed and implemented by the Agency. To enhance this effort, the FDA Working Group on Aging-Related Issues was established in 1992. FDA has been focusing on several areas for the elderly that fall under its responsibility in the regulation of foods, drugs, and medical devices. Efforts in education, labeling, drug testing, drug utilization, and adverse reactions have been of primary interest. Working relationships exist with the National Institute on Aging, the Centers for Disease Control, and the Administration on Aging of the Department of Health and Human Services to further strengthen programs that will assist the elderly now and in the future. Some of the major initiatives that are underway are described below.

Patient Education

To further the goals established by the joint Public Health Service/Administration on Aging Committee on Health Promotion for the elderly, during the last 8 years FDA has coordinated the development and implementation of significant patient education programs with the National Council on Patient Information and Education (NCPIE) and many private sector organizations. NCPIE is a nongovernmental group consisting of professional (e.g., medical, pharmacy, nursing), consumer, and pharmaceutical industry organizations whose goal is to stimulate patient education and program development. Special emphasis has been placed on the elderly, who use more prescription drugs per capita than the rest of population.

The "Get the Answers" campaign is a program urging patients to ask their health professionals questions about their prescriptions. The major component of the campaign is a medical data wallet card that lists the five questions patients should ask when they get a prescription. These questions are:

—What is the name of the drug and what is it supposed to do?
—How and when do I take it—and for how long?
—What foods, drinks, and other medicines, or activities should I avoid while taking this drug?
—Are there are any side effects, and what do I do if they occur?
—Is there any written information available about the drug?

The "Get the Answers" message has been widely disseminated to consumers through news releases, advice columns, and other media. Wallet cards with the "Get the Answers" message are available through FDA's Office of Consumer Affairs.

The Women and Medicines Campaign was initiated during "Talk About Prescriptions" month, October 1991. The purpose of the Campaign is to ensure safer and more effective use of medicines through improved communication between women and health care providers (e.g., doctors, pharmacists, dentists, nurses). The Campaign focuses on concerns related to all women, but especially special populations, such as the elderly and minorities. It is important because women use more medicines than men and serve as the medicine managers for other family members. A brochure and planning guide were produced by the National Council on Patient Information and Education with the support and assistance of FDA. These materials can be used in many settings, including classrooms, waiting rooms, workplace seminars, and health fairs.

The brochure "Medicines: What Every Woman Should Know," shares information that will assist women to improve communication with health care providers. The planning guide, "Women Have Special Medicine Information Needs," shares information that will assist health care providers improve communication with women.

Concurrent with the activities aimed at patients, FDA, NCPIE and many private sector organizations are conducting a major campaign to encourage health professionals to provide drug information to their patients. Urging consumers to "Get the Answers" and health professionals to "Give the Answers" is vital to bridge the communications gap—to get both sides to talk to each other about medications.

Currently, NCPIE is advocating the use of "Brown Bag Medication Reviews." This is a procedure to permit health professionals to review all medication being taken by elderly patients. Patients are asked to bring in all their current medication (in a brown bag) to an appointment with a physician, nurse, pharmacist, or other health professionals. NCPIE is using funds from a grant from the Administration on Aging to disseminate materials and promote the program to health professionals.

FDA's Field Public Affairs Specialists (PAS) have promoted and help conduct these brown bag reviews. One of the main target audiences for these reviews is elderly patients.

In addition to patient education initiatives, FDA and NCPIE are continuing to evaluate the effectiveness of patient education programs and are monitoring the attitudes and behavior of consumers and health professionals about patient drug in-

formation. FDA is encouraged by the number and quality of patient education activities undertaken by the various sectors. FDA will continue to provide leadership to foster the patient education initiative.

FDA's continuing patient education initiatives include the publication of the reprint "Testing Drugs in Older People" from the November 1990 "FDA Consumer" magazine. This article discusses the physiological changes that occur in aging bodies and the need for medication adjustment.

CLINICAL STUDY GUIDELINES

In 1989, FDA published the "Guidelines for the Study of Drugs Likely to be Used in the Elderly." The guideline provides detailed advice on the study of new drugs in older patients. It is intended to encourage routine and thorough evaluation of the effects of drugs in elderly populations so that physicians will have sufficient information to use drugs properly in their older patients. The guideline serves as a stimulus to the development of this information and suggests additional steps to sponsors who are already assessing the effects of their drugs in the elderly.

PREMARKET TESTING GUIDELINES

FDA's efforts to ensure that premarket testing adequately considers the needs of older people also include educational activities for Institutional Review Boards (IRB) through workshops and the dissemination of information sheets on a variety of topics of interest to IRBs. An IRB governs the review and conduct of all human research at a particular institution involving products regulated by FDA. This aspect of drug testing and research is particularly important to institutional patients, a category comprised of a large number of elderly persons, to ensure adequate protection with regard to informed consent. FDA continues to work closely with the National Institutes of Health to develop and distribute information sheets to clinical investigators and members of the IRB community.

Postmarketing Surveillance Epidemiology

The Office of Epidemiology and Biostatistice prepares an annual report, "Annual Adverse Drug Experience (ADE) Report," which analyzes the ADE reports FDA receives each year through direct reporting by health professions or through manufacturers' reports. The annual report includes an analysis of ADE reports by age and sex that identifies the number of males and females 60 years or older for whom ADE reports were submitted. Of 72,749 ADE reports received and computerized in 1991, 32,654 (61%) reported the age and sex of the patient. Of these reports, 9,741 (30%) were for individuals 60 years and older.

Geriatric Labeling

On November 1, 1990, FDA published a proposed rule to amend its regulations pertaining to the content and format of prescription drug product labeling (55 FR 46134). The proposed rule would require a person marketing a prescription drug to collect and disclose available information about the drug's use in the elderly (persons aged 65 years and over). "Available information" would encompass all information in the applicant's possession that is relevant to an evaluation of the appropriate geriatric use of the drug, including the results from controlled studies, other pertinent pre-marketing or post-marketing studies or experience, or literature entitled "Geriatric use" with reference, as appropriate, to more detailed discussions in other parts of the labeling, such as the "warnings" or "Dosage and Administration" sections. The proposed rule is not intended to alter the type of amount of evidence necessary to support drug approval but is intended to ensure that special information about the use of drugs in the elderly is well organized, comprehensive, and accessible.

Public comments on this proposed rule were due by December 31, 1990. FDA is currently preparing responses to public comments received and anticipates a final rule based on the proposal to publish in the "Federal Register" in the spring of 1992.

Medication Information Leaflets (MILS) for Seniors

The American Association of Retired Persons (AARP) Pharmacy Services Division, in conjunction with FDA's Drug Labeling, Research and Education Branch (DLREB) publish MILS—educational leaflets about drugs written for use through the AARP prescription drug mail order program. In 1989, MILs were written for the

following classes of drugs: nonsteroidal anti-inflammatory drugs, beta-blockers, beta-blocker/thiazide combination drugs, and potassium-sparing diuretics and hydrochlorothiazide combination drugs. Additionally, MILs were revised for several agents including: warafrin, belladonna alkaloids and barbiturates, isosorbide dinitrate sulfamethoxazole and trimethoprim, quinidine prazosin, clofibrate sucralfate and pentoxifylline. The leaflets provide the patient with:

—a description of the contents
—a list of the diseases for which the drug is used as a treatment
—information the patient should tell the physician before taking the medication
—dosage information—how the medication should be taken
—instructions on what to do if a dose is missed
—possible interactions with other medications
—possible serious and nonserious side effects

In 1991, MILs that were revised and updated included: Probenecid, Nitroglycerin, and Ranititidine/Famotidine.

"Marketing Research" Study

The FDA designed and supervised the data collection of a survey to assess information needs and motivations of subgroups of older individuals with hypertension who subscribe to the AARP Pharmacy Service. Analyses identified four distinct sub-audiences who are expected to respond differently to varying health promote message strategies.

An article entitled "A Segmentation Analysis of Prescription Drug Information-Seeking Motives Among the Elderly" was published in the "Journal of Public Policy and Marketing" (Fall 1992) and was presented at the 1992 Marketing and Public Policy Conference in Washington, D.C., May 15-17, 1992. In a second phase to the project, targeted medication information messages are being developed and tested on identified sub-audiences.

Year 2000 Health Objectives

A consortium of over 300 government and private agencies developed a set of health objectives for the Nation which is serving as a national framework for health agendas in the decade leading up to the year 2000. The overall program is called "Healthy People 2000." In the food and drug safety area, FDA has responsibility for objective 12.6, which sets as a target to:

> Increase to at least 75 percent of primary-care providers who routinely review with their patients aged 65 and older all prescribed and over-the-counter medicines taken by their patients each time a new medication is prescribed.

FDA's Marketing Practices and Communications Branch is conducting a study that tracks patients' receipt of medication information from doctors and pharmacists over the past 10 years and will also serve as a baseline for programmatic efforts in patient education for the Healthy People program for the rest of the decade.

During the coming year, FDA will work with private sector organizations to advance medication counseling activities. One particular initiative is working jointly with the American Nurses Association on a project related to counseling elderly patients taking multiple medications. Plans for developing materials and methods for organizing medications taken and developing materials to help patients taking numerous medications are being developed.

Pharmacy Initiative

During the past year, Dr. David Kessler, FDA Commissioner, has personally sought to encourage greater pharmacy-based counseling. Through articles in major medical ("New England Journal of Medicine") and pharmacy ("American Pharmacist") journals, Dr. Kessler has encouraged the increased role of pharmacists, using computers to generate targeted information, to inform patients about the uses, directions, risks, and benefits of medication. The pharmacy profession has responded positively, bringing many examples of their initiatives to FDA's attention. In particular, several organizations have informed FDA of the expanded use of "Pharmacy Kiosks" to provide patient instructional materials to their customers.

Health Fraud

Health fraud—the promotion of false or unproven products or therapies for profit—is big business. These fraudulent practices can be serious and often expensive problems for the elderly. In addition to economic loss, health fraud can also

pose direct and indirect health hazards to those who are misled by the promise of quick and easy cures and unrealistic physical transformations.

The elderly, more often than the general population, are the victims of fraudulent schemes. Almost half of the people over 65 years of age have at least one chronic condition such as arthritis, hypertension, or a heart condition. Because of these chronic health problems, senior citizens provide promoters a large, vulnerable market.

In order to combat health fraud, FDA uses a combination of enforcement and education. In each case, the Agency's decision on appropriate enforcement action is based on considerations such as the health hazard potential of the violative product, the extent of the product's distribution, the nature of any mislabeling that has occurred, and the jurisdiction of other agencies.

FDA has developed a priority system of regulatory action based on three general categories of health fraud: direct health hazards, indirect hazards, and economic frauds. The Agency regards a direct health hazard to be extremely serious and it receives the Agency's highest priority. FDA takes immediate action to remove such a product from the market. When the fraud does not pose a direct health hazard, the FDA may choose from a number of regulatory options to correct the violation, such as a warning letter, a seizure, or an injunction.

The Agency also uses education and information to alert the public to health fraud practices. Both education and enforcement are enhanced by coalition building and cooperative efforts between government and private agencies at the national, state, and local levels. Also, evaluation efforts help ensure that our enforcement and education initiatives are correctly focused.

The health fraud problem is too big and complex for any one organization to effectively combat by itself. Therefore, FDA is working closely with many other groups to build national and local coalitions to combat health fraud. By sharing and coordinating resources, the overall impact of our efforts to minimize health fraud will be significantly greater.

FDA and other organizations have worked together to provide consumers with information to help avoid health fraud.

In 1986, FDA worked with the National Association of Consumer Agency Administrations (NACAA) to establish the ongoing project called the NACAA Health Products and Promotions Information Exchange Network. Information from FDA, the Federal Trade Commission (FTC), the U.S. Postal Service (USPS), and State and local offices is provided to NACAA periodically for inclusion in the Information Exchange Network. This system provides information on health products and promotions, consumer education materials for use in print and broadcast programs, and the names of individuals in each contributing agency to contact for additional information.

In 1990 and 1991, FDA's Public Affairs Specialists all over the country have carried out extensive campaigns against health fraud, particularly targeting senior groups. These efforts have included radio and television shows and public service announcements, talks, and workshops.

Regional Hispanic Health Fraud Conference

FDA has made special efforts to target health fraud information to Hispanics, particularly the elderly. As a special population, they are particularly at risk because of language and cultural considerations that may limit their access to health care and information about health fraud.

The Hispanic Health Fraud Initiative was kicked-off at the model 1989 National Health Fraud Conference of San Juan, Puerto Rico. The primary conference goal was to provide practical guidance to individuals and organizations in the Commonwealth that would enable them to recognize and defend themselves against health fraud, quackery, and misinformation.

FDA has conducted a series of followup regional conferences throughout Puerto Rico and the Continental U.S. The series began in Puerto Rico in September 1990 in the Carolina Region. In 1991, the series was continued in Caguas, Fajardo, Ceiba, and Humacoa. These conferences were cosponsored with the Congress of Workers and Consumers of Puerto Rico (COTACO) and the Puerto Rico Department of Consumer Affairs. The first in the statewide series of conferences was held in FDA's Pacific Region (Culver City, CA), on September 13-14, 1990. Two additional statewide conferences are being planned for 1993 in FDA's Southeast Region in Miami, FL, and in the Southwest Region in Albuquerque, NM.

"Health Is Life" Consumer Education Campaign

FDA, the Food Marketing Institute (FMI), and the National Urban League (NUL) launched a two-phase cooperative consumer health education campaign which is culturally specific (language and graphics) and focused to promote healthy lifestyles among African Americans. The campaign components include seven nutritional and health promotion posters, health fairs, and workshops. The posters promote good health behaviors and are targeted to the following African American audiences: elderly and young males; pregnant women; children 6 to 12 years of age; adolescents 12 to 17 years of age; and the general population. Several national organizations expressed an interest in the campaign and participated in the orientation and training forum——National Urban League Affiliates, FDA field Public Affairs Specialists, American Dietetics Association, and the Food Marketing Institute. The campaign series will be launched in February 1993, and tour six cities: Houston, Texas (February 20, 1993), New Orleans, Louisiana (February 27, 1993), Tallahassee, Florida (March 6, 1993), Winston-Salem, North Carolina (March 13, 1993), Columbia, South Carolina (March 20, 1993), and Richmond, Virginia (March 27, 1993).

The campaign was unveiled at the July 1991 annual convention of the National Urban League and has been promoted through over 150 other national African American multiplier organizations, such as the Auxiliary to the National Medical Association; National Council of Negro Women; LINKS, Inc.; Delta Sigma Theta Sorority; and the Congressional Black Caucus. The NUL's affiliate network of 114 local organizations are displaying and promoting them to their respective constituencies along with promoting the relationship between diet and health. An additional 3,000 copies of the posters were provided to the FMI membership for display in member food store chains.

Activities of Public Affairs Specialists

Mammography, an x-ray examination of the breast used as a screening tool in the detection breast cancer, is the best method currently available for detecting tumors in their early stages, offering women their best chance for survival.

To inform women and health care providers about mammography and the early detection of breast cancer, FDA's Office of Consumer Affairs (OCA) and the Center for Devices and Radiological Health (CDRH) initiated and education campaign focusing on the need to select a quality mammography facility.

In 1990, the OCA and CDRH continued their educational efforts in providing information on mammography. A breast cancer and mammography packet was mailed to 10,000 consumer organizations and individuals. The packet included materials developed to inform women and health care providers about mammography, a "Mammography Screening Update" providing guidelines for the detection of breast cancer in women without symptoms, and a bibliography of publications on breast cancer available from the National Cancer Institute.

A comprehensive story on hearing aids by a Public Affairs Specialist in an Orlando, Florida, newspaper elicited over 1,000 requests for information, sparking a nationwide initiative by FDA field offices to bring more information on these devices to the public.

OCA is working with the Philadelphia and Newark District Offices to pilot a consumer education program called Pharm-Assist, designed to deliver prescription information to elderly, disadvantaged, non-English speaking, and minority consumers. Consumer HELP, an independent consumer group, and Ciba-Geigy, a manufacturer, are supporting this initiative.

Food Labeling

In recognition of the fact that elderly people have a greater need for more information about their food to facilitate preparation for special diets, maintain adequate balance of nutrients in the face of reduced caloric intake, and assure adequate levels of specific nutrients which are known to be less well absorbed as a result of the aging process (e.g., vitamin B12), food labeling is very important to this group. The new food label will soon offer more complete, useful and accurate nutrition information to enable the elderly to meet those needs. Significant labeling changes include: nutrition labeling for almost all foods; information on the amount per serving of saturated fat, cholesterol, dietary fiber, and other nutrients that are of major health concern to today's consumers; nutrient reference values that can help consumers to see how a food fits into an overall daily diet; uniform definitions for terms that describe a food's nutrition content (e.g. "light", "low-fat", and "high-fiber"), particularly helpful for consumers trying to moderate their intake of calories or fat and other

nutrients; claims about the relationship between specific nutrients and disease, such as sodium and hypertension; standardized serving sizes; declaration of total percentage of juice in juice drinks; and voluntary quantitative nutrition information for raw fruit, vegetables, and fish. While manufacturers will have until May 1994 to comply with most of the new labeling requirements, regulations pertaining to health claims become effective May of 1993. In addition, to help consumers get the most from the new food label, educational materials will appear early in 1993.

TOTAL DIET STUDIES

The Total Diet Study, as part of FDA's ongoing food surveillance system, provides a means of identifying potential public health problems with regard to diet for the elderly and other age groups. Through the Total Diet Study, FDA is able to measure the levels of pesticide residues, toxic elements, chemicals, and nutritional elements in selected foods of the U.S. food supply. In addition, the Study allows FDA to estimate the levels of these substances in the diets of twelve age groups: infants 6–11 months; children 2, 6, and 10 years old; 14–16-year-old boys; 14–16-year-old girls; 25–30-year-old men; 25–30-year-old women; 40–45-year-old men; 40–45-year-old women; 60–65-year-old men; 60–65-year-old women; men 70 years and older; and women 70 years and older. Because of Total Diet Study is conducted yearly, it also allows for the determination of trends and changes in the levels of substances in the food supply and in daily diets.

POSTMARKET SURVEILLANCE OF FOOD ADDITIVES

FDA's Center for Food Safety and Applied Nutrition (CFSAN) monitors complaints from consumers and health professionals regarding food and color additives, dietary supplements, and dietary practices, as part of its Adverse Reaction Monitoring System. Currently, the database contains approximately 8,500 records. Of the complainants who reported their age, approximately 7.5 percent were individuals over age 60.

PROJECT ON CALORIC RESTRICTION

FDA is participating in research which could lead to significant insight into the relationship between dietary habits and lifespan. The Project on Caloric Restriction (PCR) is a collaborative effort of FDA's National Center for Toxicological Research (NCTR) and the National Institute on Aging (NIA). It is designed to study whether a diet that is calorically restricted will add to the longevity and health of laboratory rats and mice. An increasing interest in the role of caloric restriction in aging coupled with the potential economic impact associated with health care was the impetus for the creation of the PCR.

The extraordinary interest displayed by research groups across the country and the NCTR's commitment to the PCR project has produced a scientific environment conducive to the interchange of ideas and the formulation of new approaches to the diverse scientific disciplines. NCTR developed a matrix which identifies areas of ongoing research, identifies additional research areas that need to be addressed and helps to avoid duplication of research effort.

Current study results from NCTR indicate that calorically restricted animals are living longer than animals on unrestricted diets and are exhibiting a reduced incidence of all forms of spontaneous toxicity. In other words, caloric restriction may dramatically influence cancer development toxic response, and biological processes usually associated with aging in animals.

Recent investigations in various laboratories agree that dietary caloric restriction is effective in extending average and maximum achievable life span in animals and in retarding a broad spectrum of age related disease processes, including spontaneously occurring and chemically induced cancers as well as that of many age associated noncancerous lesions.

DNA repair is increased in calorically restricted animals. Hormonal mechanisms may be responsible for the relative of in this parameter. Oxidative free-radical damage appears to be decreased with caloric restriction in animals and perhaps in humans.

Caloric restriction does not appear to be harmful to behavioral functioning, and may be beneficial for some tasks. Effects of restriction on neural cells, especially hippocampal cells, need further evaluation.

Many of these results are consistent with the idea that caloric restriction induces an adaptation phenomenon within at least some animal species. Not all functions are altered. Rather those processes that appear to be most affected are those which have been previously referred to as longevity assurance processes. These processes

have as their primary role maintenance of the information flow and content of biological systems and work in concert with one another with the end result being the multiple of these interactive changes. By fine tuning these processes, possibly via altering gene expression in some very basic way, animals may keep themselves alive until a more advantageous period for reproduction. By studying mechanisms of action, we can hopefully gain the advantages of this adaptation phenomena without its negative consequences and discomforts.

The collaborative project between NCTR and NIA is currently undergoing expansion in order to provide animals to more interested researchers and broaden the information base on biomarkers of aging and mechanisms of aging.

Intraocular Lenses

Data on intraocular lenses (IOLs) continue to demonstrate that a high proportion (85-95 percent) of the patients will be able to achieve 20/40 or better vision with the implanted lenses and that few (3 to 5 percent) will experience poor visual acuity (20/200 or worse). The data also demonstrate that the risks of experiencing a significant post-operative complication are not great. Furthermore many of the complications result during the early post-operative period and are associated with cataract surgery; the incidence of these complications is generally not affected by IOL implantation. Approved lenses have significant impact on the health of elderly patients having surgery to remove cataracts. The IOLs, because they are safe and effective, have come the treatment of choice, allowing elderly patients to maintain their sight and thus their ability to drive and otherwise lead normal lives. FDA continues to monitor several hundred investigational IOL models and has, to date, approved thousands of models as having demonstrated safety and effectiveness.

FDA scientists have tested the optical quality of IOLs being marketed. FDA studies include measurements of focal length, resolving power, astigmatism, and image quality. This information provides a useful data base for making decisions about optical quality of new IOL designs. Test results show that the overall optical quality of currently marketed IOLs is excellent.

Pacemakers

Dysfunction of the electrophysiology of the heart can develop with age, be caused by disease, or result from surgery. People with this condition can suffer from fainting, dizziness, lethargy, heart flutter, and a variety of similar discomforts or ills. Even more serious life-threatening conditions such as congestive heart failure to fibrillation can occur.

The modern pacemaker is designed to supply stimulating electrical pulses when needed to the upper or lower chambers of the heart or with some newer models, both. It has corrected many pathological symptoms for a large number of people.

Approximately half-a-million elderly persons have pacemakers. An estimated 125,000 pacemakers are implanted annually, 30 percent being replacements. An estimated 75 percent of these are for persons 65 years of age or older. Without pacemakers, some of these people would not have survived. Others are protected from life-threatening situations and, or most, the quality of life has been improved.

FDA, in carrying out its responsibilities of ensuring the safety and efficacy of cardiac pacemakers, has classified the pacemaker as a Class III medical device. Devices in Class III must undergo testing requirements and FDA review before approval is granted for marketing.

In addition, FDA in conjunction with the Health Care Financing Administration (HCFA) of the Department of Health and Human Services has instituted a national registry of cardiac pacemaker devices and leads. HCFA and FDA have developed an operational registry with a data base of approximately 870,000 pacemaker and lead entries to date.

Physicians and providers of health care services must submit information to a national cardiac pacemaker registry if they request Medicare payment for implanting, removing, or replacing permanent pacemakers and pacemaker leads. The final rule implementing the national registry was published by FDA and HCFA in the July 23, 1987, "Federal Register" and became effective on September 21, 1987.

Under this new rule, physicians and providers of services must supply specified information for the pacemaker registry each time they implant, remove or replace a pacemaker or pacemaker lead in a Medicare patient; HCFA may deny Medicare payment to those who fail to submit the required data. The information is submitted to HCFA's fiscal intermediaries at the same time as the bill for services and HCFA relays the data to FDA. Health care providers may obtain forms for submitting the information from the fiscal intermediaries.

These activities have been conducted with extensive cooperative involvement with all 50 State Radiation Control Programs, with the American College of Radiology, with other key health professional organizations, with Federal agencies such as the Centers for Disease Control and the National Cancer Institute, as well as with several FDA components.

Radiological Health Sciences Learning File

One area of concern was with the accuracy of interpretation of mammograms, primarily because the radiology residency training programs in previous terms did not stress mammography. Consequently, in the early 1980's BRH decided to help improve radiology training by adding a Mammography Section to the Radiological Health Sciences Learning File. The File is now used in essentially all U.S. medical schools and radiology residency programs, as well as many others worldwide. Its films form the basis for the American Board of Radiology's credentialing examination.

The Medicare Screening Mammography Benefit

As the value of mammography became increasingly recognized, concern grew about the access of poorer women to this examination. To help solve this problem, the Omnibus Reconciliation Act of 1990 provided for the inclusion of screening mammography among the benefits of Medicare. This Act also required that providers of this benefit meet quality standards for their equipment, personnel, and quality assurance programs. CDRH staff were heavily involved in assisting the Health Care Financing Administration in developing these quality standards, which were published as "interimfinal regulations" on December 31, 1990. By September 8, 1992, over 6,500 facilities had been certified by HCFA as eligible for reimbursement for screening mammography examinations provided to Medicare eligible women. The certification was initially based on the facility "self-attesting" that it was in compliance with the quality standards. Now HCFA has developed an inspection program that will be the basis for certification in the future. CDRH staff provided technical assistance in the development of this inspection program and in the training of the inspectors.

The National Strategic Plan for the Early Detection and Control of Breast and Cervical Cancer

FDA, the National Cancer Institute, and the Centers for Disease Control have coordinated a combined effort to cover 75 professional, citizen, and government groups to develop the National Strategic Plan for the Early Detection and Control of Breast and Cervical Cancer. The goal of this plan, approved by the Secretary of Health and Human Services on October 15, 1992, is to mount a unified effort by all interested groups to combat these two serious cancer threats. FDA staff took the lead in writing the Breast Cancer Quality Assurance section, one of six components of the plan, and anticipated in the development of the other components.

Mammography Quality Standards Act of 1992

On October 27, 1992, the President signed into law the Mammography Quality Standards Act of 1992. This Act requires the Secretary of Health and Human Services to develop and enforce quality standards for all mammography of the breast, no matter what the purpose or source of reimbursement. By October 1, 1994, any facility wishing to produce, develop, or interpret mammograms will have to meet these standards to remain in operation. Although responsibility for this Act has yet to be assigned to a specific agency, FDA expects to be involved in its implementation in some fashion.

Blood Glucose Monitors

Recent publications estimate the number of diagnosed diabetics in the United States to be 5 million and increasing at a rate of 600,000 per year. Over 65 percent of diabetics are 55 years and, of course, many must monitor their blood glucose.

Since the implementation of Medical Device Reporting (MDR) regulations in December 1984, approximately 3,500 reports were submitted to FDA regarding erroneous test results encountered by users of self-monitoring blood glucose (SMBG) systems. As a result of these findings, a project was initiated to study and provide solutions to the problems with use of these devices. The study was conducted in four phases: (1) information/data analysis including labeling, instructional and training

The required information includes:

The name of the manufacturer, the model and serial number of the pacemaker or pacemaker lead, and the warranty expiration date.

The patient's name and health insurance claim number, the provider number, and the date of the procedure.

The names and identification numbers of the physicians ordering and performing the surgery.

When a pacemaker or lead is removed or replaced, the physician or provider must also submit the date of initial implantation (if known) and indicate whether the device that was replaced was left in the body and, if not, whether the device was returned to the manufacturer.

Renal Dialysis

End Stage Renal Disease (ESRD) patients are dependent upon some form of dialysis treatment, either hemodialysis or peritoneal dialysis, for survival until they receive a transplant, or if that is not possible, for the remainder of their lives. Moreover, ESRD is a disease frequently seen in the elderly. Recent data released by the U.S. Renal Data System indicated that the median age adjusted for age and sex for new ESRD patients in 1984 was 60 with nearly 40 percent over 64. The incidence rates of ESRD vary dramatically among age groups, ranging from 1 in 91,000 below age 20, to 1 in 1,876 between ages 64 and 74.

Because of the nature of the treatment, ESRD patients are vulnerable to a number of possible hazards during dialysis treatments. Many of the hazards arise from failure to properly maintain and use the equipment, or from insufficient attention to the safety features of the dialysis system components. Educational video tapes have been provided to the dialysis community to alleviate many of these problems.

Following an educational video on human factors in hemodialysis, FDA in conjunction with other organizations, such as the Health Industry Manufacturers Association (HIMA), the Renal Physicians Association (RPA), and the American Nephrology Nurses Association (ANNA), have been active in developing several additional videos including water treatment, infection control and reuse, and manuals on water treatment and quality assurance. Complimentary videos illustrating concerns and proper techniques have been distributed to every ESRD facility in the United States. These videos have received a very high level of acceptance from the nephrology community.

The video on the proper reuse of dialyzers developed by the FDA, RPA, and other concerned groups was released. The video follows the protocols detailed in the Association for the Advancement of Medical Instrumentation (AAMI) Recommended Practice for the Reuse of Hemodialyzers. This practice has been adopted by the Health Care Financing Administration as a condition of coverage to ESRD providers that practice reuse.

A multi-State study conducted for the FDA in 1987 indicated that dialysis facilities appeared to be deficient in quality assurance (QA) techniques used in all areas of dialysis treatment. To address this problem, FDA funded a contract for development of guidelines that can be used by dialysis facility personnel in establishing QA programs. The guidelines printed in February 1991 were mailed to every dialysis facility in the United States area free of charge.

In the past year, FDA has continued to work cooperatively with the nephrology community and ESRD patients groups to improve the quality of dialysis treatment. These efforts are yielding positive results.

Mammography

Since 1975, FDA's Center for Devices and Radiological Health (CDRH) (formerly the Bureau of Radiological Health) had conducted a great many mammography activities. These have been done with several goals in mind:

Reduce unnecessary radiation exposure of patients during mammography to reduce the risk that the examination itself might induce breast cancer;

Improve the image quality of mammography so that early tiny carcinoma lesions can be detected at the state when breast cancer is most treatable with the less disfiguring and more successful treatments;

Improve the ability of radiologists to read and interpret mammograms more accurately; and

Develop an integrated U.S. system of diagnosis and treatment of breast cancer, the risk of which increases significantly as a woman ages.

materials; (2) identification of problems and contributing factors, including the use of data obtained by survey, contract, scientific literature, laboratory testing and MDR submissions; (3) development of a strategy for corrective action(s); and (4) implementation of corrective actions that could include assistance and collaboration with interested organizations.

As the limitations of the elderly, e.g., slowed response time are deficient vision, are important considerations in properly using glucose meters, FDA conducted a human factors analysis of blood glucose meters. Completed in May 1990, the goals of the analysis were:

Determine if operation and instructional materials of blood glucose meters is compatible with users' ability;

Determine if the features of blood glucose meters contribute to user error; and

Determine the quality and quantity of instructional material available to meter users for learning proper meter operation.

The study found that instructional materials did not adequately prepare users to obtain accurate results. In addition, the study pointed out the need for proper training of users by health professionals. It also led to suggestions for design changes to enhance the user's ability to obtain accurate readings.

A National Steering Committee for Quality Assurance Glucose monitoring was recently formed to address findings of the human factor study. During FY 1993, the Committee initiated development of user education strategies and instructional material designed to reduce problems associated with the use of blood glucose meters.

A consumer brochure containing tips for safe and accurate self-testing of blood glucose will be completed in FY 1993. Also, procedural checklists for both the diabetic and the diabetic health care trainer will be completed in FY 1993.

Patient Restraints

Soft patient restraints are devices used to protect patients from falls and other injuries. Restraints are used mostly on elderly patients. FDA's Medical Device Reporting (MDR) database has documented 60 deaths related to patient restraint use. The scientific literature suggests that the annual deaths related to use of this device may be as high as 200. Moreover, the use of patient restraints is expected to increase as the number of elderly persons increases. FDA believes that the users of these devices, including doctors, nurses, nursing assistants, and nurses aides need better instructional materials to be able to use these devices properly. Accordingly, FDA initiated an educational campaign aimed at development of:

—graphic messages to be used on the restraints and in the package labeling to effectively convey important safety information to restraint users;
—a poster to serve as a reminder about crucial information needed to apply restraints properly;
—a brochure and exhibit for use at professional meetings; and
—a learning package to assist facilities in meeting on-going educational needs.

FDA has also taken steps to label the devices for "prescription use" by health care providers, and to change regulations so that FDA can review the devices for safety, labeling, and design prior to marketing.

Vaccines

The use of pneumococcal vaccine and influenza vaccine in this population has the potential for saving many lives annually. Elderly persons are at increased risk for complications with influenza infection. Therefore, they are in target groups for special vaccination programs. Scientists at the Center for Biologics Evaluation and Research (CBER) and other staff work with CDC and WHO collaborating laboratories to assure that the vaccine available each year contains strains that would be the most effective for the epidemic year. CBER, along with its Vaccine and Related Products Advisory Committee makes the final selection after consultation and provides appropriate reference materials.

One of the objectives of Healthy People 2000 of deaths due to epidemic related pneumococcal and influenza in part by immunization. In addition, another objective of this PHS goal is to reduce pneumonia-related days of restricted activity. Scientists at CBER perform lot release on both influenza and pneumococcal vaccines which may help in this objective. CBER is working in programs directed at improving pneumococcal vaccines as well as other vaccines that may be useful in preventing infectious diseases in the elderly. CBER evaluates many other biological products of specific need to the elderly, including diagnostic skin tests for TB and blood products.

Immune Senescence

Elderly individuals are especially vulnerable, as evidenced by increased morbidity and mortality, to a wide spectrum of infectious diseases caused by bacterial and viral etiologic agents. Moreover, the incidence of most malignancies increases and peaks among the elderly. The immune system is responsible for protection against infections, and its proper function is also thought to be instrumental for protection against the outgrowth of malignant cells. It is now well documented that advancing age compromises the ability of the immune system to fulfill its function. The decreased vigor of the immune response with age is believed to be, at least in large part, responsible for the increased vulnerability of the aged to infectious and malignant diseases.

Efforts are underway, by investigators at the FDA Center for Biologics Evaluation and Research to understand and dissect mechanisms underlying the immunologic decline with age. Investigators at CBER, working in collaboration with investigators in Japan, are trying to understand why the activity of T cells are decreased with age. Proper function of T cells, central players in the immune system, is especially crucial to fending off infection and rejecting tumors. Investigators at CBER have demonstrated that the expression of certain proteins, and the genes which encode them, is reduced with advanced age. These proteins, known as perforin (or pore-forming protein or cytolysin) and granzymes, are found within granules in killer T cell. They are released upon contact foreign cells (e.g., tumor cells) or virally infected cells, and are believed to be involved in the lysis and death of the target cells. Moreover, the function of another class of T cell, the helper T cell, is also compromised with age, and compromise of its function may further magnify the decremental function of killer T cells. Investigators at CBER, using a rodent model, have shown that these cells exhibit reduced activity within the whole aged animal. One ultimate aim of these studies is to determine whether cytokines or biologic agents can be used specifically to restore the decreased function of the aged immune system to more youthful levels.

Dialogue With Alzheimer's Organizations

On September 9, 1992, individuals from several organizations representing Alzheimer's patients and their families met with the Commissioner to begin a dialogue aimed at better understanding the needs and concerns of these organizations and their constituencies. The Commissioner emphasized that there are no distinctions made by FDA in dealing with issues and products related to life-threatening illnesses, and that the Agency is in the process of establishing mechanisms to ensure this equality. Increased outreach and a focal point of access for constituencies concerned with Alzheimer's, AIDS, and cancer are planned. This meeting was the first in a series designed to actively engage the Alzheimer's community in constructive dialogue on their needs and the Agency's role and responsibilities as it impacts those needs.

Specific concerns addressed included:

—removing import alert on THA
—obtaining access to study protocols
—reaching a better understanding of the FDA process for making therapies for Alzheimer's available
—addressing the perception that standards for drug approval differ between AIDS and Alzheimer's drugs
—need to expedite review of Alzheimer's drugs

Attendees included representatives from the Families for Alzheimer's Rights Association, the Alzheimer's Disease and Related Disorders Association, the Alzheimer's Disease Alliance, and the American Health Assistance Foundation. The consumer representative on the Peripheral and Central Nervous System Drugs Advisory Committee also participated. Agency management expressed their desire to expand involvement to other interested groups and organizations who may bring different concerns to future meetings. Such meetings will likely address in greater detail the Agency's policies, processes, and activities specifically related to Alzheimer's disease, as well as provide information to patients and families about how to enroll in clinical trials.

HEALTH RESOURCES AND SERVICES ADMINISTRATION

The Health Resources and Services Administration (HRSA) has lead responsibility for Federal efforts to promote access to health care services, primarily through programs which increase the availability of community health resources.

HRSA's programs are far-reaching in their support of health services to disadvantaged and underserved groups. In addition to older people, our clients include mothers and children, minorities, the homeless, the poor, drug users, migrant workers, people with AIDS/HIV, those with Hansen's Disease, and those who need organ transplants. Our challenge is to help assure the best possible care to as many individuals as possible at reasonable cost.

HRSA also provides technical assistance and resources to improve the education, supply, distribution and quality of the Nation's health professionals, and access to health services and facilities. Our partners in these efforts include State and local health departments, universities, private nonprofit organizations, and many other participants in the Nation's public health care system.

A primary emphasis during the past year has been on strengthening the role of State and local health departments. HRSA, in conjunction with the Centers for Disease Control, has been instrumental in assisting the three organizations representing public health officials, the Association of State and Territorial Health Officials (ASTHO), the National Association of County Health Officials (NACHO), and the U.S. Conference of Local Health Officers (USCLHO), in forming a coordinated approach to public health practice with the creation of the Joint Council of Official Public Health Agencies. They are currently working on the development of a strategic plan.

HRSA is concerned about training our Nation's professionals to provide care for today's older individuals and individuals who will be old in the future. The Agency provides services to underserved older Americans, such as those who live in rural areas and those with low incomes. One quarter of older Americans live in rural areas. One out of four elderly Americans, or 7.4 million, are poor or near poor.

Several HRSA components significantly influence programs and activities that benefit older Americans.

Bureau of Primary Health Care

The Bureau of Primary Health Care (BPHC) helps assure that primary health care services are provided to persons living in medically underserved areas and to persons with special health care needs. It also assists States and communities in arranging for the placement of health professionals to provide care in health professional shortage areas. The Bureau provides services to older Americans through Community and Migrant Health Centers (C/MHCs), the National Health Service Corps, the Division of Federal Occupational Health, the Home Health Demonstration Program, and the Alzheimer's Demonstration Grant Program.

COMMUNITY AND MIGRANT HEALTH CENTERS

During fiscal year 1992, C/MHCs, located in medically underserved areas, provided a range of family-oriented, preventive, primary health managed care services to those who would otherwise lack access to care, particularly the poor and minorities. Approximately 6.1 million people were served, of which approximately 8 percent (or about 477,000) were age 65 or older.

The Bureau has entered into collaborative relationships with other organizations to better assist C/MHCs in addressing the specific needs, behavior patterns, and health concerns of the elderly through planning and evaluation initiatives. One such collaborative effort is between the Health Resources and Services Administration and the Administration on Aging. Together they provided training to Area Agencies on Aging and State Primary Care Association staff to assist them in developing statewide plans for health services to the elderly.

An evaluation of the activities under this collaborative program showed that financial barriers are a major impediment to increasing elderly participation in C/MHCs. In response to this finding, the "Guidebook on Geriatric Program Development in Community and Migrant Health Centers" was developed and distributed to C/MHCs.

THE NATIONAL HEALTH SERVICE CORPS

The National Health Service Corps places physicians, nurse practitioners, physician assistants, certified nurse midwives, and other health professionals in health personnel designated shortage areas. Older Americans with special health needs and reduced mortality need primary care providers close at hand. The Corps works closely with C/MCHs, other primary care delivery systems and the Indian Health Service to provide assistance in recruiting and retaining health personnel for populations in need.

DIVISION OF FEDERAL OCCUPATIONAL HEALTH

The Division of Federal Occupational Health (DFOH) provides a variety of services related to health promotion and disease prevention in the elderly to managers and employees of over 3,000 Federal agencies. Retirement planning, care of aging parents, and prevention of osteoporosis are some examples of geriatric issues that are regularly addressed in educational seminars and counseling sessions provided by the Division's clinical and employee assistance programs.

HEALTH CARE SERVICES IN THE HOME DEMONSTRATION PROGRAM

The Health Care Services in the Home Demonstration Program was developed to identify low-income persons who can avoid unnecessary institutionalization or hospitalization if case-managed skilled home health services are provided in the home. Through the program, these services are provided to technology-dependent children, disabled adults, the frail elderly, and others who are uninsured or underinsured.

Five State health departments have been awarded demonstration grants—Hawaii, Mississippi, North Carolina, South Carolina, and Utah. There were significant variations in terms of demographics, service needs, health resources available, cultural attitudes, and State governments among the States. Each State found people who were uninsured or underinsured for case managed skilled home health services provided by a multidisciplinary team. Many people were inadequately served both in terms of their needs, preferences, and quality of care by current services. Together these States have provided services to approximately 2,000 uninsured or underinsured clients in the first 4 years of the program.

It took some time and a re-orientation of thinking for providers both within the grantee and community to think beyond currently reimbursable services. The usual response was to tailor services to what was reimbursable and available rather than what the client really needed. It also meant creatively thinking beyond hospitalization and institutionalization as solutions.

The multidisciplinary team includes nurses and social workers in all States. States were encouraged to include physicians and pharmacists as regular members of the team. States have varied in their abilities to do this, e.g., Mississippi, and South Carolina being strong in physician involvement, and North Carolina, South Carolina and Utah having significant pharmacist involvement. In all cases in which the physician and/or pharmacist—have had a strong role, there have been significant improvements in patient care. The contribution of the pharmacist, as a regular member of the multidisciplinary team has increased compliance, reduced side effects, and reduced the costs of drugs. Other members have included nutritionists, physical therapists, occupational therapists, speech therapists, etc., as needed and available.

Clients and their caretakers have been overwhelmingly pleased with the program.

The 6-year demonstration includes separately funded evaluation components that are studying policy, program, financial, and case management issues addressed by the five States. Because of their differences in structure, target groups, and clients served, it was determined that these projects have unique information relevant to long-term policy discussions, particularly in regard to case management of special populations. The Bureau of Primary Health Care entered into a contract to gather and analyze relevant information regarding case-managed skilled home health care for special populations.

In addition, States are doing evaluations at the State level, e.g., a study of caregivers in Hawaii; pharmacy use in home health clients in North Carolina; a comparison study of case-managed versus regular skilled home health care in South Carolina; and release of technology dependent children from nursing homes in Utah.

Approximately $15.5 million has been awarded for this 6-year program. The first grants were awarded in Fiscal Year 1988; the demonstration will continue through Fiscal Year 1994.

ALZHEIMER'S DEMONSTRATION GRANT PROGRAM

The Alzheimer's Demonstration Grant Program was established under Sections 398, 399, and 399A of the Public Health Service (PHS) Act as amended by Public Law 101-557, the Home Health Care and Alzheimer's Disease Amendments of 1990. The first grants, of approximately $3.9 million, were awarded in fiscal year 1992 to governmental agencies located in nine States, the District of Columbia, and Puerto Rico. It is anticipated that up to 4 new grantees will be funded in FY 1993.

This demonstration program is designed to demonstrate how existing public and private nonprofit resources within a State may be more effectively identified, utilized, and coordinated to deliver appropriate respite care and supportive services to

underserved persons with Alzheimer's Disease or related dementias, to their families and caregivers. The program will also identify gaps in the services existing within the community and, where possible, develop creative and innovative approaches to bridge these gaps. Lastly, the program will identify and develop strategies to overcome barriers that exist in accessing these services.

An evaluation strategy, which will include a data collection system, is currently being designed so that the effectiveness of the demonstration program can be measured at its conclusion.

Office of Rural Health Policy

The Office of Rural Health Policy (ORHP) serves as the focal point within the Department for coordinating nationwide efforts to strengthen and improve the delivery of health services to populations in rural areas. In particular, the Office advises the Secretary on the effects that the Medicare and Medicaid programs have on access to health care by rural populations, especially with regard to financial viability of small rural hospitals and the recruitment and retention of health professionals; coordinates rural health activities within the Department and with other Federal agencies, States, national organizations, private associations and foundations; administers a national grant program that establishes rural health research centers; provides staff assistance to the National Advisory Committee on Rural Health; and ensures that the Department invests adequate resources into research projects on rural health issues.

Aging related issues are of particular importance to the Office of Rural Health Policy. One quarter of the Nation's elderly live in rural areas and rural counties have, on the average, a higher percentage of their population over 65 years of age than their urban counterparts.

Activities and initiatives of the ORHP which affect the rural elderly include:

Providing an impact analysis to the Health Care Financing Administration on proposed and final regulations which are expected to have a significant impact on small rural hospitals and the rural elderly that they serve;

Supporting new and innovative local efforts to extend health care access to the rural elderly through a $24.8 million Outreach Grant Program. The program targets elderly and others whose needs have heretofore gone unmet under existing Federal programs;

Coordinating activities with the Bureau of Health Professions and the Bureau of Health Care Delivery and Assistance relating to the development and utilization of rural health professionals;

Meeting with personnel in other Federal agencies (e.g., the Alcohol, Drug Abuse and Mental Health Administration and the National Institute on Aging) to work on issues which affect the health and health care access of rural elderly; and

Apprising interest groups, such as the National Council on Aging and the American Association on Retired Persons about ORHP and its activities

The Subcommittee on Health Services of the National Advisory Committee on Rural Health designated the needs of the rural elderly as one of three priority areas. Based on the work of the Subcommittee, the full Committee's 1991 report addressed a number of problems which rural elders experience in obtaining needed health services. The Committee proposed policy actions and programs to improve the availability of in-home services, community-based services, health promotion programs and transportation services, the adequacy of Medicare reimbursement for home health services, and the quality assurance of home health and institutional long-term care services. Also, the Committee recommended the issuance of specific regulations to implement the Medicare "social factors" provision contained in OBRA 1987. The provision directs Medicare's Peer Review Organizations to recognize "social factors" such as the distance from the patient's home to post-treatment care for complications as grounds for approving inpatient hospitalization for some treatment that would otherwise be on an outpatient basis.

Since 1989, the Office has awarded grants to seven rural health research centers to conduct applied research, case studies and analyses focusing on the delivery, financing, organization, and management of rural health and care services. The Centers provide data and policy research capabilities on a wide range of rural health concerns, including areas relevant to the elderly.

The office also awarded grants to 42 State Offices of Rural Health to help them meet the needs of rural communities and the elderly.

To enhance the dissemination of information on rural health, an interagency agreement with the U.S. Department of Agriculture (USDA) was signed in January

1990. It provides for the placement of the Rural Information Center in the USDA's National Agricultural Library. This Rural Information Center Health Service (RICHS), as it is called, commenced operations on October 1, 1990. For access to the center, call 1-800-663-7701.

Bureau of Health Professions

The Bureau of Health Professions (BHPr) monitors and guides the development of health resources by providing leadership to improve the education, training, distribution, utilization, supply, and quality of the Nation's health personnel.

The Bureau has established Seven Strategic Directions to achieve the Department's Year 2000 National Health Promotion and Disease Prevention Objectives and to guide the implementation of the Bureau's programs in an era of health care reform.

The Seven Directions are:

1. Health Care Reform: Promoting Primary Health Care Education;
2. Health Care Reform: Increasing the Number of Health Care Providers from Minority/Disadvantaged Backgrounds;
3. Health Care Reform: Establishing Linkages Between Education Programs and Service Settings;
4. Health Care Reform: Assuring Health Care Quality Through Publicly-Responsive Reforms in Health Professions Education Practice and Liability Management;
5. Health Care Reform: Strengthening Public Health Education and Practice;
6. Health Care Reform: Strengthening Health Professions Data, Information Systems, and Research; and
7. Health Care Reform: Building the Capacity of Nursing and Allied Health Professions to Meet the Demands for Health Services.

The strategy defined by these seven directions will be implemented through a variety of collaborative public and private efforts and programs supported and operated by the Bureau. Programs include: education and training grant programs for institutions such as health professions schools and health professions education and training centers; loan and scholarship programs for individuals, particularly those from disadvantaged backgrounds; the National Practitioner Data Bank; and the Vaccine Injury Compensation Program.

The Bureau supports the Council on Graduate Medical Education. The Council reports to the Secretary and the Congress on matters related to graduate medical education, including the supply and distribution of physicians, shortages or excesses in medical and surgical specialties and subspecialties, foreign medical graduates, financing medical educational programs, and changes in types of programs. It also supports the National Advisory Council on Nurse Education and Practice which advises the Secretary on PHS Title VII nursing authorities. The Bureau is in the process of establishing the National Commission on Allied Health and the Advisory Council on Medical Licensure.

BHPr administers several education-service network multidisciplinary and interdisciplinary programs such as the Area Health Education Centers, the Geriatric Education Centers, and Rural Interdisciplinary Training Programs. In addition, it also administers the AIDS Regional Education and Training Centers Program which provides multidisciplinary training for primary health care providers in the care of HIV-infected individuals and people with AIDS.

The National Vaccine Injury Compensation Program is administered by BHPr. The program, which became effective October 1, 1988, was created by the National Childhood Vaccine Injury Compensation Act of 1986 as a no-fault system through which families of individuals who suffer injury or death as a result of adverse reactions to certain childhood vaccines can be compensated without having to prove negligence on the part of those who made or administered the vaccines.

BHPr maintains a federally sponsored health practitioner data bank on all disciplinary actions and malpractice claims. The National Practitioner Data Bank (NPDB) was created by The Health Care Quality Improvement Act of 1986, Title IV of P.L. 99-660, as amended November 1986. The Act authorized the Secretary of Health and Human Services to establish a data bank to ensure that unethical or incompetent medical and dental practitioners do not compromise health care quality. The NPDB is a central repository of information about: malpractice payments made on behalf of physicians, dentists and other licenses health care practitioners; licensure disciplinary actions taken by State medial boards and State boards of dentistry against physicians and dentists; and adverse professional review actions taken against physicians, dentists, and certain other licensed health care practitioners by hospitals and other health care entities, including health maintenance organiza-

tions, group practices, and professional societies. The NPDB opened on September 1, 1990.

TARGETED SUPPORT FOR GERIATRICS

In FY 1992, 27 Geriatric Education Centers (GECs) received grants under section 789(a) of the PHS Act, an authority which specifically authorizes geriatric training. Many centers are consortia or other organizational arrangements involving several academic institutions, a broad range of health professions schools, and a variety of clinical facilities.

The Centers are based at the following institutions:
University of Alabama at Birmingham, Birmingham, AL
Stanford University, Stanford, CA[2]
University of California, Los Angeles, CA[2]
University of Colorado, Denver, CO
University of Miami, Gainesville, FL
University of Illinois, Chicago, IL
Indiana University, Indianapolis, IN
University of Kentucky, Lexington, KY
Harvard Medical School, Boston, MA
University of Minnesota, Minneapolis, MN
University of Mississippi Medical Center, Jackson, MS
St. Louis University, St. Louis, MO
University of Medicine and Dentistry of New Jersey, Stratford, NJ
Research Foundation of SUNY [2]
Research Foundation of CUNY [2]
Bd of Regents, Univ. of NV, Reno [2]
Case Western Reserve University, Cleveland, OH
University of Oklahoma, Oklahoma City, OK
Oregon Health Science Center, Portland, OR
University of Pennsylvania, Philadelphia, PA
University of Pittsburgh, Pittsburgh, PA[2]
Meharry Medical College, Nashville, TN
Baylor College of Medicine, Houston, TX
University of Texas, San Antonio, TX
Virginia Commonwealth University, Richmond, VA
University of Washington, Seattle, WA
Marquette University [2]

Awards for these 27 GECs totaled $9,298,927 for fiscal year 1992. Funding for fiscal year 1993 under Section 777(a) is expected to be approximately $5.5 million. These Centers are educational resources providing multidisciplinary geriatric training for health professions faculty, students, and professionals in allopathic medicine, osteopathic medicine, dentistry, pharmacy, nursing, occupational and physical therapy, podiatric medicine, optometry, social work, and related allied and public or community health disciplines. They provide comprehensive services to the health professions educational community within designated geographic areas. Activities include faculty training and continuing education for practitioners in the disciplines listed above. The Centers also provide technical assistance in the development of geriatric education programs and serve as resources for educational materials and consultation.

GERIATRIC ACTIVITIES SUPPORTED UNDER BROADER TRAINING AUTHORITIES

Division of Associated, Dental and Public Health Professions

This Division funds education projects for a wide array of health providers. The General Dentistry Training Grant Program (section 785) currently supports 32 postdoctoral residency and advanced education programs in dentistry, which include training opportunities to provide dental care to the elderly. In awarding $3,252,561 in FY 1992 grants, a funding priority was given to applicants who proposed to further expand and improve the geriatric training components of their postdoctoral programs.

Under section 799A, the grant program for Interdisciplinary Training for Health Care for Rural Areas has as one of its goals improving access to and availability of health care for the residents of rural communities. A funding priority for this grant program is given to applicants who include curriculum elements that address the

[2] Indicates New Centers.

uniqueness of health conditions and the ethnic/cultural characteristics of the populations within the rural areas where training/service is occurring. This provision includes the health of older Americans, and is reflected generally in funded projects.

The University of Hawaii at Manoa School of Social Work received $126,606 for a project cosponsored by the Hawaii Department of Health. The project is establishing a statewide coordinated structure for rural health care providers and interfaces with the Pacific Islands Geriatric Education Center and Area Agencies on Aging. Activities will increase the knowledge base of providers on the needs of special rural populations, including the elderly.

The University of Nebraska Medical Center College of Dentistry received $79,768 for the development of clerkships of rotating interdisciplinary training experiences in rural Nebraska. This project, which involves significant geriatric emphasis, will provide special didactic course work in the social aspects of health care delivery to elderly and ethnic minority individuals, including migrant workers. Collaborative arrangements exist with the Nebraska Department on Aging and the Nebraska Geriatric Education Center. Existing area training sites serving a significant population of elderly persons will be used in the implementation of project objectives. The evaluation team includes representatives of the Omaha Gerontology Program.

The University of North Dakota School of Medicine received $124,159 for a project which proposed to increase recruitment and retention of nurse practitioners, physician assistants, and social workers in designated health manpower shortage and frontier areas of North Dakota. Continuing education for practitioners in isolated areas through the use of teleconferencing will include topics such as alcoholism in the elderly and the impact of geographic isolation upon the management of Alzheimer's Disease among the elderly.

Vanderbilt University received $147,446 to establish a nurse case-managed primary care clinic to serve as a clinical practicum site for graduate nursing and pharmacy students as well as family practice residents. The clinic will serve a predominantly black population and be used as a preceptored learning laboratory for gerontological nurse practitioners and gerontological psychiatric/mental health nurses, among others.

The West Alabama Health Services, Inc., received $209,228 for a collaborative project with the University of Alabama to develop an interdisciplinary training program to enhance the quality and availability of health care services and to retain health care providers in the rural western part of the State. Trainees will undergo substantial interdisciplinary geriatric training.

Husson College in Maine received a grant for $229,949 to develop and evaluate a community-based interdisciplinary geriatrics assessment and therapeutic service.

Other grants awarded under section 799A include curriculum development and/or training seminars on gerontology and health care needs of the elderly.

Allied Health Special Project Grants under section 796 have several purposes related to the aged: number 2—"to improve and expand enrollment in professions with greatest demand and most needed by elderly"; number 3—"interdisciplinary training programs that promote allied health in geriatrics and rehabilitation of elderly"; number 5—"adding and strengthening allied health curriculums in prevention and health promotion, geriatrics, long-term care, home health and hospice care, and ethics."

Several of these grant programs include activities to strengthen academic and clinical curricula in the areas of geriatrics and long term care, and to increase the geriatric knowledge and skills of their didactic faculties.

Howard University in Washington, D.C., has a $94,463 grant titled "Multi-tiered Geriatric Education and Training Project." This grant addresses the need for geriatric literacy, interdisciplinary skills in response to the needs of the elderly, and strengthening curriculum units relative to geriatrics content throughout the College of Allied Health Sciences. The objectives of the grant are: (1) to impact the geriatric knowledge and skills of the didactic faculty; (2) to promote interdisciplinary geriatric care among clinical faculty; (3) to enable faculty to infuse geriatric content throughout the professional curriculum; (4) to impact student learning via January semester in geriatrics and subsequent geriatric experiential learning; and (5) establish faculty/student geriatric assessment teams.

Indiana University School of Medicine has a $83,525 grant to strengthen existing curricula and expand enrollment in programs preparing allied health practitioners. Objectives include: (1) strengthening allied health programs through faculty development activities; (2) expanding enrollments which commonly serve the elderly (occupational therapy, physical therapy and respiratory therapy); (3) strengthening curricula in all nine allied health program areas offered by the Division of Allied Health Sciences and offering an interdisciplinary course in geriatrics for those pro-

fessions which most commonly care for the elderly; and (4) enhancing recruitment to all the allied health programs through a series of health professions career days and guidance counselor information sessions with special emphasis on minority recruitment through the establishment of a minority student association and minority mentor network.

Langston University in Langston, Oklahoma, a Historically Black College or University, received a $57,021 grant titled "Enhancement of Faculty, Curriculum, and Students." Activities include strengthening academic and clinical curricula in the areas of health prevention and promotion, geriatrics, long-term care, home health, and hospice care.

Clark County Community College, Southern Nevada has a $15,798 grant titled "A Wellness-Centered Geriatrics Specialist Program." This grant is designed to implement an interdisciplinary modular approach to address allied health care training to serve the needs of an aging population. Objectives include: (1) developing interdisciplinary instructional modules on geriatrics for allied health practitioners and faculty that emphasize wellness and healthy aging; (2) delivering instructional modules to a minimum of 60 allied health practitioners and faculty; (3) providing a total learning environment for students in the geriatric instructional modules to gain a more positive attitude about aging and increased willingness to work with the senior adult client; and (4) developing continued community support.

The University of North Carolina at Chapel Hill received a grant for $110,888 to develop a model geriatric clinical education program in allied health entitled "Geriatric Education Research and Practice in Physical Therapy."

Under the program for Faculty Training Projects in Geriatric Medicine and Dentistry (section 789(b)), 16 grantees received $4,040,419 to provide geriatric faculty training experiences for 74 fellows. Participants were trained in either 2-year fellowships or 1-year retraining projects which included clinical, teaching, administrative and research skills pertaining to geriatrics.

Division of Medicine

The Division continues to support through its grant and cooperative agreement programs significant educational and training initiatives in geriatrics.

Twelve predoctoral grantees and 98 graduate program grantees under section 786(a), Family Medicine Training, indicated that they are actively involved in the development, implementation and evaluation of their geriatrics curriculum and training. Twelve of the predoctoral grantees received funds totaling $527,470, and 3 of the residency program grantees received funds totaling $160,568 specifically for developing and enhancing geriatrics curriculum and training experiences. In addition, 12 faculty development programs reported that they provided geriatrics training. Four of the section 780 Family Medicine Departments program grantees received awards totaling $302,382 for the purpose of strengthening geriatric training and carrying out research activities in this area.

Under section 784, the General Internal Medicine and General Pediatrics Residency Training Programs reported 6 grantees who provided geriatric medicine training. A total of $42,464 was awarded.

The Area Health Education Center (AHEC) Program (section 781) awarded a total of $17,309,412 to the 20 AHECs. Approximately 5 percent of these awards support geriatric activities. Trainees include all health professions students at all levels and practitioners. In addition, the AHEC special initiatives program awarded two grants totaling $198,928 to develop programs targeted to health care issues of the elderly which impacted 950 trainees. Activities include training of nursing home staff and hospital staff. Training sites involve public health departments/clinics and other ambulatory care sites.

Seven Physician Assistant Training Program (section 788(d)) grantees have instituted training activities in geriatrics. These grantees were awarded $116,450 specifically for their efforts in this area which affected an estimated 433 trainees.

Six grantees receiving support for Podiatric Primary Care Residency Training under section 788(e) authority have included curricular emphasis in geriatric health. These grantees received a total of $475,000.

Geriatrics training components will be developed by 4 of 13 grantees under the Health Education and Training Centers Program (section 781(f)). A total of $3,911,000 was awarded for this program. Approximately 3 percent of this amount involved geriatric activities related to geriatrics impacted an estimated 650 trainees including physicians, social workers, nurses, community health worker, and public health trainees.

Division of Nursing

The Division of Nursing continues to administer grants awarded through four programs: (1) Advanced Nurse Education, (2) Nurse Practitioner and Nurse-Midwifery, (3) Special Projects, and (4) Professional Nurse Traineeships. The fourth program provides funds to schools which allocate these funds to individual full-time master's and post-master's nursing students who are preparing to be administrators, educators, researchers, nurse-midwives, nurse practitioners, nurse anesthetists, or other types of nurse specialists.

Activities relating to the aging in each of these programs during FY 1992 include:

The Advanced Nurse Education Program (section 821) authority supported 11 grants totaling $1,693,717 for gerontological and geriatric nursing concentrations in programs leading to a master's or doctoral degree in nursing. Graduates of these programs are prepared broadly to meet a wide range of needs relative to the elderly in many settings, but are particularly prepared to deal with the older individual who is acutely ill. In addition, the program prepares nurses who can teach and do research in this important field.

Under the Nurse Practitioner and Nurse-Midwifery Program (section 822(a)) 11 master's or post-master's gerontological nurse practitioner programs received $1,415,435 in grant support. As nurses with advanced academic preparation and clinical training, they are prepared as primary health care providers to manage the health problems of the elderly in a variety of settings, such as long-term care facilities, ambulatory clinics and the home. They provide nursing care which includes the promotion and maintenance of health, prevention of disease, assessment of health needs, and long term nursing management of chronic health problems.

Emphasis is placed on teaching and counseling the elderly to actively participate in their own care and to maintain optimum health.

The Nursing Special Projects Grant Program (section 820) supported 16 projects, amounting to $2,198,561, for in-service educational programs for licensed practical nurses working with the aged, gerontological training programs for nurse educators, and educational programs for practicing nurses in the assessment and management of the frail elderly. Project activity was based in acute care settings and in the community as well as nursing homes.

Below is highlighted one of the specific special projects:

A special project was awarded to Old Dominion University, Norfolk, Va. over a 3-year period to compare the effectiveness of utilizing a case management system implemented by a family nurse practitioner in a mobile health unit to assess, coordinate and deliver services to individuals 65 years of age or older in a rural setting with the current method of providing services. The project will focus on providing access to health care services for those individuals who have difficulty obtaining care because of illness, transportation problems, or financial factors. The nurse practitioner associated with the project will provide nursing services in the home as well as at designated community sites via the mobile health unit.

The proposed project will study changes in access to care, functional status, health status, and health promotion behaviors after implementation of the project as well as evaluate the impact of the project on the community, and test the cost effectiveness of the service delivery model. It is anticipated that data from this project will be useful in determining the health status of the rural elderly and provide a better understanding of the life conditions affecting health in a rural area.

A total of 5,337 traineeships were supported through the Professional Nurse Traineeship Program (sections 830(a) and (c)). Of this number, 96 were for study in gerontological nursing and of 1,165 nurse practitioners involved, 55 are in geriatrics. Thus, 151 traineeships or 3 percent were in geriatrics.

ACTIVE CONTRACTS UNDER TITLE VII AND VIII OF THE PUBLIC HEALTH SERVICE ACT

Funding FY 1992

Project
240-92-0014
University of South Florida
"Eighth Workshop for Key Staff of Geriatric Education Centers"

01/30/92-01/31/92 ..... $128,090

The purpose of the contract is to plan, develop, and conduct a workshop, including logistical support, to enable key staff from both long-existing and newly established Geriatric Education Centers (GECs), to interact, exchange information, share strate-

gies and jointly consider GEC purposes. The workshop focused on identification of strategies for accomplishing programmatic functions of GECs including: faculty development, technical assistance, information referral activities, curriculum development, education services in geriatric education, and other topics. Emphasis was given also to identification and assessment of issues and solutions in GEC management and organization including methods: of obtaining support from the community or area served, for initiating and increasing geriatric content in health professions education programs throughout the area served, of stimulating the improvement of services to target populations, and investigating how GECs can address emerging issues in geriatrics.

Funding FY 1992

Project
92-331(P)
Case Western Reserve University
"Elder Abuse Activities in Geriatric Education Centers:

06/04/92-12/08/92..... $20,621.13

The purpose of this project was to: (1) identify and assess the nature and extent of program activities (at 31 funded and 12 previously funded Geriatrics Education Centers) that related to identification, diagnosis, treatment, and prevention of elder abuse and neglect in community and institutional settings; (2) highlight GEC "best practice" models of professional education and public awareness with respect to elder abuse and neglect; and (3) synthesize Geriatric Education Centers' assessment of the need for training of health professions educators and practitioners about elder abuse and neglect.

PUBLICATIONS

The "Eighth Report to the President and Congress on the Status of Health Personnel in the United States 1991" (submitted to Congress September 1992) has a section devoted to *Geriatrics.*

The report to Congress entitled "Study Models to Meet Rural Health Care Needs Through Mobilization of Health Professions Education and Services Research" (June 1992), included a chapter devoted to "The Rural Elderly."

The Coordinator for Geriatric Education Centers Program, Ms. Ann Kahl, co-authored a paper, "Geriatrics Education Centers Address Medication Issues Affecting Older Adults," in the January/February 1992 issue of the *Public Health Report.*

Ms. Kahl also authored the paper, "The Role of Geriatric Education Centers in Promoting Multidisciplinary Training in Geriatrics and Gerontology," in the "Gerontology & Geriatrics Education," Vol. 12(3) 1992.

Ms. Kahl also served on the Research Resources Technical Workgroup for the congressionally mandated Task Force on Aging Research.

FUNDING FACTORS USED IN BHPR TRAINING PROGRAMS

The Bureau utilizes several funding factors to address national priority areas. These factors are designed to place applicants responding to these national needs in a more competitive funding position. The following programs used a geriatric *funding priority* in awarding funds in FY 1992:

Area Health Education Centers (cooperative agreement), section 781(a)(1)
Area Health Education Centers (special initiatives), section 781(a)(2)
Podiatric Medicine, section 788(e)

The following programs used a geriatric special consideration in awarding funds in FY 1992:

Nurse Practitioner/Nurse Midwifery, section 822(a)
Geriatric Education Centers, section 789(a) (special consideration relates to clinical training in geriatrics rehabilitation)
Allied Health, section796(a)

NATIONAL INSTITUTES OF HEALTH—NATIONAL INSTITUTE ON AGING

The number of Americans age 65 and over is expected to double in the next 40 years. Providing appropriate, cost effective health care for America's aging population in the years ahead will depend on aggressive efforts to conduct aging research and to translate the resulting scientific advances into clinical use. This report highlights a number of research advances made during 1992 by scientists at the National Institutes of Health (NIH), the principal medical research arm of the Federal

Government. Among the NIH institutes, the National Institute on Aging (NIA) is the central sponsor of aging research in the United States. The first section of this report covers recent achievements in Alzheimer's disease (AD), one of the chief research priorities at NIA. The second section describes new findings on cardiovascular disease, genetic developments, prostate cancer, osteoporosis and calcium deficiency, the pneumococcal vaccine, and other concerns affecting older people.

Alzheimer's Disease

AD poses enormous challenges to those with the disease, their families, and to our Nation's health care providers. Although the disease today cannot be prevented or reversed, promising research is under way to reveal its causes, to improve diagnostic techniques, and to find effective treatments.

Scientists estimate that 4 million Americans suffer from AD, a slowly degenerative brain disease that impairs memory, attention, and judgment. Most persons with AD are age 65 or older, and risk of developing the disease increases with advancing age. As we approach the 21st century, the number of older Americans is growing rapidly. It is estimated that the number affected by AD may rise to as many as 14 million by the middle of the next century, as medical advances and lifestyle changes increase the number of people living to a very old age.

AD costs the Nation an estimated $90 billion each year, including medical bills, nursing home costs, home care costs, and lost productivity. The overall cost of the disease can be expected to escalate dramatically over the next several decades as health care costs increase generally and the population ages.

The financial costs are small, however, compared to the human toll taken by this disease. Patients face the inevitability that their "self" is disintegrating. Caregivers face the despair of seeing their loved ones' minds and personalities fade as they become totally dependent. Families frequently assume difficult physical and emotional burdens, as well as economic hardships, in caring for patients over prolonged periods that average from 8 to 20 years.

In the face of hardship there is increasing hope as researchers intensely pursue the clues that will allow them to unlock the mysteries of AD. A better understanding of the role genetics may play in the disease, new discoveries about proteins implicated in the death of brain cells, increasingly accurate diagnostic approaches, and potential treatments currently in development are all the result of hours spent at the laboratory bench and in clinics with patients and their families. As scientists learn more about the disease, this knowledge will be translated into approaches to help persons with AD live as fully as possible for as long as possible and help relieve the burdens of care borne by their families.

The advances of 1992 bring us a step closer to these goals and provide a firm footing for the discoveries ahead in 1993. Key AD research in 1992 included an increased understanding of the role of the amyloid precurser protein (APP) in the development of AD, improvements in diagnostic techniques, cross cultural research designed to identify risk factors, potential treatments, and an in-depth look at the impact of special care units on people with AD.

This report provides highlights of research supported by or conducted at NIH through NIA; the National Heart, Lung, and Blood Institute; the National Institute of Diabetes, Digestive, and Kidney Diseases; the National Institute of Neurological Disorders and Stroke; the National Institute of Allergy and Infectious Diseases; the National Institute of Arthritis, Musculoskeletal, and Skin Diseases; the National Institute on Deafness and Other Communication Disorders; the National Institute of Mental Health; the National Center for Research Resources; and the National Center for Nursing Research. Other research on AD is being conducted by the national Cancer Institute; the National Institute of Dental Research; the National Institute of Child Health and Human Development; the National Eye Institute; the National Institute of Environmental Health Sciences; the National Center for Human Genome Research; and the Fogarty International Center.

The National Center for Human Genome Research (NCHGR), the NIH component charged with overseeing the Human Genome Project, supports the development of research tools that make the search for disease genes faster, easier, and cheaper. Recently, an international team of investigators, which included NCHGR grantees, published a complete map of the gene-containing portion of chromosome 21, one of the chromosomes linked to familial AD. NCHGR supports several investigators who are improving the detail on this map, which will help pinpoint the location of suspect genes and provide a basis for analyzing cloned DNA pieces representing the region where genes reside.

THE STRUCTURE AND FUNCTION OF THE BRAIN

The human brain is a complex organ that controls behavior, movement, feelings, and senses. It is the basis for the human ability to speak, move, understand, and remember. The brain also controls functions we may not always be aware of, such as breathing and swallowing.

The brain is an intricate network that contains billions of nerve cells called neurons. These neurons are the building blocks of a complex communication system that relays messages within the brain and between the brain and the rest of the body. Each neuron consists of a cell body, axon, and dendrites. Within the center of the cell body is a nucleus. Each cell has a long extension called an axon, which transmits chemical messages to other cells. Branch-like ends extending from the cell body, called dendrites, receive these communications from other cells. The messages are transmitted by chemical messengers called neurotransmitters from the axons of one cell to the dendrites of another across a gap between cells, called the synapse. In AD, this complex process of communication between cells breaks down.

Groups of neurons are located throughout the brain. In AD, the areas of the brain that appear to be particularly affected are parts of the cerebral cortex and the hippocampus. The cerebral cortex is the outer layer of the brain. The areas of the cerebral cortex responsible for cognitive functions such as language are most affected in AD. The hippocampus is located deep in the brain and is believed to play an important role in memory. Unlike most other cells in the body, neurons are long-lived but cannot be replaced if they die. Therefore, death of neurons in these important parts of the brain of a person with AD has a severe impact on memory, cognition, and behavior.

UNRAVELING THE MYSTERIES OF PLAQUES AND TANGLES

Dr. Alois Alzheimer's description of the disease that we now call AD was based on his examination of the brain of a middle-aged woman who had developed symptoms of dementia prior to her death. Alzheimer noted two types of abnormal structures in the brain: amyloid plaques and neurofibrillary tangles. Today, the presence of these structures in the brain remains the pathological criteria for a diagnosis of AD. Since Dr. Alzheimer's discovery in 1907, scientists have studied these plaques and tangles extensively in an attempt to understand their location, form, structure, composition, and relation to normal brain structure.

Plaques and tangles have provided clues to the process of the disease and possible causes. Plaques contain dense deposits made up of a protein known as amyloid, as well as other associated proteins. In AD, amyloid plaques are found in areas of the brain associated with memory. Neurofibrillary tangles are collections of twisted nerve cell fibers, called paired helical filaments, found in the cell body of neurons. In addition to neurofibrillary tangles, paired helical filaments can be found in neurites, finger-like extensions from the cell body. Recently, scientists have analyzed these filaments to learn more about their chemistry and what role they may play in the disease.

A protein called beta-amyloid peptide is the major component of the amyloid plaques that fill the brain in AD. This protein is derived from a much larger protein, the amyloid precursor protein. Scientists do not yet know how beta-amyloid peptide is produced from APP or why it accumulates in plaques. Until recently, they thought that beta-amyloid peptide formed only in the brains of people with AD. Researchers at several laboratories, including those of NIA grantees Dr. Dennis Selkoe at Brigham and Women's Hospital in Boston, Massachusetts, and Dr. Steven Younkin at Case Western Reserve University in Cleveland, Ohio, have discovered that beta-amyloid peptide is produced and secreted normally by a variety of cells and is also found in cerebrospinal fluid and blood. Thus, rather than simply the presence of beta-amyloid peptide, the rates at which it is made, secreted, accumulated, and removed may be important in the formation of amyloid plaques. With this knowledge, drugs that affect these rates can be tested in cell culture systems.

MUTATIONS IN THE AMYLOID PRECURSOR PROTEIN PROVIDE CLUES

An important link between APP and the development of AD has been identified. Family in which early onset AD is inherited have been known for years. Recently, several of these so-called FAD families (familial AD) have been shown to carry one of a few rare mutations in the APP gene. In these families, the presence of the mutation appears to be linked specifically to the development of dementia in middle age.

Researchers recently identified a mutation in the APP gene in two Swedish FAD families. This mutation brings the number of known mutations in the APP gene to

seven; four appear to cause early onset AD and two cause cerebrovascular disease with or without dementia. The seventh APP mutation has not yet been shown to be clearly associated with the disease. Research on these mutations identified in the APP gene is discussed further in sections of this report highlighting work supported by other institutes.

A pattern appears to be emerging in the APP mutations—so far, the mutations seem to be concentrated near the beta-amyloid peptide region of the APP gene. Significantly, three of these mutations affect the identical site in the APP protein.

Although it is not clear whether beta-amyloid peptide is responsible for the death of brain cells, the association of APP mutations with some FAD families has strongly implicated some aspect of APP as a factor in the etiology of AD.

ADDITIONAL ALZHEIMER'S GENE IS IDENTIFIED

NIA grantee Dr. Gerard Schellenberg and colleagues at the University of Washington in Seattle have recently obtained evidence for an additional AD gene. They showed that inheritance of AD in a group of early onset FAD families was closely linked to a gene in a small region of chromosome 14. Determining the identity of this gene could represent a major step toward understanding the origin and development of AD. Previous FAD mutations have been identified only in the APP gene. It is possible that the chromosome 14 gene may be involved in the processing of APP. It is equally possible that this gene will point researchers toward a previously unsuspected mechanism operating in AD.

CALCIUM-ACTIVATED PROTEASES IMPLICATED IN DEVELOPMENT OF AD

Dr. Ralph Nixon and colleagues, grantees at McLean Hospital in Belmont, Massachusetts, have reported widespread and early changes in calcium-activated proteases in the brains of people with AD. Proteases are enzymes involved in the breakdown of proteins. The researchers found that the level of calcium-activated protease in the AD brain was elevated three-fold. Proteolysis, or the breakdown and processing of proteins into small fragments, has been implicated in various ways in AD. Calcium-activated proteases may contribute to the altered protein processing and protein phosphorylation found in plaques and tangles in the AD brain. In phosphorylation, phosphates are added to specific sites on proteins, a process that has significant effects on cellular metabolism.

ESTROGEN MAY PLAY A ROLE IN AVOIDING CELL DEATH

Findings by grantee Dr. C. Dominique Toran-Allerand at Columbia University in New York suggest that estrogen may play a role in AD. Neurons that are affected in AD have estrogen receptors, as well as receptors for nerve growth factor. Whatever initiates the breakdown of neurons in AD, cell dysfunction and death are the final result. If estrogen is involved in maintaining the function of neurons which are at risk in AD, this would have important therapeutic implications. This research also raises the question of whether estrogen deficiency may make post-menopausal women more vulnerable than men of the same age to AD, as some epidemiological studies have suggested.

IMPROVING DIAGNOSTIC TECHNIQUES

At present, there is no test to diagnose AD in living patients. The appearance of plaques and tangles can be noted only by examining brain tissue. This means that AD is a diagnosis of exclusion, which is confirmed on autopsy in about 80 to 90 percent of probable AD cases. A probable diagnosis of AD is based on the patient's medical history, a physical examination, and tests of mental ability. A thorough diagnostic examination is important, because although AD is the most common type of dementia experienced by older persons, it is not the only cause of dementia-like symptoms. A stroke, depression, vitamin deficiency, medication reaction, viral infection, and a condition called normal pressure hydrocephalus can cause symptoms closely resembling AD. These conditions require different treatments, and in some cases the symptoms can be reversed. Only by ruling out these conditions can a diagnosis of probable AD be made.

Researchers have been striving to develop an accurate test to diagnose AD in living patients. NIA grantees, including Dr. William Van Nostrand of the University of California, Irvine, and Dr. Merrill Benson and colleagues at Indiana University in Indianapolis, have pinpointed a reduction in the levels of a derivative of APP, called PN-2, in the cerebrospinal fluid of persons with familial AD compared to their unaffected siblings. Researchers believe it may be possible to use this result to devise a biochemical diagnostic test for the disease.

CONSORTIUM TO ESTABLISH A REGISTRY FOR ALZHEIMER'S DISEASE (CERAD) HITS THE 1,000 MARK

In 1992, the Consortium to Establish a Registry for Alzheimer's Disease (CERAD) registered its 1,000th case. CERAD is working to bring uniformity to the clinical study of AD by standardizing clinical, neuropsychological, neuroimaging, and neuropathological assessments. Since 1986, the CERAD network has expanded from its original 14 sites to 23 clinical sites throughout the country.

A highlight of recent activity is the *CERAD Dementia Assessment Packet,* which includes a detailed clinical examination, differential diagnosis criteria, and data forms for all the major dementias. The packet also includes tests sensitive to possible early symptoms of AD and the Behavior Rating Scale, developed to assess the psychiatric symptoms of dementia. Specific guidebooks have been developed to be used in neuropathological and neuroimaging assessment.

Well on the way to meeting many of their original goals, CERAD investigators have expanded the focus of their research to look at a broader range of major dementias of older people. In addition, CERAD is expanding internationally, with a number of projects currently under way in Canada and France. CERAD assessment tests have been translated into seven languages, and a new component of the project, CERAD International Associates, has recently been established. This new component will develop international clinical resources at major medical centers for future collaborative multinational and cross-cultural research on AD and related dementias.

EARLY MARKERS OF ALZHEIMER'S DISEASE (EMAD) PROGRAM

Led by Dr. Paul Coast, intramural researchers at the NIA Laboratory of Personality and Cognition (LPC), Early Markers of Alzheimer's Disease (EMAD) Program have made significant progress in their attempts to identify signs of AD. Working with participants in the NIA Baltimore Longitudinal Study of Aging, researchers examined changes in immediate visual memory performance as assessed by the Benton Visual Retention test. Compared to participants without AD, people with a diagnosis of AD had a greater change in number of errors over the 6-year retest interval prior to the estimated onset of the disease. These results suggest that AD may be manifested by changes in immediate visual memory performance earlier than it is currently detectable by clinical evaluation. Replication of these findings is an important priority for ongoing and future research.

POTENTIAL LINK IDENTIFIED BETWEEN LEVEL OF EDUCATION AND AD

Dr. Yaakov Stern and colleagues, grantees at Columbia University in New York, have investigated the relationship between level of educational attainment and AD. Researchers propose that education may actually provide a reserve of cognitive capacity that delays the clinical symptoms of AD. Researchers measured the cerebral blood flow of a group of people who appeared to have comparable levels of dementia. Despite the fact that they seemed to have similar symptoms of AD, patients with a greater number of years of education had a more advanced level of brain deterioration than those with fewer years of education. The researchers concluded that education may provide a reserve that compensates for the neuropathological changes in AD and may delay the onset of its symptoms.

RISK FACTORS ARE THE FOCUS OF CROSS-CULTURAL STUDY

NIA grantees Dr. Hugh Hendrie of Indiana University in Indianapolis and Dr. Benjamin Osuntokun of the University of Ibadan, Nigeria, are working together to discover possible risk factors for AD. This cross-cultural study is the first to focus on African-Americans and Nigerians at risk for the disease.

One objective of the study is to determine whether the prevalence and incidence of AD is lower in the Nigerian than in the African-American population. Researchers will collect data on the most common physical signs of AD in the brain-plaques and tangles. They suspect that these lesions may differ in size and number in Nigerians with Alzheimer's than in African-Americans for reasons that have yet to be determined. Valuable information may be forthcoming from any differences that are observed.

Researchers are particularly interested in noting if some risk factors are common to people in both locations, or if the number of cases in both locations is associated with certain risk factors. They hope that some risk factors, which are widespread in Westernized societies, will become obvious when comparisons are made between different societal and cultural environments.

INITIATIVE IS LOOKING AT SPECIAL CARE UNITS

While special care units (SCUs), long-term care settings geared specifically toward meeting the needs of people with AD, have proliferated across the country in recent years, little is actually known about their effectiveness in caring for people with dementia. To expand the level of knowledge in this area, the NIA has funded 10 projects nationwide to evaluate SCUs. Among the questions this initiative hopes to address are: What effects do SCUs have on people with AD and their family caregivers, and on administrators, management, and staff of long-term care facilities? How do nondemented residents of nursing homes feel about SCUs? Understanding the effectiveness of different types of care will provide important information for consumers, family caregivers, and health professionals. It will also assist policy makers as they determine how SCUs should be regulated and reimbursed.

SITES TEST DEPRENYL AND VITAMIN E FOR AD

The NIA Alzheimer's Disease Cooperative Study Unit has launched a 23-site study to determine whether the drug deprenyl, in conjunction with vitamin E, is beneficial for people with AD. At sites located around the country, researchers will test this potential treatment with an estimated 370 mild to moderately impaired people with AD.

Deprenyl, also called selegeline or Eldepryl, has been approved for use in the treatment of Parkinson's disease. It works by inhibiting an enzyme in the brain that impairs certain neurotransmitter systems. In studies with laboratory rats, it has also been shown to increase life span, possibly by preventing oxidative damage to brain cells. Oxidative damage, which researchers suspect may occur in AD, happens when oxygen-free radicals break down nerve cell membranes. Vitamin E appears to counteract the destructive oxygen free radicals once they are formed.

TACRINE TRIAL RESULTS ARE PUBLISHED

Tacrine, also called tetrahydroaminoacridine or THA, is a drug that increases the amount of the neurotransmitter acetylcholine in the brain by inhibiting acetylcholinesterase, an enzyme that breaks down acetylcholine. Tacrine was evaluated as a treatment for AD in a large clinical trial initiated in 1987. The multicenter study was sponsored collaboratively by the NIA, the Alzheimer's Association, and the Warner Lambert Pharmaceutical Co. Recently released results of that trial and another independent trial indicate that Tacrine may be beneficial in reducing some symptoms in some people with AD. In the collaborative study group, researchers were able to note a positive response on a measure of cognitive ability. However, this group found no effect on a measure of global clinical change.

In a second study, researchers reported positive effects on both cognitive and global measures. These results suggest that the treatment effect of Tacrine may be clinically significant in some patients. Future studies are needed to further determine the role of Tacrine in treating patients with AD and to identify which patients are most likely to benefit from this treatment.

SUSTAINED LOW-DOSE ARECOLINE IS UNDER INVESTIGATION

NIA intramural researchers are studying the drug arecoline to determine its use as a potential treatment for AD. One of the primary neurotransmitter systems affected by AD is the cholinergic system. Thus, one approach to identifying potential treatments has been to study compounds that either stimulate the cholinergic system or replace depleted levels of the neurotransmitter acetylcholine. Arecoline stimulates the cholinergic system.

Doctors administer escalating doses of arecoline to participants with AD by continuous intravenous infusion over a 2-week period. An optimal dose of arecoline is identified and then infused continuously for 5 days. During this time, the participant is given a series of neuropsychological tests to determine whether his or her performance improves while receiving the optimal dose. Based on preliminary data, continuous infusion of an optimal dose of arecoline produces a modest improvement in the cognitive functioning of persons with AD.

RESEARCH ADVANCES IN ALZHEIMER'S DISEASE SUPPORTED AND CONDUCTED BY OTHER NIH INSTITUTES

National Heart, Lung, and Blood Institute

The National Heart, Lung, and Blood Institute (NHLBI) supports research on the normal and abnormal function of blood components. The institute's program in

thrombosis (blood clotting) and hemostasis (stopping of bleeding) includes studies of the blood platelet as a source of APP. In collaboration with the NIA, the NHLBI recently initiated basic studies on the biochemistry and molecular biology of APP.

People with AD have large deposits of amyloid around the neurons and blood vessels of the brain. The normal function of amyloid and its correlation with AD are not known. However, recent studies suggest that it may play a role in hemostasis and thrombosis. For instance, researchers have found that blood platelets contain a significant amount of APP and that activated platelets release it outside the cell. Further, a mutation in APP appears to lead to cerebral bleeding. The possible link between AD and blood clotting has been recognized only recently, but evidence indicates that a precise balance between clotting factors and their inhibitors is essential in maintaining healthy brain cells. Scientists hope that basic research on APP will elucidate its role in hemostasis and thrombosis and, at the same time, point the way toward development of a diagnostic test for AD.

National Institute of Diabetes and Digestive and Kidney Diseases

The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) conducts and supports research on the biomedical, cellular, genetic, and dietary aspects of AD.

NIDDK-supported researchers have identified a defective gene on chromosome 21 that appears to be the source of early onset, familial AD. The newly identified mutation, one of seven mutations identified to date, produces a defect in the APP, which may cause an accumulation of beta-amyloid protein in the brains of Alzheimer's patients. The buildup of this insoluble protein may, in turn, disrupt the transmission and reception of nerve signals in brain cells, causing the neurologic and mental impairment associated with Alzheimer's.

The researchers believe this finding will shed light on the genetic basis of familial AD as well as lead to a further understanding of the more common late-onset AD. They plan to transfer the newly found gene into transgenic mice, which could serve as animal models for further research into the AD process. Transgenic mice are mice that contain a foreign gene, such as the gene that codes for human amyloid protein.

Another NIDDK-supported researcher is studying the role of dietary factors in the metabolism of dietary aluminum. The researcher is using rats that have been surgically altered to provide a model of impairments associated with aging. The role of aluminum in the aging process is not understood, but a buildup of the mineral has been found in the brains of persons with AD upon autopsy.

National Institute of Neurological Disorders and Stroke

The National Institute of Neurological Disorders and Stroke (NINDS) is the principal source of support for neurological research in the United States and a major participant in the study of AD. NINDS-supported scientists are pursuing a wide variety of research programs to expand knowledge of this complex disease. Basic studies are aimed at determining its underlying causes and effects, while clinical research seeks to improve the diagnosis and treatment of patients.

Scientists Study Plaques and Tangles for the Cause of AD

When the causes of a disease are unknown, scientists are often faced with a question of whether tissue abnormalities found in the disease are a cause or result of the disease. This question has long been posed about the amyloid plaques found in AD, since one form of the amyloid protein found in the plaques is a natural part of the healthy nervous system.

This year, NINDS-supported scientists found that part of the protein itself can cause Alzheimer-like degeneration in mouse brain tissue. The investigators used the gene for the amyloid precursor protein (APP) to make cells that produce a portion of the amyloid protein. Four months after the cells were transplanted into laboratory mice, the animals' brains showed significant tissue degeneration. In addition, brain tissue contained other proteins commonly found in AD, demonstrating that this portion of the Alzheimer amyloid protein could replicate many aspects of AD.

The same investigators have also found that this portion of the APP binds specifically to the surface of neurons. They hypothesize that this binding may be the result of attachment to a cell surface receptor. This receptor may, in turn, activate machinery in the cell that leads to the cell's destruction. If this hypothesis is validated, it may lead to a potential therapy that involves blocking these proteins from binding to neural cells.

Another group has found that protein phosphorylation may regulate the secretion of APP. This finding offers the hope of eventually blocking the accumulation of amyloid plaques by hindering the secretion of APP.

The other hallmark of AD, neurofibrillary tangles, is associated with irregularities in a protein called tau, a protein naturally found in the healthy body. Investigators supported by the NINDS have discovered that neurofibrillary degradation in AD is likely caused by an abnormal chemical change in tau, rather than by a decrease in the amount of tau in the brain.

Scientists have recently proposed that the cause of AD might be found in the mitochondria, the cell's powerhouse. Defects in the mitochondria can lead to an energy shortage in the neural cells and atrophy of brain tissue. Last year, a group of investigators found evidence of a decrease in the activity of cytochrome oxidase (CO), a key mitochondrial enzyme, in people with AD. This year, the theory gained support when NINDS-supported investigators found that decreasing the activity of CO in rats led to a condition with similarities to AD. This finding requires further study since another NINDS-supported team could find no reduction in the activity of CO in the brain tissue of people with AD.

GENETIC CLUES FOUND TO BE A CAUSE OF AD

Now that the human APP gene has been isolated, scientists around the world are looking for genetic defects that could explain why the members of some families tend to develop AD more than the members of other families. One group of NINDS-supported scientists found a specific mutation in the APP gene in three AD patients who are members of a family with higher incidence of the disease. The investigators don't know yet if this mutation is related to the incidence of disease in this particular family.

INVESTIGATORS SEEK MORE SPECIFIC DIAGNOSES AND TREATMENT

The diagnosis of AD remains a diagnosis of exclusion. NINDS-supported scientists are using advanced brain imaging technology such as positron emission tomography (PET), magnetic resonance imaging (MRI), and others to identify markers that might eventually help doctors diagnose AD in living patients.

One such marker was discovered this year by NINDS-supported investigators using MRI. MRI works in part by measuring the magnetic properties of the atoms that make up the body. The investigators found that one measurement is significantly increased in the hippocampus of people with AD. Furthermore, the amount of increase in this measurement correlates with the severity of cognitive impairment. The use of this marker may serve as a tool to detect, characterize, and follow AD in living patients.

A group of investigators supported by the NINDS is looking for drugs that amplify the effects of the brain's existing cholinergic neurotransmitters rather than replacing depleted levels of these chemical messengers. The group has synthesized a number of compounds that inhibit the enzyme that degrades the neurotransmitter acetylcholine in the brain. They found that some of these compounds were stronger and more specific than any other drugs currently available for this purpose. These findings may provide the basis for future therapeutic strategies.

National Institute of Allergy and Infectious Diseases

Although little evidence exists to suggest that AD is caused by an infectious agent, similar patterns of tissue destruction are seen in AD and certain infections of the brain. Understanding what underlies these tissue changes is of interest to the National Institute of Allergy and Infectious Diseases (NIAID).

Amyloid, the abnormal protein that accumulates in the fibrous plaques of AD, is also seen in brain tissue of sheep suffering from scrapie, a transmissible degenerative brain disease. The value of scrapie research to Alzheimer's is that animal and cell culture models can be used to study both amyloid formation and possible therapeutic strategies. NIAID intramural scientists studying scrapie have recently identified several chemical inhibitors of amyloid formation, one of which, Congo red, may be useful for treating AD. Tests of the therapeutic effects of Congo red are in progress in the scrapie animal model.

Another researcher has been studying protein components of amyloid in female Syrian hamsters, animals that usually die from an overaccumulation of amyloid. One of these proteins is also found in the amyloid deposits in AD. The researchers have determined that estrogens play a key role in the high production of this protein in these hamsters.

National Institute of Arthritis and Musculoskeletal and Skin Diseases

The National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) leads and coordinates research efforts against the many forms of arthritis and related problems. One focus of NIAMS-supported research is the possible relationship between amyloid and certain forms of arthritis.

In addition to investigating the role of amyloid in arthritis, researchers supported by NIAMS are looking at how abnormal amyloid protein is deposited. These amyloid protein deposits may cause damage to brain cells and, consequently, AD. Isolation of enzymes involved in removing amyloid may lead to an understanding of why one type, beta-amyloid, builds up in excess in the brain. Researchers are working to identify and purify this enzyme that is thought to be abnormal in persons with AD.

NIAMS-supported researchers have also produced a transgenic mouse as a potential animal model, which can be analyzed for the effects of this foreign gene. If the mice develop lesions similar to those seen in AD, researchers can test various therapies that may inhibit formation of abnormal amyloid proteins.

National Institute on Deafness and Other Communication Disorders

The National Institute on Deafness and Other Communication Disorders (NIDCD) conducts and supports research on hearing, balance, smell, taste, voice, speech, and language. The NIDCD is the focal point for research on the causes and prevention of communication disorders associated with AD.

An NIDCD investigator is studying the physiologic basis for neurolinguistic impairments in people with AD, Parkinson's disease, and stroke. These people frequently have problems with complex communication processing such as speech fluency and sentence comprehension.

This investigator is specifically studying sentence comprehension, word processing, and grammatical problems in the language of people with AD. The investigator is using positron emission tomography (PET) to examine the pattern of brain blood flow during word analysis techniques in healthy people and people with AD.

Extensive linguistic analyses are being performed to determine how specific disease processes and anatomic lesions can interfere with language output and comprehension. These studies will provide new information about how language functions are organized in the brain and will lead to potential new strategies for effective speech therapy.

National Institute of Mental Health

The National Institute of Mental Health (NIMH) AD research program focuses on basic neuroscience, genetics and neurobiology, diagnosis and treatment, and stress associated with caregiving. Researchers are also comparing normal aging processes with the processes that take place in AD.

NIMH-supported investigators have learned that many of the changes seen in the AD brain are also seen in normal aged brains. The key is to understand what differences exist in AD. One theory is that there is a disturbance or exaggeration of the normal aging processes. Recent research has shown that certain neurotransmitters, particularly acetylcholine and somatostatin, are profoundly diminished in the AD brain. Several research efforts are focused on learning as much as possible about how these substances work and how they interact with each other.

One of the reasons acetylcholine is decreased is that the neurons that produce the compound seem to die prematurely. Why this occurs is largely unknown. Investigators have discovered an interesting connection between the embryonic brain and the aging brain. In the developing brain, cells and their processes use growth factors and trophic molecules as cues to find their correct places and connections as the brain is formed. These factors also may be vital for neuronal survival. One factor, nerve growth factor (NGF), seems to play a significant role in the support and survival of developing neurons that make acetylcholine. This finding, which suggests that a dramatic change in NGF concentration during aging may be responsible for the loss of acetylcholine-producing neurons, holds promise for treating the disease using therapies that target the NGF system.

Recent work focusing on how APP is processed and regulated suggests that certain brain receptors control APP processing by activating protein kinase C. Deficiencies in neurotransmitter systems linked to the processing of this protein might contribute to the formation of amyloid plaques. The latest finding from these researchers suggests that low levels of acetylcholine contribute to formation of these plaques, providing a new target for drug development. This newly envisioned medi-

cation would not only stimulate (or inhibit) acetylcholine production, but also interact in regulating amyloid protein production.

Understanding normal neuronal processes is critical for unraveling the pathologic mechanisms of AD. NIMH-supported researchers have shown that a newly discovered neurotransmitter, called nitrous oxide (NO), is present in larger quantities in neurons compared with anywhere else. These scientists believe that excessive production of NO is closely involved in the cell death associated with stroke and diseases such as AD and Huntington's. The group is also studying drugs that penetrate the blood-brain barrier and that could influence brain protein phosphorylation.

NIMH intramural researchers have discovered that human olfactory neurons—nerve cells found in nasal tissue—can be cloned and cultured. Olfactory neurons may make a good model for studying AD because they have many features in common with nerve cells located in the brain. The cells are easily accessible in the nose and can be obtained from living patients with AD. Olfactory neurons also exhibit the tangles seen in the brains of people with AD. Researchers have already detected abnormalities in the way AD patients' olfactory neurons process beta-amyloid. The fact that these cells come from living patients may be instrumental in developing and choosing specific drug therapies for individual patients.

The inability to diagnose AD in its earliest stages limits intervention and treatment development. Researchers at the University of Washington in Seattle have developed a biomarker that uses electronencephalogram (EEG) results. They have automated and standardized the process for interpreting and scoring sleep EEG data. The biomarker can distinguish mild AD from major depression without cognitive impairment.

NIMH intramural scientists have also identified a protein that is present in increased levels in the spinal fluid of people with AD. This potential diagnostic marker, alpha-2-haptoglobin, increases during inflammation and also during problems with iron metabolism.

Investigators at Stanford University in California are using the Folstein Mini-Mental State Examination to examine rates of decline in AD. Patients are tested every 6 months to determine decline in cognitive functioning, which has been linked to both behavioral and physical changes in patients. An increased rate of decline has been linked to the phenomenon "sundowning," or nighttime confusion.

The intramural research program (IRP) is proceeding with a number of new drug studies. Studies with scopolamine and other drugs are designed to establish a better pharmacologic model of the memory deficit associated with AD. Using imaging studies to examine the effects of scopolamine on regional brain metabolism, researchers hope to understand the memory impairment associated with AD. Initial results suggest altered metabolism in brain regions related to cholinergic functions.

The IRP program is also seeking a way to combine the modest effects of multiple medications to create a more effective overall treatment strategy. In the first pilot study, investigators have learned that selected medications can safely be given together to people with dementia. Scientists are also continuing to compare the biochemical and clinical profiles of people with AD and those with depression to understand the overlap in behavioral symptoms between these two groups.

Most of the world's population relies on traditional medical practices that have evolved over many centuries.

By taking advantage of this information, the newly established NIMH Psychotherapeutic Drug Discovery and Development Program is testing plant extracts, some of which are currently used in India for memory and dementia—a practice dating back many centuries. In recent studies, these extracts have shown activity at several brain receptors thought to play a role in memory and cognition. Future studies will further characterize the pharmacology of these traditional medications.

The effects of caring for AD patients on family members have been widely noted. Work of NIMH-supported investigators has yielded important information on the physiological effects of the chronic stress of caregiving. This information is helping researchers understand how stress affects the immune system, increasing the risk of flu, infection, hypertension, and cardiovascular disease. Moreover, subgroups of caregivers at risk are being identified. For example, caregivers without adequate social support and respite from caregiving are most at risk for compromised immune functioning.

National Center for Research Resources

Resource centers and other funding provided by the National Center for Research Resources (NCRR) support a variety of studies focused on understanding and treating AD.

Investigators at the Indiana University General Clinical Research Center in Indianapolis have found a gene for amyloid protein in two recent generations of a family with familial, early onset AD. Analysis revealed a specific mutation—a single amino acid substitution of phenylalanine for valine—in the relevant area of the APP. The mutation correlated with the presence of AD in all patients studied and was absent in Alzheimers's-free family members and 100 unrelated individuals. As discussed earlier in this report, the mutation may be the inherited factor causing amyloid formation and dementia in people with this form of AD.

Nerve growth factor (NGF) is a naturally occurring protein that promotes cell growth. Information gathered from long-term studies of the efficacy and safety of chronic administration of NGF in nonhuman primates will provide the basis for future human clinical trials. Four rhesus monkeys at the University of California Regional Primate Research Center in Davis have received grafts containing NGF-producing cells; the grafts showed response up to 90 days. In continuing studies, the end-point will be extended from days to 6 months, and MRI and PET scans will be used to monitor graft survival.

National Center for Nursing Research

The National Center for Nursing Research supports both basic and clinical research to maintain and improve the cognitive functions and quality of life of people with AD, whether they reside at home or in an institution.

One of the most tragic symptoms associated with AD is disorientation, a symptom that inhibits independence, can result in wandering behavior, and severely burdens the caregiver and family. Furthermore, disorientation is often one of the factors considered when families decide to institutionalize a person with AD.

Preliminary results of an NCNR-funded basic research study suggest that disorientation in rats can be modified. Nurse-scientists used a rat animal model to examine the effects of damage to the hippocampus. Researchers found that rats without hippocampal damage could find a hidden platform in opaque water, even when researchers attempted to distract them. Brain-damaged rats, however, were easily distracted until researchers introduced both visual and auditory signals. The combined cues enhanced the brain-damaged rats' ability to find their way to the platform. These results suggest the need for future studies on the role that visual and auditory cues might play in curtailing disorientation in animals and ultimately people with AD.

OUTLOOK

The discoveries of the past year promise to yield further insight into the causes of AD and how it effects the brain. Although scientists cannot predict that prevention or a cure is around the corner, they are optimistic that the discoveries of the next few years will lead to effective treatments. Because age is a primary risk factor for AD, a delay in the onset of the disease or a slowing of its progression could have a significant effect on the overall prevalence of AD. While this will require a better understanding of the reasons neurons break down and die, it is not an unreasonable goal for biomedical researchers.

Toward these goals, AD research projects for 1993 include a look at the role of calcium and glucocortocoids, a type of hormone, in cell death; research on the functions of the blood brain barrier; and a project to learn more about the effects of oxidative damage to membranes. Scientists hope that these and other research projects will continue to provide the missing pieces to the AD puzzle.

Understanding Aging

NIA scientists take a multidisciplinary approach to studying ways to improve the diagnosis, treatment, and prevention of health problems experienced by older adults. Other NIH institutes who also have an interest in aging research are the National Cancer Institute; the National Heart, Lung, and Blood Institute; the National Institute of Dental Research; the National Institute of Diabetes and Digestive and Kidney Diseases; the National Institute of Neurological Disorders and Stroke; the National Institute of Allergy and Infectious Diseases; the National Eye Institute; the National Institute of Environmental Health Sciences; the National Institute of Arthritis and Musculoskeletal and Skin Diseases; the National Institute on Deafness and Other Communication Disorders; the National Institute of Mental Health; the National Institute on Alcohol Abuse and Alcoholism; the National Center for Research Resources; the National Center for Nursing Research; and the Office of the Director.

CELLULAR CLUES MAY REVEAL WHY OLDER PEOPLE ARE MORE PRONE TO ATHEROSCLEROSIS

Researchers studying cardiovascular disease (CVD) at NIA's Gerontology Research Center in Baltimore, Maryland, have found that cellular changes in blood vessels may underlie the high incidence of CVD seen in older people.

CVDs are disorders of the heart and circulatory system. They include high blood pressure (hypertension), angina, stroke, and thickening of the arteries (atherosclerosis). Atherosclerosis is caused by the buildup of fatty deposits (plaque) along arterial walls. This plaque (made up of cells, as well as cholesterol and other fats and fibrous tissue) accumulates and eventually reduces the flow of blood to the heart muscle. When an artery is blocked completely, a heart attack occurs.

NIA's special interest in CVD stems from the major impact this disease has on the health of older people, causing almost half the deaths in this population and an enormous burden of disability. Moreover, while heart attack has been recognized for many years as a health threat to men, it is also a major cause of death in older women.

Intramural scientists Drs. Rebecca R. Pauly, Antonino Passaniti, Michael Crow, James L. Kinsella, Nickolas Papadopoulos, Robert Monticone, Edward G. Lakatta, and George R. Martin have been examining the effects of age and injury on the vascular system in experiments using rat models and cells in culture (both rat and human). It is believed that in injured blood vessels, endothelial and smooth muscle cells [1] lose structural complexity (become dedifferentiated) and are likely to migrate and increase in number (proliferate).

While cells in healthy animals normally exhibit a high degree of complexity and organization (are differentiated), dedifferentiation occurs in injured vessels. Dedifferentiated smooth muscle cells turn on the same proteins that are activated by cancer cells as they spread to other sites (metastasize), resulting in changes that alter their structure and function. Through this process, called invasion, normal blood vessel tissue is destroyed.

In healthy people the smooth muscle cells contract to change the diameter of the vessel. But this ability may be lost in certain vascular diseases when smooth muscle cells dedifferentiate, proliferate, migrate, and invade surrounding blood vessel tissue to form the atherosclerotic lesion.

Differentiation and dedifferentiation in endothelial and smooth muscle cells appear to be regulated in part by interactions involving proteins making up the basement membrane on which these cells rest. Dedifferentiated cells produce proteolytic enzymes that breakdown basement membrane proteins and allow them to reach the lumen of the blood vessel. Smooth muscle cells from older animals release more of this proteolytic enzyme in culture than cells from younger animals. The regulation of this enzyme appears to be different between older and younger animals as well. These dedifferentiated cells, no longer under the control of the surrounding basement membrane, may proliferate freely and contribute to the formation and progression of the atherosclerotic lesion.

The NIA scientists believe their findings can help to further identify the molecular events that control dedifferentiation in vascular cells. This would then promote development of therapeutic agents to maintain healthy vessels. This study might also help researchers better define which factors are associated with the progressive buildup and conversion of fatty streaks into advanced stages of atherosclerotic plaque. In studying how to reduce plaque buildup within the arterial walls, scientists may eventually be able to reverse atherosclerosis.

SCIENTISTS IDENTIFY PROMISING NEW GENE THERAPY VEHICLE FOR MEDICAL TREATMENTS

We usually take medications orally, by injection, or in certain cases in the form of a skin patch. Scientists are now developing a method for administering biological substances such as hormones and growth factors through the use of cell-mediated gene therapy. This technique involves genetic engineering in which copies of the gene for the appropriate human hormone or growth factor are inserted into the genetic material of cells taken directly from the patient. The inserted genes instruct the cells to manufacture the desired hormone or growth factor. When the genetically altered cells are returned to the patient, they synthesize and secrete the desired hormone or growth factor into the bloodstream for delivery to the entire body. Gene therapy holds great promise for a wide range of medical applications in people of all

[1] Blood vessels are made up of a thin sheet of endothelial cells attached to a sheet of basement membrane that forms the surface on which blood flows. Beneath the endothelial basement membrane are layers of smooth muscle cells whose role is to maintain vessel tone.

ages. By the turn of the century, scientists predict that some forms of cell-mediated gene therapy will be in common use in medical practice.

A major obstacle to gene therapy is the development of effective cellular vehicles for the delivery of therapeutic gene products to the patient. NIA grantees are now exploring the potential use of muscle cells, called myoblasts, for gene therapy. Dr. Helen M. Blau and her colleagues at Stanford University School of Medicine in California have found that myoblasts, genetically engineered to contain the human growth hormone (hGH) gene, can be reimplanted into the skeletal muscles of the original donor mice. Once implanted, the myoblasts become permanently incorporated into existing muscle fibers and begin to synthesize and secrete hGH into the blood stream. Myoblasts have several advantages compared to other cell types, such as fibroblasts and lymphocytes, which have also been used as vehicles for gene therapy. First, incorporation of the transplanted myoblasts into existing muscle fibers where they are nourished by the blood stream extends the *in vivo* life span of the genetically engineered cells several months. This contrasts with genetically engineered fibroblasts and lymphocytes that have an average life span of only a few weeks as they are rapidly destroyed following implantation. Second, myoblasts produce high levels of the desired gene product, so are able to sustain significant levels of the hormone or growth factor in the blood stream. Recent studies in Dr. Blau's laboratory have shown that significant levels of hGH were sustained for several months in the mice receiving myoblasts containing the hGH gene.

Dr. Blau's research sets the stage for the development of intervention strategies to retard or reverse some of the consequences of human aging. A small clinical trial conducted by Dr. Blau and her colleagues has indicated that myoblast-mediated gene therapy can be effectively applied to people. One prominent example of such an intervention is the treatment of hGH deficiency in older people. Recombinant growth hormone injections are currently used to alleviate the muscle wasting and loss of bone strength noted in aging adults who are deficient in hGH. Although highly successful, current therapy with synthetic hGH is very costly. Myoblast-mediated hGH gene therapy promises a cost-effective alternative to the multiple hormone injections. In addition to the potential value of myoblast-mediated gene therapy in developing effective interventions for aging processes, this type of gene therapy holds enormous promise for the future treatment of cancers, AIDS, insulin-dependent diabetes, and genetic diseases.

GENETICS MAY OFFER A KEY TO AGING AND CANCER THERAPY

Researchers studying aging on the genetic level are interested in both the genes that control the expression of human characteristics and the role they play in aging processes. The telomere is currently of interest because of its possible link with cell aging.

Telomeres are the ends of chromosomes, which are found in the nucleus of each of the trillions of cells making up the human body. Each chromosome consists of a double-stranded DNA (deoxyribonucleic acid) molecule containing genes that determine the expression of human characteristics and traits. Telomeres in humans are composed of a specific sequence (TTAGGG) repeated thousands of times. They have an important stabilizing effect on chromosome structure throughout the life span of an organism and are particularly important in protecting chromosomes from entering into undesirable rearrangements during chromosome duplication.

Of significance for the study of aging is the observation that in most human cells telomeres shorten in length with each division of the cell. NIA grantees Dr. Carol W. Greider at Cold Spring Harbor Laboratory in Long Island, New York, and Dr. Calvin B. Harley at McMaster University in Hamilton, Ontario, Canada, found that telomeres shorten by a constant amount with each cell division. The remaining length of the telomere can predict the number of previous divisions the cell has undertaken during its life span and the number of future divisions possible before the cell loses its ability to divide further. Thus, telomere length may serve as a counting mechanism to record cell division. The investigators noted, however, that telomere shortening did not occur in nondividing cells, such as neurons in the brain and heart muscle cells. Nor did it occur in human sperm cells. Although sperm cells undergo cell division like other body cells, their telomeres retain their full length throughout the cell's life span. This may be made possible by the activation of telomerase, an enzyme present in all cells but inactive in most human cells.

A direct link between telomere loss and cellular aging has not yet been established, but Drs. Greider and Harley believe they are getting closer to understanding the functional roles telomeres play in aging cells. Their central question is whether the progressive decrease in telomere length ultimately causes cell aging or whether shortening occurs merely as a function of passing time. Other aging experts warn

that while telomeres may function as cellular timekeepers, human aging is linked to a number of different processes operating at many levels, and not solely due to one mechanism such as telomere loss.

In another part of their research, Drs. Greider and Harley along with their colleagues found that telomeres may have an important bearing on the uncontrolled growth of cancer cells. When normal human cells become cancerous, immortal cells are produced capable of undergoing an infinite number of divisions. Telomere shortening is overcome in the immortal cells by the addition of telomere sequences. Investigators believe these additional sequences may be produced as a result of the activation of the telomerase enzyme. However, telomerase activity is only one mechanism responsible for maintaining uncontrolled growth in immortal cancer cells; many of the cellular mechanisms responsible for this growth still need to be better understood.

The results of these findings on telomeres and telomerase may have a practical benefit for cancer patients in the future. Developing therapies that can block production of telomerase activity in cancer cells is a goal that may be achieved soon. Drugs currently being tested to inhibit the AIDS virus may be found to be of use, and other types of new drugs are being developed and tested.

IMPROVED TESTING REVEALS PROSTATE CANCER EARLIER

Older men can breathe a little easier when they go for their next physical exam. Physicians now may be able to detect prostate cancer years earlier than was previously possible by monitoring yearly changes in the level of an enzyme, prostate specific antigen (PSA). Discovering a prostate tumor early, before it has escaped to other parts of the body, can mean the difference between life and death.

Drs. Jay D. Pearson of NIA, H. Ballantine Carter of The Johns Hopkins University, and their colleagues found that repeated measurements of PSA can detect 70–75 percent of prostate cancer as early as 4 years before diagnosis. PSA is produced by both normal and cancerous prostate cells, and increases as the volume of prostate cells increases. PSA levels are elevated in patients with prostate cancer and with benign prostatic hyperplasia (BPH), a common condition in which the prostate becomes enlarged.

Most middle-age men experience some prostate enlargement, which often causes difficult or painful urination and sometimes requires surgery. About 66 percent of men over 50 have BPH. Physicians often test PSA levels when the digital exam indicates a problem. A single PSA measure, however, can be deceiving. Previous studies suggest that up to 60 percent of BPH patients may be falsely identified as potential cancer cases when based on a single PSA value. This leads to many unnecessary biopsies. Dr. Pearson's studies show that more frequent measurements of PSA can reduce the error rate in distinguishing between BPH and cancer to about 10 percent.

The increase in PSA is far greater in cancer patients than in men with BPH or with normal prostates. This is because prostate cell volume doubles within 50 to 200 days in a prostate cancer patient, while taking between 10 and 15 years to double in patients with BPH. In addition, a cancer cell contributes 10 times more PSA to the bloodstream than does a BPH cell. Doctors believe that measuring the rate of change in PSA levels over time will be a more accurate method of finding prostate cancer in its early stages than relying on a single PSA measure.

Dr. Pearson's group conducted the study using frozen blood samples from participants in NIA's Baltimore Longitudinal Study of Aging (BLSA). The BLSA already has data from repeated clinical exams on individuals for more than 25 years. The researchers studied samples from a total of 54 participants—18 with prostate cancer, 20 with BPH, and 16 who were healthy—and showed that PSA levels increased exponentially 7 to 9 years before the actual clinical diagnosis of prostate cancer.

This finding may increase the cure rate for prostate cancer,and could have the potential of accurately screening for prostate cancer much like mammography does for breast cancer. If future research confirms that long-term measures of PSA are more accurate than single measurements, it would be a more reliable and less costly screening test for early prostate cancer detection.

Most prostate problems are initially found by a routine digital rectal exam. If a growth is detected, the physician follows up with an ultrasound examination and a biopsy. If the tissue proves to be cancerous, treatment includes surgery or radiation therapy. However, 60 percent of patients have disease outside the prostate by the time it is diagnosed clinically, if they rely solely on a digital examination.

Prostate cancer is the most common cancer found in American men. More than 130,000 new cases will be diagnosed in the United States this year and about 34,000

men will die of the disease. If the the disease is detected before cancer cells migrate beyond the prostate gland, it can be completely cured. for advanced stages of the disease, there is no cure. Thus, this research will affect thousand of men over age 50, and offer them—and their doctors—a big boost in peace of mind when testing for prostate cancer.

CALCIUM IN CHILDHOOD PROTECTS AGAINST OSTEOPOROTIC FRACTURES

Osteoporosis is a condition in which bones become thin, fragile, and highly prone to fractures. If affects an estimated 25 million Americans, 80 percent of whom are women. Each year the disease results in about 500,000 spinal fractures and about 3,000,000 hip fractures. In addition to the pain, long periods for recuperation, and loss of mobility and independence, treatment costs the Nation up to $10 billion each year, thus making hip fractures a major contributor to spiraling health care costs.

A central factor in preventing osteoporosis is high calcium consumption throughout life. Increased calcium intake is associated with a greater gain in bone mass during childhood. This higher bone mass is important since it protects against future osteoporotic fractures.

NIA researchers recently found that taking in more calcium than the recommended dietary allowance (RDA) during childhood could benefit the adolescent skeleton. Dr. C. Conrad Johnson, Jr., and colleagues at the Indiana University School of Medicine in Indianapolis showed that even when a preadolescent child's normal dietary calcium intake met the RDA, additional calcium significantly increased the gain in bone mass. If this increase in bone mass can be maintained into adulthood, these people can expect a lower risk of osteoporotic fractures.

This study is the first to find a direct link between the amount of calcium consumed in childhood and skeletal development. The finding poses a tremendous opportunity for an early focus on the prevention of osteoporosis, particularly for growing girls.

According to Dr. Johnston, peak bone mass is a major determinant of bone mass later in life, and an increase in peak bone mass could protect the bones from the depletion that occurs with aging and menopause. Although family genetics plays a major role in determining bone mass, other factors such as exercise and nutrition are also important. Dr. Johnston's work followed previous studies suggesting calcium may be important for the development of peak bone mass and that a high-milk intake early in life is associated with increased bone mass later on. This study looked at whether calcium alone was effective in increasing the rate of bone acquisition.

Dr. Johnston studied 45 healthy identical twin (ages 6 to 14) in a double-blind placebo-controlled trial that lasted 3 years. All the children continued with their normal diet, which included the average RDA of calcium (800 mg a day for children 1 to 10 years and 1,200 mg a day for children 11 and older). One child in each twin pair received an average of 700 mg extra calcium each day. The supplemental calcium came from calcium citrate malate. According to researchers, this form of calcium has been shown to be absorbed well in children and young adults and to slow bone loss in older women.

All the children showed substantial increases in bone density throughout the course of the study. But the prepubertal children who received extra calcium showed greater overall gains, including statistically significant gains in the forearm and spine. There was no difference in response to the calcium supplement between the boys and girls in the study.

This finding highlights the importance of adequate calcium intake in children. Because bone loss typically begins around 35, even small changes in peak bone mass in the population may contribute to reductions in the fracture rates seen in older men and women.

TO DRIVE OR NOT TO DRIVE? NEW RESEARCH DEFINES RISK, SHOWS HOW OLDER DRIVERS' SKILLS CAN BE IMPROVED

Each year many older Americans and their families have to ask whether—in the face of advancing age, disability, vision loss, and attention problems or Alzheimer's disease—the license to drive should be limited or even taken away. With more and more older drivers on the road as the population ages, questions about their safety become more urgent.

Scientists are beginning to find some answers. Driver accidents analyzed by NIA scientists show that, contrary to popular stereotypes, crash rates for older drivers fell during the 1980's. However, the rate of deaths increased significantly, suggesting older drivers may be particularly vulnerable when crashes do occur.

These findings were reported by NIA scientists at a meeting in Bethesda, Maryland, cosponsored by NIA, the National Highway Traffic Safety Administration, the Federal Highway Administration, and the Centers for Disease Control. The scientists focused on identifying what additional research is needed to improve the safety and mobility of older drivers. They specifically emphasized the older drivers' functional abilities. Suggestions were made on ways to better understand accident risk among older people, how deaths among this segment of the population could be reduced, and ways to test and improve driving skills.

The number of older drivers rose rapidly during the 1980's and this increase was most marked among drivers over 70. These changes brought with them a sharp increase in older people who were killed when driving a car. In fact, while driving fatalities decreased during the 1980's fatalities among drivers over 65 increased by 43 percent.

Despite these fatality statistics, there is no support for the view that older drivers are an undue risk to others on the highway. Crash rates (accidents per 100 drivers) for people 65 and older fell significantly from 1980 to 1989. The increase in fatalities suggests rather that older drivers may be at greater risk of dying when involved in a crash. So the concern is for the risk of injury to the older person.

The freedom that driving means for older people is also of concern, especially for the increasing population in the suburbs and rural areas. Losing a license to drive can mean ending the independence to visit friends, to go grocery shopping, or to see the doctor. The decision of whether or not to continue driving is a difficult one for older people and their families.

NIA meeting participants recommended a balanced approach to address the problems facing older drivers. While scientists must find ways to identify the driving limitations experience by older people, cars and highways also need to be made safer. Meanwhile, licensing programs should not needlessly deny or restrict older drivers.

RESEARCHERS ENCOURAGE GREATER USE OF VACCINE FOR PNEUMOCOCCAL INFECTIONS

NIA grantees have found convincing evidence that a pneumococcal vaccine, available in the United States since 1977, should be used more widely to prevent pneumonia in high-risk groups, such as older adults.

Dr. Eugene D. Shapiro at the Yale University School of Medicine in New Haven, Connecticut, and his colleagues have been studying the polyvalent pneumococcal vaccine, which prevents infection with *Streptococcus pneumoniae,* the most common cause of bacterial pneumonia. The researchers learned the vaccine was 61 percent effective in people with normal immune systems.

This 6-year study included 2,108 adult patients in 11 hospitals throughout Connecticut. The pneumococcal vaccine was given to 1,054 of the participants. Afterward, scientists compared the rate of vaccination in people who developed serious pneumococcal infection against the rate of unvaccinated controls.

The pneumococcal vaccine is currently recommended by the Public Health Service for everyone over age 65, although only about 20 percent of older Americans have been vaccinated. It is most effective when received before age 65 rather than later, and experts are now considering whether the age for this universal recommendation should be dropped to 55.

The groups at highest risk of developing an infection are older adults, individuals with a chronic illness (such as heart disease or diabetes), and people with a weak immune system (such as resulting from kidney disease, some cancers, HIV infection, and other conditions). These groups are more likely to develop pneumonia than others, and their illness is more likely to be life-threatening.

Dr. Shapiro and his colleagues believe their study provides the evidence that immunizations are valuable for preventing pneumonia. Although widespread vaccination will not totally eliminate the disease, it will significantly reduce the incidence. Meanwhile, work is under way on improving the vaccine's effectiveness.

DIABETES AND AGING

NIA studies the biological mechanisms underlying diabetes as well as risk factors for the disease, which is about 10 times as prevalent among older people as in younger adults. Recent NIA findings show that fasting glucose levels as low as 107–111 mg/dl in older people indicate a risk for developing diabetes. Researchers at the NIA's Gerontology Research Center in Baltimore, Maryland, examined 25 years of data on diabetes risk factors from its Baltimore Longitudinal Study of Aging (BLSA). The BLSA is an ongoing study involving more than a thousand men and women from age 20 to over 90. They found that fasting glucose levels as low as 103–

106 mg/dl in men 28–59 years of age and 107–111 mg/dl in men 60–96 years of age carry significantly increased risk for the future development of diabetes. These levels are considerably lower than those previously considered to place an individual at risk.

According to the BLSA data, increasing obesity and abdominal fat explain much of the higher risk for diabetes that come with age. Other studies have shown that diet plus moderate exercise can reduce these risks. How exercise lowers risk was demonstrated by recent, NIA-sponsored research in which exercise training improved glucose tolerance and insulin sensitivity. The improvements were linked to increases in lean body mass, reduced fat mass, and higher glucose disposal rates.

In studying the mechanisms of age-related insulin resistance, another NIA grantee found no difference in number of insulin receptors between young and old rats. Insulin receptors from older rats, however, showed significantly lower levels for both the enzyme tyrosine kinase and autophosphorylation, which are needed by insulin to stimulate glucose transport into cells. These findings suggest that such deficits may be major factors in age-related insulin resistance.

ARTHRITIS AND AGING

Arthritis is an area of special importance to the institute since it affects over 18 million individuals over age 60 and is the number one cause of disability for older people.

Osteoarthritis, the most common form of arthritis, is the focus of recent studies conducted by Dr. Marc C. Hochberg and colleagues at the University of Maryland School of Medicine and Dr. Jordan D. Tobin and associates at NIA's intramural program at the Gerontology Research Center. These scientists analyzed cross-sectional longitudinal data from the Baltimore Longitudinal Study of Aging to examine risk factors for hand arthritis in both women and men. They evaluated the role of age, obesity, body composition, bone mass, muscle mass, and muscle strength as risk factors for hand arthritis. Body mass index, waist-to-hip ratio, arm and shoulder skinfold thicknesses, bone mineral density, and grip strength were measured. Changes in hand osteoarthritis were identified on X-ray obtained as part of the longitudinal study's evaluation of participants.

The data from these studies failed to demonstrate causal associations between obesity, body fat distribution, body composition, bone mass, forearm muscle mass, or grip strength with either the presence or progression of hand osteoarthritis among participants. However, hand arthritis increased as participants aged.

OLDER RURAL POPULATIONS

In light of the rapidly increasing costs for health care, NIA places a high priority on research that examines access to health care services for older people living in rural areas of the United States. AD in rural populations is the focus of a major research program at NIA. Much of what is known about AD comes from studies of people who seek care in university medical schools, such as the NIA-funded Alzheimer's Disease Centers across the country. Rural areas, and particularly the Appalachian mountain region, are of special interest because many of the residents experience poverty, malnutrition, an inferior education, and dangerous work environments. They are often injured or develop illnesses associated with these work places; exposed to environmental toxins in the agricultural and mining industries; and receive infrequent, inadequate health care.

To extend the services of Alzheimer's Disease Centers, NIA recently established 26 Satellite Diagnostic and Treatment Clinics. These clinics will encourage greater participation at existing centers by people who need services but are unable to gain access because of their living conditions. Researchers believe these clinics will produce greater heterogeneity among participants, which in turn will result in more generalizable research findings.

In a separate study on AD in rural populations, NIA researchers at the University of West Virginia have been analyzing prevalence of AD among poor, older people living in Morgan, Marshall, and Tucker counties. Results from this ongoing project will add to our basic knowledge about the disease and can aid State policymakers in identifying those older residents in greatest need of resources.

The Center on Aging and Health in Rural America is a large multidisciplinary study evaluating the effects of socioeconomic and demographic characteristics on the health care services received by older people in rural communities. Researchers recently found that older people in rural areas are poorer than their urban counterparts, and this difference increases with age. After demographic variables (such as age, sex, race, and education) were matched between the rural and urban groups,

the investigators were able to link the rural group's lower socioeconomic level to preretirement employment conditions and to the lower pay scales prevalent in rural communities. It will be important to determine if the lower cost of living in rural settings is significant enough to offset the reduced income, particularly in terms of gaining access to needed health services.

OLDER MINORITY POPULATIONS

NIA supports a broad range of research related to life expectancy, health, environmental influences, social networks, interventions, and biomedical characteristics targeted to ethnic minorities. NIA has worked aggressively to enhance existing biomedical, clinical, and behavioral research on minority aging and is committed to increasing the racial and ethnic diversity of its investigators.

Institute funding for research efforts relevant to ethnic minorities has nearly doubled since 1991. In 1992, approximately $18 million was obligated to expand existing programs as well as start new initiatives. Regarding the development of minority scientists, NIA awarded over $2 million in supplemental funding to support underrepresented minority researchers, including supplements to renowned MERIT grantees. As one other example of institute support for minority scientists, approximately $900,000 in funding was used by the NIH Minority Biomedical Research Support Program.

Highlighting NIA-sponsored research on minority aging, several major new initiatives were launched in 1992. These included approximately $2 million in awards focused on older Hispanic populations, $1.9 million for research on the long-term care needs of ethnic minority populations, and $750,000 for educational outreach programs on AD. Many of the institute's fact sheets about aging—known as *Age Pages*—have been translated into Spanish, and new dissemination efforts geared toward older Hispanic communities are presently under way. The institute is also expanding its efforts to increase the representation of African-American men and women in its intramural program, the Baltimore Longitudinal Study of Aging, which is a landmark study on human aging. NIA also sponsors the Summer Institute in Research on Minority Aging, a week-long conference held yearly that focuses on ethnic minority aging. The Summer Institute provides the opportunity for beginning researchers, university faculty members, and institute staff to discuss topics related to health, race, and aging.

AIDS AND OLDER AMERICANS

Immune function normally decreases with age, but it declines more quickly in older AIDS patients, who become sick and die sooner than their younger counterparts. People with AIDS who are age 50 and above account for about 10 percent of all AIDS patients in the United States. Thus, NIA researchers continue to explore the effects of age on HIV infection and the immune response to HIV.

In the first category, exploring the effects of age on HIV infection, recent laboratory work has shown that it takes longer for older people to produce new T-cells following trauma. This finding suggests that the net sum of circulating T-cells in an HIV-infected person depends not only on how many are destroyed but also on how quickly new T-cells enter the system. In older AIDS patients, the study suggests, the rate of entry is probably slower than in younger patients.

In the second category, immune response to HIV, investigators at NIA have also learned more about the basic biology of the infection. A key finding is that while antibodies to certain HIV antigens decline as the infection progresses, other antibodies—those to the so-called envelope antigens—remain at high levels. Envelope antigens are also found at high levels in the serum of AIDS patients, and the antibodies bind to them, creating large numbers of antigen-antibody complexes. These toxic combinations are usually dealt with by immune system cells called macrophages, but in AIDS patients their sheer numbers appear to overwhelm the body's defenses, preventing them from dealing with other assaults, such as an invasion of bacteria. This appears to be one reason that AIDS patients are highly susceptible to infection.

Other recent findings show that certain illegal drugs can influence sectors of the immune system. Researchers sponsored by NIA and the National Institute on Drug Abuse found that amyl nitrate can inhibit natural killer cell activity and cocaine can cause a decline in antibody production in laboratory tests.

RESEARCH ADVANCES ON AGING SUPPORTED AND CONDUCTED BY OTHER NIH INSTITUTES

National Cancer Institute

More than one-half of all cancers are diagnosed in people over 65 years of age. The National Cancer Institute (NCI) is using the full range of its resources to address this important problem. For example, all NCI-supported clinical trials are reviewed to ensure that older patients are not arbitrarily excluded from participation. Eight treatment trials focus primarily on cancers in older patients. In addition, trials for breast cancer in post-menopausal women and for prostate cancer have a large percentage of older people.

The NCI efforts include information and awareness campaigns, studies of the effects of lifestyle practices on health in older Americans, and basic research on the aging process. An NCI educational initiative provides information on early detection tests and treatment choices. During 1992, NCI started a major new clinical trial to look at methods of detecting cancers of the prostate, lung, colon and rectum, and ovary. The study is designed to see if screening tests such as flexible sigmoidoscopy for colon cancer, chest X-rays for lung cancer, and pelvic exam, transvaginal ultrasound and CA 125 tests for ovarian cancer can reduce cancer mortality in older Americans. This large trial will also define the positive predictive value of screening tools such as prostate specific antigen (PSA) for early detection of prostate cancer. About 74,000 women and 74,000 men ages 60–74 will participate.

The National Center for Nursing Research and NIA have joined NCI in a 3-year research initiative to enhance care for older women with cancer. This program focuses on identifying factors that influence delays in diagnosis, evaluation of the extent of disease, and referrals for supportive care and rehabilitation for breast cancer patients who are at least 65 years old. Investigators are exploring what influences treatment decisions, as well as access to and availability of cancer care.

National Heart, Lung, and Blood Institute

The National Heart, Lung, and Blood Institute (NHLBI) supports a number of large, population-based studies related to cardiovascular disease (CVD) in older people. The past year has brought new findings that extend our understanding of CVD risk in that age group. For instance, the long-running Framingham Heart study recently reported data from echocardiographic measurements of 1,159 participants. The findings demonstrated a greater than two-fold increased risk of stroke in participants with calcification of the mitral valve annular, after adjustment for other stroke risk factors such as age, sex, systolic blood pressure, diabetes, cigarette smoking, atrial fibrillation, coronary heart disease, and congestive heart failure. Even when participants with coronary heart disease or congestive heart failure were excluded from analysis, those with mitral annular calcification still had twice the risk of stroke as those without.

Following the recent demonstration in the Systolic Hypertension in the Elderly Program (SHEP) that treatment of isolated systolic hypertension (ISH) reduces risk of stroke in older people, cross-sectional data from the Cardiovascular Health Study were analyzed to determine the association between ISH and noninvasive measures of subclinical disease. Among 2,189 persons age 65 and older, ISH was strongly associated with increased left ventricular mass, a known risk factor for CVD, and with increased intima-media thickness of the carotid artery. These findings underscore the importance of diagnosing and treating ISH, a common condition among older people.

National Institute of Dental Research

The National Institute of Dental Research (NIDR) gives high priority to the oral health of older Americans. Saliva plays many important roles in the mouth, particularly in oral immunity and digestion. Saliva contains special immune components which limit the growth of harmful bacteria that cause tooth decay and other oral infections. Saliva also lubricates the mouth's soft tissues, making speaking and chewing easier, and it assists digestion by providing enzymes that break down food. Because of saliva's importance to oral health throughout life, NIDR scientists examined salivary function in a 10-year study of healthy older Americans. Expanding on a previous finding that saliva output does not diminish with age, investigators this year showed that important components in saliva collected from parotid glands, one of the three major pairs of salivary glands, do not alter over time. They concluded that salivary composition remains unchanged as individuals grow older.

In another study, NIDR grantees are exploring whether a combination of periodontal disease, dry mouth, and swallowing disorders places older people at increased risk for aspiration pneumonia, a leading cause of death among people over 65. This form of pneumonia results when bacteria-infected saliva is aspirated into the lungs. In a study of 450 older people (ages 58 to 100), researchers found that almost one-third took medications that cause dry mouth, one of the suspected risk factors. The scientists are now investigating whether periodontal disease is the source of the bacterial infection that causes aspiration pneumonia and whether swallowing disorders promote the influx of bacteria into the lungs.

National Institute of Diabetes and Digestive and Kidney Diseases

Osteoporosis is a major public health issue that affects large numbers of postmenopausal women. As the lead institute for endocrine and nutrition research, the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) conducts and supports research on the multiple ways vitamin D and its receptor stimulate bone formation and resorption.

In earlier research supported by NIDDK, scientists verified that vitamin D was targeted to cells in the intestines, bone, and kidneys. However, they also found the vitamin D receptor in unexpected places, such as in breast epithelial cells, in the ovaries, in pancreatic islet cells, in certain skin cells, and in some malignant cells, leading them to consider whether vitamin D did more than raise the level of calcium and phosphorus in blood to form bone.

Using techniques of molecular biology, these scientists have now delineated the structure and function of the vitamin D receptor. They have discovered that vitamin D and its receptor not only synthesize bone proteins and stimulate the body's use of calcium and phosphorus to build bone, but that they also play a second important role in stimulating and signaling the bone cells responsible for bone remodeling.

With this knowledge, researchers are now in a position to develop analogs for vitamin D as a treatment for osteoporosis, and to explore the use of vitamin D compounds to treat some types of cancer and skin disease such as psoriasis.

National Institute of Neurological Disorders and Stroke

The National Institute of Neurological Disorders and Stroke (NINDS) is the lead institute for research on a number of nervous system disorders—such as stroke and Parkinson's disease—that occur with greater frequency in older people. The institute also conducts and supports research on a number of other diseases that occur more commonly in older people such as AD.

Scientists investigate Parkinson's disease

Parkinson's disease—characterized by tremors, rigidity, and difficulty initiating movement-adversely affects the quality of life for more than half a million people in the United States. Even simple tasks, such as holding a spoon or rising from a chair, can become impossible for Parkinson's patients. The disease occurs as a result of a loss of brain cells that produce dopamine, a chemical that carries signals from one nerve cell to another. While many advances have been made in treating the symptoms of Parkinson's disease, its underlying cause remains a mystery. This year, significant findings by NINDS investigators are yielding intriguing new clues to the disease.

In the last decade, the chemical MPTP (1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine) has become a highly significant tool for research on Parkinson's disease. MPTP becomes transformed in the body into a toxic chemical that selectively destroys dopamine neurons in the substantia nigra, part of the basal ganglia at the center of the brain. This destruction results in a paralysis that faithfully mimics Parkinson's disease, allowing researchers to create a useful animal model of the disease and test possible therapeutic drugs. The high degree to which MPTP replicates the natural pathology of Parkinson's disease suggests that the disease itself may be the result of an internal or external neurotoxin that resembles the chemically transformed MPTP. This year, scientists funded by the NINDS suggested that a class of MPTP-like compounds called N-methylated beta-carbolines could be capable of producing Parkinson's disease.

Scientists are also looking for the cause of Parkinson's disease in the cell structures that carry dopamine in and out of the synapse between cells. One group found an age-related decrease in dopamine transporter in the area of the brain that is damaged in Parkinson's disease.

Since the 1960's, L-dopa has been the major drug for relieving the symptoms of Parkinson's disease. Clinicians have found, however, that the effectiveness of L-dopa fluctuates over the course of therapy. This year, one group of NINDS-supported investigators found evidence that this clinical "on-off" phenomenon is the result of desensitization of the dopamine receptors in the brain. This provides the basis for research aimed at affecting this desensitization process and ameliorating the "on-off" clinical phenomenon.

One new avenue of research on treatments for Parkinson's disease focuses on a method for delivering dopamine to critical areas in the brain. NINDS-supported investigators, using an animal model of the disease, implanted tiny dopamine-containing particles into brain regions affected by the disease. The investigators found that such implants can partially ameliorate the movement problems found in these animals. The results suggest that similar techniques may work for people with Parkinson's disease.

SCIENTISTS STUDY RAPID TREATMENT FOR STROKE

Stroke represents the third most common cause of death in the United States, and the disease results in physical and psychological disability far more often than death. This year, NINDS supported studies of tissue plasminogen activator (tPA), a compound that breaks up blood clots in the brain and might stop brain injury early in the course of a stroke. In preliminary studies, the scientists found that patients with acute stroke could be treated with tPA and that success might be expected if the drug is given within 90 minutes of the stroke's onset. These results lead to the need for a randomized clinical trial of the drug in humans.

National Institute of Allergy and Infectious Diseases

The broad range of basic research supported by the National Institute of Allergy and Infectious Diseases (NIAID) in the prevention, diagnosis, and treatment of infectious diseases is an important area of focus in studying the problems of older people. Respiratory infections, such as pneumonia, are often more serious in this population than in other age groups. In addition, an increasing number of people are developing asthma later in life. *Chlamydia pneumoniae* is emerging as an important cause of respiratory conditions, including pneumonia and asthma.

The difficulty of diagnosing *C. pneumoniae* infection by standard tests such as serology and culture may delay infection. Recently, NIAID intramural scientists have experimented with using a laboratory test called polymerase chain reaction-enzyme immunosorbent assay (PCR-EIA) to detect chlamydial antigen. The PCR technique is a method of amplifying an organism's DNA so that minute quantities can be detected. The researchers used this technique on 132 samples from immunocompromised patients with pneumonia that had been negative using the culture technique to detect the organism. In the PCR-EIA test, however, 9.8 percent of the culture-negative samples were positive for *C. pneumoniae*. The PCR-EIA technique, which is more sensitive than others, could be an important tool in identifying this difficult-to-isolate bacterium.

National Eye Institute

Today, there are over 32 million Americans age 65 and older. By the year 2030, this figure will more than double to nearly 66 million Americans. With more older people in our society, more Americans than ever will enter the Nation's health care system with eye diseases such as cataract, age-related macular degeneration (AMD), and glaucoma. A major goal of the National Eye Institute (NEI) is to find ways of reducing age-related vision loss that can reduce quality of life.

An important research challenge is to differentiate the abnormalities underlying age-related eye disease from the eye's natural aging process. It a better understanding of these processes can be obtained, it may be possible to develop improved prevention and treatment strategies for these diseases. To promote research in this area, the NEI has launched the Age-Related Eye Diseases Study (AREDS), a major multicenter clinical project in which researchers will document the ocular aging process in over 4,600 older Americans.

Another challenge is to evaluate whether vitamin and mineral supplements slow the development or progression of cataract and AMD. Some research data suggest that people at risk for cataract and AMD can benefit from vitamin and mineral supplements, since these may activate key enzyme systems or serve as antioxidants. The NEI has recently established a new component of the AREDS to evaluate vitamin and mineral supplementation. Because this area of the study will be conducted

as a large randomized clinical trial, AREDS should offer the most definitive information to date on this important therapeutic question.

National Institute of Environmental and Health Sciences

The National Institute of Environmental and Health Sciences (NIEHS) places a high priority on research investigating the environmental contribution of certain diseases or conditions that commonly affect older people, basic research on the mechanisms of aging, and the effect of environmental agents on the aging process.

GENE MAPPING AND SEQUENCING RESEARCH

NIEHS intramural scientists have an ongoing program to map and sequence genes that regulate the aging process, and genes that predispose individuals for cancers that affect older people such as breast and prostate cancer. Discovering, mapping, and sequencing these genes will enable physicians to identify individuals who are at risk of developing diseases as they age, and to develop strategies to block the expression of undesirable genes.

THE EFFECTS OF HAZARDOUS ENVIRONMENTAL AGENTS ON THE AGED

As people age they become more sensitive to environmental agents, their organs and systems become more susceptible to damage from exposure, and their ability to recover from harmful environmental exposure is impaired. Exposure to certain agents may hasten or exacerbate the aging process. NIEHS-supported researchers, using animal models and human epidemiologic studies, determine how certain types of exposure—such as to air pollution, ultraviolet light, and heavy metals—affects people differently as they age. These study results are used to develop strategies to prevent exposure and illness, and to bring about regulations to protect those populations who are more susceptible.

National Institute of Arthritis and Musculoskeletal and Skin Diseases

Many of the disease conditions under the aegis of the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) are associated with aging. These include certain bone diseases such as osteoporosis and Paget's disease, joint diseases such as osteoarthritis, degenerative back diseases, and skin diseases such as pemphigus.

More than 1.5 million Americans each year have fractures of the hip, wrists, and spine due to osteoporosis. NIAMS scientists, studying bone mineral density in the wrists and hips of 1,150 older men and women, found that men had significantly higher bone mass than did women. Other NIAMS researchers found that moderate weight-bearing exercise increased bone mineral density in the lower spine of both men and women. They concluded that weight-bearing exercise is vital to prevent excessive bone loss in older people.

Osteoarthritis (OA) affects an estimated 16 million Americans and may cause disease in the knees, hips, and spine. In separate studies, NIAMS researchers found that the risk of OA in the knee can be significantly reduced by weight loss (in women) or by a program of supervised fitness walking. OA causes considerable disability and accounts for most of the total knee replacements done in the United States annually.

Paget's disease affects more than 3 million older Americans. It causes increased bone formation in one or more bones of the skull, pelvis, hips, and knees. Researchers have found that calcitonin may be a valuable treatment for patients with advanced stages of the disease.

National Institute of Deafness and Other Communication Disorders

The National Institute of Deafness and Other Communication Disorders (NIDCD) supports and conducts research and research training in hearing, balance, smell, taste, voice, speech, and language. The physiological changes that occur with normal aging may affect each of the NIDCD's seven areas of interest. In addition, certain diseases and disorders associated with aging may affect the ability to communicate.

NIDCD-supported scientists studying presbycusis, or age related hearing loss, tested whether inner ear pigment protects the ear from degeneration and subsequent hearing loss. While it was thought that loss of pigment in the inner ear with age contributes to hearing loss, these investigators concluded that age-related inner ear degeneration does not appear to be related to inner ear pigment.

Parkinson's disease is usually associated with people in older age groups. It is possible that some forms of this disease may be caused by an environmental toxin that enters the body through the olfactory nerve which transmits smell impulses from the nose to the brain. A recent NIDCD-supported study found that persons with Parkinson's disease caused by injections of the street drug MPTP have a normal sense of smell, whereas those with the disease from unknown causes have a reduced sense of smell. This supports the theory that some forms of Parkinson's disease may be caused by environmental toxins that enter the brain through the olfactory nerve.

National Institute of Mental Health

One focus of research at the National Institute of Mental Health (NIMH) is to better understand the etiology, course, and treatment of the major mental disorders of late life. At least 8 percent of the older population are affected by AD and other dementias; 20 percent suffer from anxiety disorders, including phobic disorders; and nearly 1 percent suffer from schizophrenia. Delirium, sleep disorders, and personality disorders are also common among older people. Nearly 40 percent of geriatric patients having major depression also meet criteria for an anxiety disorder. As many as 30 percent of dementia patients suffer from major depression and may exhibit symptoms of agitation, paranoia, hallucinations, and sleep disturbance. Among frail older people with multiple coexisting medical illnesses, "failure to thrive" has been associated with psychiatric symptoms. By one estimate, only about 10 percent of older people in need of psychiatric treatment ever receive it.

Data from NIMH-supported studies suggest that many disorders with late life onset appear to have different clinical, neurobiological, cognitive, and psychosocial features; and they respond differently to treatment than early onset forms of the disorders. For example, brain imaging studies have found differences in certain brain structures of older psychotic depressed patients. Researchers are exploring the hypothesis that geriatric depression may have a different etiology and pathogenesis, including brain changes induced by neurological diseases or aging. These results suggest that findings based on samples of young adults may not apply to older people.

Depressive illness in the older population continues to be a serious public health concern. In the NIH Consensus Development Conference on Diagnosis and Treatment of Depression in Late Life, cosponsored by NIMH, it was reported that nearly 5 million individuals age 65 and over have serious, persistent symptoms of depression and over 1 million suffer from major depression. Several NIMH studies demonstrate that psychopharmacological approaches and electroconvulsive therapy are effective in treating acute depressive episodes, either alone or in combination with psychosocial approaches.

New studies using imaging techniques and pharmacologic probes suggest that geriatric patients with delusional depression may represent a distinct subtype. Patients with delusional depression were found to have a trend toward chronicity or partial recovery, compared to nondelusional depression; but once recovered, delusional patients were less likely to relapse. Researchers also found an association between hearing loss and delusional depression; moreover, computerized tomography scans show differences between patients with delusional and nondelusional depression.

It is well documented that older people have the highest suicide rate. White men over 65 have a suicide rate more than double that of adolescents. With increasing age, suicide victims use more effective and lethal means to take their lives, such as firearms. Thus, older people have a much lower ratio of attempted to completed suicides. NIMH research (based on psychological autopsy data) shows that a profile for late life suicide is distinguishable from suicide in other age groups. This profile uses demographic, behavioral, and psychological factors to support the following conclusions: suicide in older people is strongly associated with affective disorder (depression) with late onset; depression in older suicide victims is primarily unipolar and less often associated with psychosis or active substance abuse; and suicide in older people is frequently associated with physical illness or loss. About 70 percent of older suicide victims had been seen by their primary care physician in the month prior to the suicide, but in no case was depression recognized or treated.

Between 30 and 50 percent of older people suffer from chronic sleep disturbance, a condition often leading to problems with use of sleeping pills (hypnotic medications), reduced quality of life, and increased morbidity and mortality. Hypnotic drugs may worsen breathing problems during sleep and produce daytime carryover effects such as sleepiness, falling and subsequent fractures, cognitive impairment, and forgetfulness. Clinical trials have demonstrated that cognitive-behavioral therapy and light

therapy may effectively relieve sleep disturbances in older people. Moreover, preliminary evidence indicates that increased aerobic fitness can improve the quality of sleep. Findings from the trials of light therapy are particularly encouraging because of the potential use of this strategy with cognitively impaired and depressed people. Researchers are now investigating the use of these therapies for long-term maintenance, as well as their effectiveness among different older populations. They have demonstrated that acute depression in late life is associated with profound and specific changes in the physiological organization and intensity of sleep, and that tricyclic antidepressants can alter sleep (as measured by electroencephalogram) in depressed patients.

An NIMH-NIA longitudinal study will soon examine the reciprocal effects of special environment and psychological functioning in older people. Researchers have located and are resurveying most of the 1974 respondents from a 1964-74 study. The study had demonstrated that the complexity of social environments (i.e., on the job or at home) has a positive effect on cognitive functioning. Regardless of age, participants engaged in more substantively complex and self-directed work over the 1964-74 decade were more likely to improve their cognitive functioning than those engaged in less complex work.

NIMH scientists are also studying Parkinson's disease. The disease is caused by degeneration in a small group of dopamine-containing neurons. These neurons are crucial to the regulation of movement, eating and drinking, and other behaviors that are deficient in persons with Parkinson's disease. Researchers have performed grafts of normal tissues in rats and now in the rhesus monkey. Graft survival is erratic; however, in animals showing the greatest success, the behavioral response produced by the graft has lasted one year. An instrument that facilitates grafting was developed and a patent awarded.

AD progresses gradually over periods of up to 20 years, and initial symptoms usually include mild memory loss. As the disease progresses, patients present more pronounced cognitive impairment, personality changes, disorientation, and wandering behavior. NIMH scientists have identified a spinal fluid protein (alpha-2-haptoglobin) that is elevated in AD patients, and which may be useful as a diagnostic marker for the disease.

NIMH research has shown that many brain changes caused by AD are seen in the normal brains of older people. The question then is whether a key difference exists in Alzheimer's brains. One working theory many scientists are using is that in diseased brains there is an exaggeration of the normal aging processes. Recent research has shown that certain brain chemicals, acetylcholine and somatostatin, which control communication between nerve cells involved in cognitive and memory functioning are profoundly diminished in Alzheimer's brains. Research efforts are focused on learning as much as possible about how these substances work and how they interact with each other.

National Institute on Alcohol Abuse and Alcoholism

The National Institute on Alcohol Abuse and Alcoholism (NIAAA) conducts and supports biomedical and behavioral research on the causes, consequences, treatment, and prevention of alcohol-related problems.

One of NIAAA's alcohol research centers is devoted entirely to the study of alcohol and aging. At the University of Michigan center, researchers are examining medical effects of alcohol use, age-related changes in alcohol sensitivity, and strategies to foster identification and treatment of alcoholism in older adults.

Several NIAAA epidemiological studies are underway to derive information on drinking patterns and problems among older drinkers, especially women, and the relationships between alcohol consumption and health problems such as hypertension and heart disease, and cirrhosis morbidity and mortality.

Using noninvasive imaging techniques in persons with alcoholism, researchers have found that reductions in both whole brain gray and subcortical white matter accelerate with age. Research in both humans and animals has shown that older individuals have increased sensitivity to the acute effects of alcohol, as measured by physiological responses and motor impairment. Results from some cognitive function studies further suggest that alcoholism and aging may have a compound effect on cognition—so that the aging brain may be at increased risk from deleterious alcohol effects.

National Center for Research Resources

Resource centers and other funding mechanisms provided by the National Center for Research Resources (NCRR) support a variety of studies on aging, including the

development of an animal model for postmenopausal bone loss. Scientists at Morehouse School of Medicine have found that an analogue of the reproductive hormone gonadotropin-releasing hormone (GnRH) can induce early and reversible menopause in rhesus monkeys. These animals not only serve as a model for human menopause, but also can be used to study progression and treatment of postmenopausal bone loss.

In collaboration with investigators at the Yerkes Regional Primate Research Center in Atlanta, the scientists at Morehouse recently discovered that growth hormone administration helps to preserve bone mass in these animals. A group of GnRH agonist-treated monkeys lost about 12 percent of their bone mass, whereas animals treated with GnRH agonist plus growth hormone showed no significant bone loss. These findings indicate that growth hormone therapy may have potential for reducing bone loss in menopausal women and in women who take GnRH agonists to treat endometriosis and other conditions. The scientists are now investigating how growth hormone and other compounds help to interrupt the progression of bone loss.

National Center for Nursing Research

The National Center for Nursing Research (NCNR) focuses on long-term care strategies for older people to help them maintain optimal health status, the highest functional ability, and the best quality of life possible.

A widespreasd impediment to this goal is confusion, which affects an estimated 50 percent of hospitalized older patients. It increases morbidity, mortality, and complications such as dehydration and falls. NCNR-funded studies of assessment tools and intervention strategies are determining the nature of confusion, at what point it occurs, and what nurses and others can do to prevent or modify it.

One study has tested a new evaluation scale to identify those at risk for confusion and those already showing symptoms. It can be scored by nurses at the bedside with little stress to patients; at the same time, it is a more sensitive measure of early or mild cognitive disturbances than other mental status tests. Using this scale, researchers have identified three patterns of confusion: chronic or environmentally induced, physiological, and metabolic. Pattern-specific nursing interventions are currently being developed and tested to reduce the incidence of confusion and improve patient functioning. This and similar studies will help nurses distinguish among types and causes of confusion, recognize patients at risk who need preventive care, and modify existing confusion using interventions tailored to the cause.

OUTLOOK

The breadth of scientific findings in this report demonstrates NIH's success in implementing its research agenda. These achievements by NIH scientists are already beginning to provide the information needed by doctors to treat their older patients.

The various NIH programs including NIA, which is the lead federal agency responsible for conducting research on the health of older adults, are achieving rapid progress on several fronts. Scientists are clarifying the differences between normal aging processes and disease states; they are identifying the basic biological mechanisms that control aging; and they are training geriatricians as research scientists and physicians. With an increasing body of scientific knowledge and more doctors tained in geriatrics, older Americans are beginning to receive more effective health care. As research advances continue to become available, long-range goals will also be realized: older Americans can expect to stay healthy for a greater part of their later years, and the Nation will have information needed to control health care costs.

NATIONAL INSTITUTE ON AGING ACTIVE GRANTS IN FISCAL YEAR 1992

Grant number	Principal investigator title	Budget start	Dates end	Institution	Total
5 P01AG00001-18	Peters, Alan, neural substrates of cognitive decline in aging monkeys..	02-01-92	00-17-00	Boston University	798,364
5 T32AG00029-17	Cohen, Harvey J., behavior and physiology in aging	07-01-92	02-97-00	Duke University	243,272
5 R01AG00029-18	Patterson, David, gene expression in somatic cells in the aging process.	07-01-92	02-97-00	Eleanor Roosevelt Institute for Cancer Research	307,571
2 T32AG00030-16	Storandt, Martha A., aging and development	09-01-92	03-07-00	Washington University	217,128
2 T32AG00037-16	Bengtson, Vern L., multidisciplinary research training in gerontology	09-01-92	03-77-00	University of Southern California	460,744
5 T32AG00045-16	Mitteness, Linda S., training in sociocultural gerontology	09-26-92	04-57-00	University of California at San Francisco	264,101
5 T32AG00048-15	Zarit, Steven H., interdisciplinary training in gerontology	07-01-92	04-87-00	Pennsylvania State University—University Park	220,153
5 T32AG00056-10	Kahana, Eva F., health research in aging	07-01-92	05-67-00	Case Western Reserve University	91,891
5 T32AG00057-15	Martin, George M., genetic approaches to aging research	05-01-92	05-77-00	University of Washington	383,121
5 T32AG00078-13	Holloszy, John O., exercise as preventive medicine in the aging process.	07-01-92	07-87-00	Washington University	184,503
5 T35AG00086-13	Siskind, Gregory W., short-term training students in health professional schools.	04-15-92	08-67-00	Cornell University Medical Center	74,114
2 T32AG00093-11	Finch, Caleb E., training in endocrinology and neurology of aging	09-01-92	09-37-00	University of Southern California	368,524
5 T32AG00105-09	Caplan, Arnold I., cellular and molecular aging	07-01-92	10-57-00	Case Western Reserve University	167,766
5 T32AG00107-09	Coleman, Paul D., training in geriatrics and neurobiology and anatomy.	03-01-92	10-77-00	University of Rochester	277,511
5 T32AG00110-08	Von Eye, Alexander, training in aging research methodology	05-01-92	11-07-00	Pennsylvania State University—University Park	63,180
5 T32AG00114-08	Adelman, Richard C., multidisciplinary research training in aging	09-01-92	11-47-00	University of Michigan at Ann Arbor	349,294
5 T32AG00115-08	Polgar, Peter R., pre- and postdoctoral training in biochemistry of aging.	07-10-92	11-57-00	Boston University	269,064
5 T32AG00117-08	Dunkle, Ruth E., social research training on applied issues of aging	06-01-92	11-77-00	University of Michigan at Ann Arbor	387,197
2 T32AG00120-06A1	Roth, Jesse, research training in gerontology and geriatrics	02-01-92	12-07-00	Johns Hopkins University	201,348
5 T32AG00128-05	De Kosky, Steven T., behavioral neurology of aging training program	12-24-91	12-87-00	University of Pittsburgh at Pittsburgh	118,708
5 T32AG00129-07	Bumpass, Larry L., population life course and aging	09-01-92	12-97-00	University of Wisconsin Madison	71,901
5 T32AG00131-08	Cristofalo, Vincent J., training in the cellular and molecular aspects of aging.	05-01-92	13-17-00	Medical College of Pennsylvania	128,470
5 T32AG00134-07	Weissert, William G., public health and aging	09-01-92	13-47-00	University of Michigan at Ann Arbor	151,682
2 T32AG00139-06	Myers, George C., social and medical demography of aging (competing contin.).	01-10-92	13-97-00	Duke University	223,767
5 T32AG00140-17	Speare, Alden, Jr., demography of aging	07-01-92	14-07-00	Brown University	80,689
5 T32AG00144-06	Kowal, Jerome, research training in geriatric medicine	08-01-92	14-47-00	Case Western Reserve University	151,729
5 T32AG00149-06	Folstein, Marshal F., research training in dementias of aging	08-01-92	14-97-00	Johns Hopkins University	156,637
5 T32AG00153-05	Kasl, Stanislav V., research training in the epidemiology of aging	07-01-92	15-37-00	Yale University	212,778

5 T32AG00154-04	Reaven, Gerald M., geriatrics gerontology	07-01-92	15-47-00	Stanford University	153,876
5 T32AG00155-05	Elder, Glen H. Jr., demography of aging and the life course	09-01-92	15-57-00	University of North Carolina Chapel Hill	102,080
5 T32AG00156-04	Horn, John L., forming science careers in developmental neurocognition.	07-01-92	15-67-00	University of Southern California	303,716
5 T32AG00158-05	Buring, Julie E., training program in epidemiologic research on aging	09-01-92	15-87-00	Brigham and Women's Hospital	110.077
5 T32AG00159-05	Crimmins, Eileen M., demography of aging	05-01-92	15-97-00	University of Southern California	26,522
5 T32AG00162-05	Wallace, Robert B., training program in epidemiology and biometry of aging.	06-01-92	16-27-00	University of Iowa	117,248
5 T32AG00164-05	Dement, William C., research training in geriatric sleep disorders medicine.	07-01-92	16-47-00	Stanford University	77,431
5 T32AG00165-05	Bowman, Barbara H., training program in molecular basis of aging	04-01-92	16-57-00	University of Texas Health Science Center, at San Antonio	101,375
5 T32AG00169-05	German, Peal S., Gerontology in Public Health	07-01-92	16-97-00	Johns Hopkins University	184,252
5 T32AG00172-05	Benson, D. Frank, dementia and behavioral neurology	08-10-92	17-27-00	University of California at Los Angeles	71,820
5 T32AG00173-05	Clark, Robert L., doctoral training in economics of aging	07-01-92	17-37-00	North Carolina State University at Raleigh	37,992
5 T32AG00175-05	Smith, Anderson D., research training in cognitive aging	05-01-92	17-57-00	Georgia Institute of Technology	93,006
2 T32AG00177-04	Preston, Samuel H., demography of aging	09-01-92	17-77-00	University of Pennsylvania	117,648
5 T32AG00180-03	Gilchrest, Barbara A., research training in aging and cell proliferation	01-01-92	18-07-00	Boston University	60,480
5 T32AG00181-04	Kuller, Lewis H., epidemiology of aging	07-01-92	18-17-00	University of Pittsburgh at Pittsburgh	186,056
5 T32AG00182-04	Ettinger, Walter H., gerontology and geriatric medicine	07-01-92	18-27-00	Wake Forest University	269,204
5 T32AG00183-04	Darlington, Gretchen J., cell and molecular biology of aging	07-01-92	18-37-00	Baylor College of Medicine	142,693
5 T32AG00184-03	Hu, Teh-Wei, economics of aging and health services	01-01-92	18-47-00	University of California at Berkeley	73,447
5 T32AG00185-04	Hoyer, William J., aging and cognitive-neuroscience	09-01-92	18-57-00	Syracuse University at Syracuse	48,298
5 T32AG00186-04	Wise, David A., economics of aging-training program	07-01-92	18-67-00	National Bureau of Economic Research	108,860
5 T32AG00187-04	Perlmutter, Marion, complementary training program in psychology of aging.	08-10-92	18-77-00	University of Michigan at Ann Arbor	121,423
5 T32AG00188-03	Auerbach, Robert, developmental biology of aging	07-01-92	18-87-00	University of Wisconsin at Madison	51,745
5 T32AG00189-03	Liem, Ronald K., cellular and neurobiological aspects of aging	01-01-92	18-97-00	Columbia University—New York	245,389
5 T32AG00194-04	Hamerman, David, aging research	07-01-92	19-47-00	Yeshiva University	224,056
5 T32AG00196-04	Meyer, Edwin M., neurobiology of aging	07-01-92	19-67-00	University of Florida	74,149
5 T32AG00197-08	Kahana, Eva F., res training in social aspects of mental health and aging.	09-01-92	19-77-00	Case Western Reserve University	96,990
5 T32AG00198-03	Maletta, Gabe J., behavioral neuroscience of aging	05-01-92	19-87-00	University of Minnesota—Twin Cities	154,255
5 T32AG00201-03	Mahesh, Virendra B., molecular aspects of endocrine cell senescence	07-01-92	20-17-00	Medical College of Georgia	33,696
5 T32AG00204-03	Wingfield, Arthur, cognitive aging in a social context	05-01-92	20-47-00	Brandeis University	83,979
5 T32AG00205-03	Yu, Byung P., nutritional gerontology	05-01-92	20-57-00	University of Texas Health Science Center at San Antonio	165,672
5 T32AG00206-02	Thorbecke, Geertruida J., geriatric research institutional training (Grit) award.	07-01-92	20-67-00	New York Univerity	128,986
5 T32AG00208-03	Hogan, Dennis P., population biology, Generations, and Cohort Succession.	05-01-92	20-87-00	Pennsylvania State University—University Park	129,161
5 T32AG00209-03	Russell, Robert M., Nutrition and Aging	06-01-92	20-97-00	Tufts University Boston	107,519

NATIONAL INSTITUTE ON AGING ACTIVE GRANTS IN FISCAL YEAR 1992—Continued

Grant number	Principal investigator title	Budget start	Dates end	Institution	Total
5 T32AG00212-02	Schwartz, Janice B., gerontology and geriatric medicine	09-01-92	21-27-00	University of California at San Francisco	171,154
5 T32AG00213-02	Ershler, William B., biology of aging and age related diseases	07-01-92	21-37-00	University of Wisconsin at Madison	152,700
5 T32AG00214-02	Heistad, Donald D., interdisciplinary research training program on aging.	07-01-92	21-47-00	University of Iowa	227,404
1 T32AG00216-01	Gage, Fred H., training in the neuroplasticity of aging	09-30-92	21-67-00	University of California at San Diego	147,510
1 T32AG00219-01A1	Goldberg, Andrew P., research training of gerontology and exercise physiology.	09-30-92	21-97-00	University of Maryland Baltimore Professional School	80,587
1 T32AG00221-01	Hermalin, Albert I., training in the demography of aging	09-01-92	22-17-00	University of Michigan at Ann Arbor	218,940
1 T32AG00222-01	Potter, Huntington, training in the molecular biology of neurodegeneration.	09-30-92	22-27-00	Harvard University	147,904
5 K12AG00294-08	Wei, Jeanne Y., Physician Scientist Program Award	08-01-92	29-47-00	Harvard University	590,560
5 R37AG00322-18	Nemethy, George, aging—conformational changes of collagen	07-01-92	32-27-00	Mount Sinai School of Medicine	131,222
2 K12AG00353-06	Seegmiller, J.E., Physician Scientist Program Award	07-08-92	35-37-00	University of California at San Diego	340,800
5 K07AG00359-06	Hamerman, David, Geriatric Leadership Academic Award	03-25-92	35-97-00	Montefiore Medical Center (Bronx, NY)	86,400
5 K07AG00368-06	Luchi, Robert J., geriatric leadership academic award	01-01-92	36-87-00	Baylor College of Medicine	62,803
2 P30AG00371-19	Cohen, Harvey J., research support services for gerontology center	04-01-92	37-17-00	Duke University	363,000
5 P01AG00378-21	Cristofalo, Vincent J., cellular senescence and the control of cell	03-15-92	37-87-00	Medical College of Pennsylvania	873,193
5 K01AG00390-05	Cheung, Hou T., nutrition, aging, and immunity	01-01-92	39-07-00	Illinois State University	71,516
5 K11AG00406-05	Kang, Un J., neurotransmitter gene expression in aging brain	03-01-92	40-67-00	University of California at San Diego	41,660
7 K11AG00406-06	Kang, Un Jung, neurotransmitter expression in aging brain	09-11-92	40-67-00	University of Chicago	45,360
5 K08AG00407-05	Brashear, Harry R., diagonal band—organization and changes in dementia.	07-01-92	40-77-00	University of Virginia at Charlottesville	76,950
5 K08AG00408-05	Bierer, Linda M., cholinergic/noradrenergic treatment of Alzheimer's	07-01-92	40-87-00	Mount Sinai School of Medicine	67,561
5 K08AG00411-06	Tenover, Joyce S., NIA Academic Award—androgen action in the elderly male.	05-01-92	41-17-00	Emory University	72,900
5 K01AG00412-05	Kelleher, Joanne K., mathematical models of intermediary metabolism in aging.	07-01-92	41-27-00	George Washington University	88,884
5 K01AG00414-03	Verdery, Roy B., NIA serca—nutritional and metabolic factors in aging.	04-01-92	41-47-00	Wake Forest University	75,870
5 K04AG00415-05	Perry, George, amyloid precursor in Alzheimer disease	09-01-92	41-57-00	Case Western Reserve University	65,988
5 K04AG00417-05	Hopkins, Paul B., organic and bio-organic chemistry	07-01-92	41-77-00	University of Washington	64,346
5 K01AG00420-05	Bales, Connie W., vitamin D metabolism—function of kidney donor/recipient.	09-01-92	42-07-00	Duke University	87,680
5 K07AG00421-05	Ettinger, Walter H., Geriatric Leadership Academic Award	08-01-92	42-17-00	Wake Forest University	80,099
5 K04AG00422-05	Bondada, Subbarao, B lymphocyte activation	08-01-92	42-27-00	University of Kentucky	64,231

7	K04AG00423-05	Seals, Douglas R., hypertension in the elderly—effects of exercise	08-01-92	42-37-00	University of Colorado at Boulder	65,183
2	R01AG00424-30	Effros, Rita B., life extension effect of caloric restriction	06-01-92	42-47-00	University of California at Los Angeles	262,681
5	K11AG00425-05	De La Monte, Suzanne M., CNS plasticity and Alzheimer's disease—molecular studies.	08-01-92	42-57-00	Massachusetts General Hospital	85,443
3	R37AG00425-27S1	Holloszy, John O., exercise-induced biochemical and anatomic adaptations.	04-15-92	42-57-00	Washington University	5,000
4	R37AG00425-28	Holloszy, John O., exercise-induced biochemical and anatomic adaptations.	08-15-92	42-57-00	Washington University	201,600
5	K08AG00426-05	Ades, Philip A., exercise conditioning in older coronary patients	07-02-92	42-67-00	University of Vermont and St. Agric College	84,780
5	K04AG00427-05	Effros, Rita B., studies on senescence in human T lymphocyte cultures.	09-01-92	42-77-00	University of California at Los Angeles	56,729
5	K08AG00428-04	Taffet, George E., modulation of relaxation in the senescent heart	12-01-91	42-87-00	Baylor College of Medicine	76,342
5	K01AG00429-04	McDonald, Roger B., aging, high sucrose diets and pancreatic function.	07-01-92	42-97-00	University of California at Davis	75,128
5	K08AG00430-04	Troy, Carol M., calcium and the cytoskeleton in Alzheimer's	07-01-92	43-07-00	Columbia University—New York	81,410
5	K04AG00431-04	Burgio, Kathryn L., behavioral vs. drug intervention—urinary incontinence.	07-01-92	43-17-00	University of Pittsburgh at Pittsburgh	10,774
7	K04AG00431-05	Burgio, Kathryn Larsen, behavioral vs. drug intervention for urinary incontinence.	09-01-92	43-17-00	University of Alabama at Birmingham	56,700
5	K11AG00432-04	Schulz, Paul E., cholinergic modulation of hippocampal mossy fiber LTP.	12-01-92	43-27-00	Baylor College of medicine	87,822
5	K08AG00433-04	Supiano, Mark A., sympathetic function in the elderly	03-01-92	43-37-00	University of Michigan at Ann Arbor	73,980
2	K01AG00434-04	Garrard, Judith, psychoactive drug use by nursing home elderly	02-11-92	43-47-00	University of Minnesota Twin Cities	101,194
5	K04AG00436-05	Wei, Jeanne Y., effect of age on cardiovascular reflex function	08-01-92	43-67-00	Beth Israel Hospital (Boston)	64,260
5	K08AG00437-03	Colvin, Perry L., Jr., dietary acclimation	12-01-92	43-77-00	Wake Forest University	69,768
2	K01AG00440-04	King, Abby C., exercise and stress related response in older adults	07-13-92	44-07-00	Stanford University	96,760
5	K04AG00441-04	Gerhardt, Greg A., age-induced changes in monoamine presynaptic function.	04-01-92	44-17-00	University of Colorado Health Sciences Center	68,288
5	K04AG00443-03	Kemper, Susan, language across the life-span	01-01-92	44-37-00	University of Kansas Lawrence	66,960
4	R37AG00443-18	Schiffman, Susan S., Gustatory and olfactory changes with age	01-01-92	44-37-00	Duke University	215,301
3	R37AG00443-18S1	Schiffman, Susan S., Gustatory and olfactory changes with age	07-01-92	44-37-00	Duke University	5,000
5	K01AG00444-04	Yarasheski, Kevin E., Anabolic effects of weight training and growth hormone.	09-01-92	44-47-00	Washington University	72,888
5	K11AG00445-04	Holitzman, David M., Trisomy 16 and NGF—effects on CNS gene expression.	07-01-92	44-57-00	University of California San Francisco	86,130
5	K08AG00446-04	Hulette, Christine M., brain reactive autoantibodies—Alzheimer's disease.	08-01-92	44-67-00	Duke University	77,004
5	K04AG00450-04	Lakoski, Joan M., aging and estrogen on biogenic amine physiology—RCDA.	09-01-92	45-07-00	University of Texas Medical BR Galveston	66,731

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Grant number	Principal investigator title	Budget start	Dates end	Institution	Total
5 K11AG00452-03	Donaldson, Deirdre H., molecular biology of neurodegenerative diseases.	01-01-92	45-27-00	University of Colorado Health Science Center	83,346
5 K08AG00453-03	Boult, Charles E., predictors of functional ability	09-01-92	45-37-00	University of Minnesota Twin Cities	69,284
5 K11AG00454-03	Norton, Peggy A., connective tissue and etiology of genitourinary prolapse.	04-01-92	45-47-00	University of Utah	87,740
5 K08A00455-03	Davis, Kenneth M., physiology of volume regulation	07-01-92	45-57-00	Harvard University	73,980
5 K07AG00461-03	Cassel, Christine K., Geriatric Leadership Academic Award	12-01-91	46-17-00	University of Chicago	82,810
5 K01AG00463-02	Redfern, Mark S., postural control in the elderly	05-01-92	46-37-00	Eye and Ear Institute of Pittsburgh	79,380
5 K04AG00465-02	Johnson, Larry, biology of the aging human TESTIS	04-01-92	46-57-00	Texas Agriculture and Mechanical University College Station	68,867
5 K07AG00466-02	Warshaw, Gregg A., geriatric leadership academic award	07-01-92	46-67-00	University of Cincinnati	87,445
5 K07AG00469-03	Masoro, Edward J., geriatric leadership academic award	04-01-92	46-97-00	University of Texas Health Science Center at San Antonio	93,120
5 K11AG00470-02	Loury, Mark C., odorant binding protein in the aged olfactory system	01-01-92	47-07-00	Johns Hopkins University	79,650
7 K08AG00471-04	Mandelblatt, Jeanne S., breast and cervix cancer control in the elderly.	07-01-92	47-17-00	Sloan-Kettering Institute for Cancer Research	76,723
5 K07AG00474-03	Potter, Jane F., geriatric leadership academic award	04-01-92	47-47-00	University of Nebraska Medical Center	86,400
5 K07AG00485-03	Ershler, William B., geriatric leadership academic award	07-01-92	48-57-00	University of Wisconsin Madison	80,896
5 K11AG00486-03	Jonas, Elizabeth A., modulation of ca current in aplysia bag cell neurons.	08-17-92	48-67-00	Yale University	88,946
5 K08AG00487-03	Stineman, Margaret G., geriatric-rehabilitation prognostic staging system.	07-01-92	48-77-00	University of Pennsylvania	80,729
5 K12AG00488-02	Cassel, Christine K., geriatric academic program award	09-01-92	48-87-00	University of Chicago	283,815
5 K12AG00489-03	Hahn, Theodore J., geriatric academic program award	09-01-92	48-97-00	University of California Los Angeles	369,384
5 K01AG00491-03	Burgio, Louis D., urinary incontinence in the nursing home	07-01-92	49-17-00	University of Pittsburgh at Pittsburgh	12,001
7 K01AG00491-04	Burgio, Louis D., urinary incontinence in the nursing home	09-01-92	49-17-00	University of Alabama at Birmingham	79,034
5 K04AG00492-03	Schwartz, Lawrence M., molecular analysis of cell death genes	09-01-92	49-27-00	University of Massachusetts Amherst	72,063
5 K08AG00494-04	Pratley, Richard E., metabolic function in elderly hypertensives	07-01-92	49-47-00	University of Maryland Baltimore Professional School	76,631
5 K08AG00495-04	Weiss, John Hiram, the chronic neurotoxicity of BMAA and non-NMDA agonists.	07-06-92	49-57-00	University of California Irvine	75,330
5 K08AG00497-04	Katzel, Leslie I., dyslipoproteinemia in silent myocardial ischemia	07-01-92	49-77-00	University of Maryland Baltimore Professional School	81,000
5 K08AG00499-02	Brandeis, Gabriel H., urinary incontinence in frail elderly women	07-01-92	49-97-00	Harvard University	78,975
5 K12AG00503-02	Abrass, Itamar B., geriatric academic program award	01-01-92	50-37-00	University of Washington	373,237
5 K08AG00504-02	Black, Ronald S., studies of ubiquitin in Alzheimer's disease	02-01-92	50-47-00	Winifred Masterson Burke Rehabilitation Hospital	79,862
5 K01AG00508-02	Levkoff, Sue E., excess disability in cognitively impaired aged	07-01-92	50-87-00	Harvard University	87,881
5 K11AG00509-02	Jurivich, Donald A., regulation of heat shock gene expression in senescence.	09-01-92	50-97-00	Northwestern University	84,132

5 K08AG00510-02	Gurwitz, Jerry H., drug induced illness in the elderly: NSAIDS as a model.	07-01-92	51-07-00	Harvard University	79,380
5 K11AG00516-02	Choi, Augustine M., genetic responses of the aging lung to oxidative stress.	04-01-92	51-67-00	Johns Hopkins University	90,315
1 K08AG00518-01	Campbell, James W., measurement of family function in elderly persons.	02-01-92	51-87-00	Case Western Reserve University	72,613
5 K01AG00519-02	Alexander, Neil B., aging, chair mobility, and musculoskeletal impairment.	09-01-92	51-97-00	University of Michigan at Ann Arbor	79,920
1 K08AG00520-01A1	Obeid, Lina M., transcriptional regulation of protein kinase c beta	04-01-92	52-07-00	Duke University	76,842
5 K12AG00521-02	Weiner, Leslie P., physician scientist program award—neurogerontology.	08-01-92	52-17-00	University of Southern California	214,011
7 K11AG00523-02	Gerhard, Glenn S., targeting serum binding proteins in development	09-25-92	52-37-00	Medical College of Pennsylvania	80,585
5 K08AG00524-02	Inouye, Sharon K., clinical predictors of delirium in the elderly	07-01-92	52-47-00	Yale University	76,950
5 K08AG00525-02	Montamat, Stephen C., NIA academic award—aging and cardiac regulation.	09-01-92	52-57-00	University of Washington	71,820
5 K08AG00526-02	Schmader, Kenneth E., epidemiology of herpes zoster and postherpetic neuralgia.	09-01-92	52-67-00	Duke University	71,479
5 K07AG00532-02	Cristofalo, Vincent J., geriatric leadership academic award	08-05-92	53-27-00	Medical College of Pennsylvania	86,400
5 K11AG00533-02	Voci, James M., NT4 characterization of a novel neurotrophic factor	07-01-92	53-37-00	Case Western Reserve University	76,724
5 K08AG00537-02	Rubinstein, Daniel B., immune senescence autoimmunity and aging	08-24-92	53-77-00	New England Medical Center Hospitals, Inc	75,600
5 P01AG00538-16	Cotman, Carl W., behavioral and neural plasticity in the aged	07-01-92	53-87-00	University of California Irvine	850,536
2 P01AG00541-15A2	Weksler, Marc E., immunobiology of aging	08-01-92	54-17-00	Cornell University Medical Center	1,005,864
1 K08AG00542-01	Wisniewski, Thomas, diffuse lewy body disease and gelsolin	09-01-92	54-27-00	New York University	76,680
1 K01AG00544-01	Ader, Marilyn, etiology of the glucose intolerance of aging	02-01-92	54-47-00	University of Southern California	89,549
1 K08AG00546-01A1	Reed, Richard L., NIA academic award—growth hormone and muscle strength.	09-01-92	54-67-00	University of Arizona	64,908
1 K01AG00547-01	Cohen-Mansfield, Jiska, treatment of agitation in aged people	02-01-92	54-77-00	Georgetown University	87,293
1 K08AG00548-01	Gravenstein, Stefan, antibody diversity, age and influenza vaccine efficacy.	01-27-92	54-87-00	University of Wisconsin Madison	81,108
1 K01AG00551-01	Hopp, Jane F., aged muscle metabolic adaptations to resistance exercise.	07-01-92	55-17-00	University of Illinois at Chicago	66,088
1 K04AG00553-01	Snowdon, David A., epidemiology of aging and Alzheimer's disease	01-27-92	55-37-00	University of Kentucky	64,671
1 K07AG00555-01	Burkhauser, Richard V., geriatric leadership academic award	07-01-92	55-57-00	Syracuse University at Syracuse	77,959
1 K08AG00559-01	Shorr, Ronald E., geriatric pharmacoepidemiology	04-01-92	55-97-00	Vanderbilt University	72,155
1 K01AG00561-01	Powe, Neil R., economic consequences of illness in an aging society	08-14-92	56-17-00	Johns Hopkins University	84,857
1 K04AG00563-01	Sapolsky, Robert M., glucocorticoids and Alzheimer's-like hippocampal damage.	08-10-92	56-37-00	Stanford University	69,390
1 K04AG00564-01	Poehlman, Eric T., physical activity—effects on energy metabolism	09-01-92	56-47-00	University of Vermont and State Agriculture College	69,567
5 K11AG00566-02	Seifer, David B., endocrinologic basis of reproductive aging	09-01-92	56-67-00	Women and Infants Hospital—Rhode Island	96,247

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Grant number	Principal investigator title	Budget start	Dates end	Institution	Total
5 K01AG00567-02	Guccione, Andrew A., development of comorbidity index for arthritis research.	09-01-92	56-77-00	Massachusetts General Hospital	84,897
1 K11AG00568-01	Eide, Fernette F., role of neurotrophins in the hippocampus	07-20-92	56-87-00	University of California—San Francisco	73,980
1 K08AG00571-01	Robin, Deborah W., effect of drug on balance in the elderly	09-30-92	57-17-00	Vanderbilt University	74,586
1 K01AG00577-01	Olshansky, Stuart J., interdisciplinary training program on aging	09-01-92	57-77-00	University of Chicago	78,024
1 K01AG00578-01	Cefalu, William T., caloric restriction and cardiovascular aging	09-30-92	57-87-00	Wake Forest University	75,330
1 K08AG00580-01	Lachs, Mark S., predictors of elder mistreatment	07-20-92	57-07-00	Yale University	78,300
1 K01AG00581-01	Rogers, Mark W., protective stepping responses and falls in the elderly.	08-10-92	58-17-00	Northwestern University	58,554
1 K01AG00586-01	Seeman, Teresa E., psychosocial factors and neuroendocrine function in aging.	08-10-92	57-67-00	Yale University	90,390
2 P01AG00599-15	Minaker, Kenneth L., program project in biomedical outcomes of aging.	06-15-92	59-97-00	Beth Israel Hospital at Boston	683,739
5 R01AG00677-15	Rutherford, Charles L., alternate pathways in cellular aging	04-01-92	67-77-00	Virginia Polytechnic Institute and State University	177,542
7 R01AG00783-13	Weigle, William O., effect of aging on immune states	01-15-92	78-37-00	Scripps Research Institute	219,163
5 R01AG00947-15	Stein, Gretchen H., growth regulation: senescent versus nonsenescent cells.	06-01-92	94-77-00	University of Colorado at Boulder	234,132
5 R01AG01121-13	Coleman, Paul D., computer aided study of dendrites in aging human brain.	04-01-92	12-17-01	University of Rochester	163,746
5 R37AG01136-15	Yen, Shu-Hui C., aging brain—immunohistology and biochemistry	07-01-92	13-67-01	Yeshiva University	231,498
5 R01AG01159-16	Manton, Kenneth G., a demographic study of multiple causes of death.	12-15-91	15-97-01	Duke University	157,540
2 P01AG01188-14	Yu, Byung P., nutritional probe of the aging process	06-18-92	18-87-01	University of Texas Health Science Center at San Antonio	1,028,444
4 R37AG01228-14	Wright, Woodring E., gene expression in aging and development	01-15-92	22-87-01	University of Texas Southwest Medical Center at Dallas	294,702
4 R37AG01274-14	Gracy, Robert W., molecular basis for abnormal proteins in aging cells.	02-01-92	27-47-01	Texas College of Osteopathic Medicine	211,892
3 R37AG01274-14S1	Gracy, Robert W., molecular basis for abnormal proteins in aging cells.	04-15-92	27-47-01	Texas College of Osteopathic Medicine	5,000
5 R37AG01437-12	Hoffman, Brian B., pharmacologic factors and sexuality in aging hypertension.	07-01-92	43-77-01	Stanford University	209,623
5 R01AG01548-09	Richardson, Arlan G., effect of dietary restriction on gene expression	04-15-92	54-87-01	University of Texas Health Science Center at San Antonio	192,072
7 P01AG01743-13	Klinman, Norman R., immunobiology and immunopathology of aging	02-01-92	74-37-01	Scripps Research Institute	741,687
5 P01AG01751-14	Martin, George M., gene action in the pathobiology of aging	08-15-92	75-17-01	University of Washington	1,557,454
5 R01AG01760-12	Klag, Michael J., precursors of premature disease and death	03-01-92	76-07-01	Johns Hopkins University	272,892

5 R01AG01822-13	Shearn, Allen D., role of specific genes in imaginal disc determination.	04-01-92	82-27-01	Johns Hopkins University	186,143
5 R01AG02038-10	Herzog, Anna R., non-sampling errors in panel surveys of older adults II.	08-01-92	03-87-02	University of Michigan at Ann Arbor	76,755
5 R37AG02049-13	Garry, Philip J., a prospective study of nutrition in the elderly	01-01-92	04-97-02	University of New Mexico at Albuquerque	323,943
3 R37AG02049-13S1	Garry, Philip J., a prospective study of nutrition in the elderly	04-01-92	04-97-02	University of New Mexico at Albuquerque	5,000
3 R37AG02049-13S2	Garry, Philip J., a prospective study of nutrition in the elderly	05-01-92	04-97-02	University of New Mexico at Albuquerque	56,394
5 R01AG02128-12	Fessler, John H., basement membrane biosynthesis	05-01-92	12-87-02	University of California at Los Angeles	305,529
5 P01AG02132-12	Prusiner, Stanley B., degenerative and dementing diseases of aging	02-01-92	13-27-02	University of California at San Francisco	1,412,104
3 P01AG02132-12S1	Prusiner, Stanley B., degenerative and dementing diseases of aging	09-30-92	13-27-02	University of California at San Francisco	50,000
5 R01AG02152-11	Stutman, Osias, T-cell development and aging	05-01-92	15-27-02	Sloan-Kettering Institute for Cancer Research	148,657
5 R01AG02163-11	Madden, David J., age and selective attention in visual search	04-05-92	16-37-02	Duke University	221,039
2 R55AG02205-12A1	Malemud, Charles J., behavior of human cartilage in aging and osteoarthritis.	09-30-92	20-57-02	Case Western Reserve University	100,000
5 P01AG02219-12	Mohs, Richard C., cholinergic treatment of memory deficits in the aged.	04-01-92	21-97-02	Mount Sinai School of Medicine	812,913
5 R37AG02224-13	Wise, Phyllis M., neuroendocrine and neurochemical function during aging.	07-01-92	22-47-02	University of Maryland Baltimore Professional School	279,433
3 R37AG02224-13S1	Wise, Phyllis M., neuroendocrine and neurochemical function during aging.	07-01-92	22-47-02	University of Maryland Baltimore Professional School	5,000
3 R37AG02224-13S2	Wise, Phyllis M., neuroendocrine and neurochemical function during aging.	09-20-92	22-47-02	University of Maryland Baltimore Professional School	74,800
5 R01AG02325-11	Lees, Sidney, mechano-ultrasonic properties of bone in aging	01-01-92	32-57-02	Forsyth Dental Center	219,229
5 R01AG02329-16	Yunis, Edmond J., immunological aspects of aging	04-01-92	32-97-02	Dana-Farber Cancer Institute	161,380
3 R37AG02452-12S1	Light, Leah L., direct and indirect measures of memory in old age	05-01-92	45-27-02	Pitzer College	5,000
5 R37AG02452-13	Light, Leah L., direct and indirect measures of memory in old age	09-05-92	45-27-02	Pitzer College	123,818
3 R37AG02452-13S1	Light, Leah L., direct and indirect measures of memory in old age	09-30-92	45-27-02	Pitzer College	56,792
5 R01AG02467-11	Kushner, Irving, induction of acute phase protein biosynthesis	02-29-92	46-77-02	Case Western Reserve University	245,908
5 R37AG02577-10	Nimni, Marcel E., osteogenesis: development, modulation, and aging	12-15-91	57-77-02	University of Southern California	144,048
3 R37AG02577-10S1	Nimni, Marcel E., osteogenesis: development, modulation, and aging	04-15-92	57-77-02	University of Southern California	5,000
5 R01AG02711-14	Ancoli-Israel, Sonia, prevalence of sleep apnea in an aged population	05-01-92	71-17-02	University of California San Diego	122,711
5 R37AG02751-11	Howard, Darlene V., studies of aging, semantic processing, and memory.	05-01-92	75-17-02	Georgetown University	65,173
3 R37AG02751-11S1	Howard, Darlene V., studies of aging, semantic processing, and memory.	05-01-92	75-17-02	Georgetown University	5,000
5 R01AG02822-12	Stockdale, Frank E., developmental age and changes in myosin isozymes.	04-01-92	82-27-02	Stanford University	229,328
5 P01AG02908-12	Berg, Paul, DNA transactions and genome integrity in aging	08-01-92	90-87-02	Stanford University	759,250
3 P01AG02921-09S1	Caplan, Arnold I., extracellular matrix and aging	08-01-90	92-17-02	Case Western Reserve University	75,500

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Grant number	Principal investigator title	Budget start	Dates end	Institution	Total
2 R01AG03051-09	Reisberg, Barry, aging and dementia: longitudinal course of subgroups.	09-01-92	05-17-03	New York University	223,026
3 R37AG03055-10S1	Elias, Merrill F., age hypertension and intellective performance	04-15-92	05-57-03	University of Maine	5,517
5 R37AG03055-11	Elias, Merrill F., age hypertension and intellective performance	07-01-92	05-57-03	University of Maine	216,263
3 R37AG03055-11S1	Elias, Merrill F., age hypertension and intellective performance	07-01-92	05-57-03	University of Maine	79,286
5 P01AG03106-10	Manuelidis, Laura., animal models for the study of dementias and aging.	03-10-92	10-67-03	Yale University	799,313
5 R37AG03188-11	Woodbury, Max A., longitudinal models of correlates of aging and longevity.	06-01-92	18-87-03	Duke University	140,016
5 R01AG03376-12	Barnes, Carol A., neurobehavioral relations in senescent hippocampus	05-01-92	37-67-03	University of Arizona	137,414
2 R01AG03417-12	Fernandes, Gabriel, influence of diet on autoimmunity and aging	08-15-92	41-77-03	University of Texas Health Science Center at San Antonio	190,623
3 R37AG03501-10S1	Leventhal, Howard, symptom and emotion stimuli to health action in the elderly.	04-01-92	50-17-03	Rutgers the State University New Brunswick	5,000
5 R37AG03501-11	Leventhal, Howard, symptom and emotion stimuli to health action in the elderly.	07-01-92	50-17-03	Rutgers the State University New Brunswick	562,846
5 R01AG03527-10	Chatterjee, Bandana, age and hormone-dependent regulation of a hepatic protein.	06-01-92	52-77-03	University of Texas Health Science Center San Antonio	162,216
2 R01AG03578-07	Chen, Kuang Y., trans-acting factors and celluar aging	07-02-92	57-87-03	Rutgers the State University New Brunswick	186,925
5 P01AG03644-08	Hamill, Robert W., neuroplasticity in aging and dementia	02-01-92	64-47-03	University of Rochester	845,215
5 R44AG03796-03	Vertrees, James C., making aging data available to researchers	04-01-92	79-67-03	Solon Consulting Group, Ltd.	251,424
5 P01AG03853-10	Blass, John P., geriatric dementia research clinic	07-01-92	85-37-03	Winifred Masterson Burke Medical Residency Institute	696,389
5 R01AG03884-11	Wright, Barbara E., computer analysis of aging in dictyostelium	05-01-92	88-47-03	University of Montana	165,400
2 P01AG03949-11	Crystal, Howard, teaching nursing home	08-20-92	94-97-03	Yeshiva University	1,194,936
5 R01AG03978-11	Miller, Richard A., effect of aging on helper T cell function	08-01-92	97-87-03	University of Michigan at Ann Arbor	224,131
5 P01AG03991-09	Berg, Leonard, healthy aging and senile dementia	01-01-92	99-17-03	Washington University	991,946
5 R01AG04058-08	Werner, John S., optical and neural changes in the aging visual system.	02-29-92	05-87-04	University of Colorado at Boulder	99,770
5 R37AG04085-09	Murphy, Claire L., chemosensory perception and psychophysics in the aged.	07-01-92	08-57-04	San Diego State University	120,634
3 R37AG04085-09S1	Murphy, Claire L., chemosensory perception and psychophysics in the aged.	07-01-92	08-57-04	San Diego State University	5,000
2 R01AG04100-08A2	Kipps, Thomas J., immunologic aging and autoimmunity	09-01-92	10-07-04	University of California San Diego	194,780
5 R01AG04139-05	Stewman, Shelby, aging and labor demand	09-01-92	13-97-04	Carnegie-Mellon University	181,803
5 R01AG04145-10	Yen, Shu-Hui C., aging and Alzheimer dementia: role of fibrous protein.	05-10-92	14-57-04	Yeshiva University	263,894

5 R01AG04146-08	Booth, Alan, marital instability over the life course	09-01-92	14-67-04	Pennsylvania State University-University Park	117,137
3 R01AG04212-09S1	Owsley, Cynthia, spatial vision and aging underlying neural mechanisms.	09-30-92	21-27-04	University of Alabama at Birmingham	46,228
5 P01AG04220-08	Wisniewski, Henryk M., aging and senile dementia of the Alzheimer type.	02-01-92	22-07-04	Institute for Basic Research in Developmental Disability	436,317
3 R37AG04287-09S1	Stevens, Joseph C., chemical senses and aging	05-01-92	28-77-04	John B. Pierce Foundation Lab, Inc.	5,000
5 R37AG04287-10	Stevens, Joseph C., chemical senses and aging	09-01-92	28-77-04	John B. Pierce Foundation Lab, Inc	216,985
3 R01AG04306-06S1	Hasher, Lynn A., aging, inhibition, and the contents of working memory.	04-15-92	30-67-04	Duke University	21,168
2 R01AG04306-07	Hasher, Lynn A., age, inhibition, and the contents of working memory.	08-20-92	30-67-04	Duke University	195,234
5 R37AG04307-10	Chase, Michael H., state-dependent somatomotor processes	08-01-92	30-77-04	University of California Los Angeles	277,046
5 R01AG04337-08	Cunningham, Walter R., age changes in intellectual abilities in the elderly.	07-01-92	33-77-04	University of Florida	44,639
7 P01AG04342-10	Oldstone, Michael B., virology and immunology of aging	08-15-92	34-27-04	Scripps Research Institute	1,052,543
4 R37AG04344-09	Porter, John C., aging and molecular neuroendocrine impairment	02-15-92	34-47-04	University of Texas Southwest Medical Center/Dallas	179,773
5 R01AG04360-10	Farr, Andrew G., age dependent modulation of T cell function	07-01-92	36-07-04	University of Washington	144,966
5 P01AG04390-09	Lipsitz, Lewis A., HRCA/Harvard Research Nursing Home continuation.	12-01-91	39-07-04	Hebrew Rehabilitation Center for Aged	1,133,185
3 P01AG04390-09S1	Lipsitz, Lewis A., HRCA/Harvard Research Nursing Home continuation.	09-01-92	39-07-04	Hebrew Rehabilitation Center for Aged	49,990
3 P01AG04391-09S1	Ford, Amasa B., selected respiratory and GI infections of the El	04-01-92	39-17-04	Case Western Reserve University	23,843
5 P01AG04391-10	Ford, Amasa B., teaching nursing home award	09-01-92	39-17-04	Case Western Reserve University	783,849
5 P01AG04393-08	Warren, John W., complications of long-term urinary catheters in the aged.	03-01-92	39-37-04	University of Maryland Baltimore Professional School	810,275
5 P01AG04402-10	Shapiro, Jay, Academic Nursing Home	07-01-92	40-27-04	Johns Hopkins University	873,825
5 P01AG04418-09	Hoffer, Barry J., aminergic function in aging and Alzheimer's disease	04-01-92	41-87-04	University of Colorado Health Sciences Center	735,499
3 P01AG04418-09S1	Hoffer, Barry J., aminergic function in aging and Alzheimer's disease	09-30-92	41-87-04	University of Colorado Health Sciences Center	94,662
4 R37AG04517-09	Wingfield, Arthur, age and decision strategies in running memory for speech.	05-10-92	51-77-04	Brandeis University	147,085
3 R37AG04517-09S1	Wingfield, Arthur, age and decision strategies in running memory for speech.	07-20-92	51-77-04	Brandeis University	5,000
2 R01AG04518-09	Hui, Siu Lui, longitudinal studies of osteoporosis in aging	09-21-92	51-87-04	Indiana University-Purdue University at Indianapolis	110,500
5 R01AG04542-08	Landfield, Philip W., hippocampal synaptic structure-physiology during aging.	05-10-92	54-27-04	University of Kentucky	97,683
5 P30AG04590-08	Rockwell, Richard, factors in aging: development research resource	02-01-92	59-07-04	University of Michigan at Ann Arbor	602,019
5 R01AG04594-09	Stanski, Donald R., IV anesthetic disposition in the aged hemodynamic state.	07-01-92	59-47-04	Stanford University	167,846
2 R01AG04736-09	Thonar, Eugene J., age-related differences in cartilage proteoglycans	04-01-92	73-67-04	Rush-Presbyterian-St. Lukes Medical Center	160,404
2 R01AG04743-05A3	Alwin, Duane F., aging, personality, and social change	06-01-92	74-37-04	University of Michigan at Ann Arbor	147,610

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Grant number	Principal investigator title	Budget start	Dates end	Institution	Total
4 R37AG04791-09	Nebes, Robert D., semantic memory in Alzheimer's disease	05-01-92	79-17-04	University of Pittsburgh at Pittsburgh	126,193
4 R37AG04810-09	Lu, John K., hormone secretion and pregnancy during aging	05-10-92	81-07-04	University of California Los Angeles	139,834
3 R37AG04810-09S1	Lu, John K., hormone secretion and pregnancy during aging	05-10-92	81-07-04	University of California Los Angeles	5,000
2 R01AG04821-10	Ozer, Harvey L., immortalization of SV40-transformed human cells	09-01-92	82-17-04	University of Medicine and Dentistry of New Jersey	281,895
5 P01AG04875-09	Riggs, Byron L., physiology of bone metabolism in an aging population.	07-15-92	87-57-04	Mayo Foundation	1,006,008
3 P01AG04875-09S2	Riggs, Bryon L., prevention of age-related bone loss with calcium therapy.	09-01-92	87-57-04	Mayo Foundation	50,000
3 R01AG04932-07S1	Smith, James C., the age-related effect of the sweet taste in the rat	04-01-92	93-27-04	Florida State University	30,805
2 P01AG04953-09	Albert, Marilyn S., age-related changes of cognition in health and disease.	08-15-92	95-37-04	Massachusetts General Hospital	1,164,604
5 R01AG04954-09	Eaves, Lindon J., genetic models of development and aging	07-01-92	95-47-04	Virginia Commonwealth University	149,287
2 R01AG04980-29A3	Thorbecke, Geertruida J., lymphoid cells in production of antibodies	02-29-92	98-07-04	New York University	251,833
5 R01AG04984-07	Rikans, Lora E., influence of aging on hepatoxicity	09-01-92	98-47-04	University of Oklahoma Health Sciences Center	96,742
5 P01AG05119-08	Markesbery, William R., biochemical, morphological, and trace element studies.	05-15-92	11-97-05	University of Kentucky	598,017
5 P50AG05128-09	Roses, Allen D., Alzheimer's disease research center	05-01-92	12-87-05	Duke University	1,958,456
3 P50AG05128-09S1	Roses, Allen D., Alzheimer's disease research center	06-01-92	12-87-05	Duke University	99,238
5 P50AG05131-09	Katzman, Robert, Alzheimer's disease research center	04-01-92	13-17-05	University of California San Diego	1,725,084
3 P50AG05131-09S2	Katzman, Robert, Alzheimer's disease research center	05-01-92	13-17-05	University of California San Diego	188,214
3 P50AG05131-09S3	Katzman, Robert, neuronal populations in dementia	05-01-92	13-17-05	University of California San Diego	140,508
3 P50AG05131-09S4	Katzman, Robert, the effect of nerve growth factor on cognition	05-01-92	13-17-05	University of California San Diego	364,529
5 P50AG05133-09	Moore, Robert, Alzheimer disease research center	05-01-92	13-37-05	University of Pittsburgh at Pittsburgh	1,083,503
5 P50AG05134-09	Growdon, John H., Alzheimer's disease research center	04-17-92	13-47-05	Harvard University	1,380,493
5 P50AG05136-09	Raskind, Murray, Alzheimer's disease research center	06-05-92	13-67-05	University of Washington	2,140,524
5 P50AG05138-09	Davis, Kenneth L., Alzheimer's disease research center	05-01-92	13-87-05	Mount Sinai School of Medicine	1,431,272
3 P50AG05138-09S1	Davis, Kenneth L., competitive supplement to Alzheimer's disease research center.	05-10-92	13-87-05	Mount Sinai School of Medicine	250,849
3 P50AG05138-09S2	Davis, Kenneth L., supplement to Alzheimer's disease research center.	05-01-92	13-87-05	Mount Sinai School of Medicine	201,463
5 P50AG05142-09	Finch, Caleb E., Alzheimer's disease research center	05-10-92	14-27-05	University of Southern California	2,208,917
3 P50AG05142-09S2	Finch, Caleb E., UCI ADRC relational database management system	07-01-92	14-27-05	University of Southern California	192,349
3 P50AG05142-09S3	Finch, Caleb E., Alzheimer's disease research center	09-30-92	14-27-05	University of Southern California	52,868
5 P50AG05144-09	Markesbery, William R., Alzheimer's disease research center	06-05-92	14-47-05	University of Kentucky	1,248,632
3 P50AG05144-09S1	Markesbery, William R., Alzheimer's disease research center	08-01-92	14-47-05	University of Kentucky	190,494

5 P50AG05146-10	Price, Donald L., aging, Alzheimer's disease, and Down's Syndrome	04-13-92	14-67-05	Johns Hopkins University	1,961,481
5 U01AG05170-08	Fantl, John A., urinary incontinence in community-dwelling women	07-01-92	17-07-05	Virginia Commonwealth University	768,584
2 R01AG05213-07	Friedman, David, effects of aging on cognitive ERPD/Cardiac waveffect.	05-01-92	21-37-05	New York State Psychiatric Institute	143,488
5 R01AG05214-08	Ellis, John, responses of subpopulations of muscarinic receptors	07-01-92	21-47-05	University of Vermont and State Agricultural College	182,534
5 R01AG05223-07	Warren, William H., Jr., visual control of locomotion	09-01-92	22-37-05	Brown University	132,483
5 R01AG05233-05	Freedman, Robert R., behavioral treatment of menopausal hot flashes	04-01-92	23-37-05	Wayne State University	180,920
5 R37AG05284-07	Davis, Maradee A., living arrangements, diet and survival of older U.S. adults.	02-01-92	28-47-05	University of California San Francisco	251,029
5 R01AG05309-06	Effros, Rita B., studies on senescence in human T lymphocyte cultures.	01-15-92	30-97-05	University of California Los Angeles	83,683
5 R01AG05317-05	Woollacott, Marjorie H., age-related changes in posture and movement.	08-01-92	31-77-05	University of Oregon	99,246
5 R01AG05333-08	Pereira-Smith, Olivia M., molecular and cytogenetic studies of human cell aging.	06-01-92	33-37-05	Baylor College of Medicine	191,270
5 R01AG05366-06	Witkin, Joan W., aging LHRH System/EM immunocytochemical studies.	07-01-92	36-67-05	Columbia University New York	149,404
5 R01AG05374-05	Szakal, Andras K., role of antigen transport by dendritic cells in aging.	04-06-92	37-47-05	Virginia Commonwealth University	129,857
7 U09AG05389-07	Hazzard, William R., study section chairmans fund (NIH)	09-30-92	38-97-05	U.S. PHS Public Advisory Groups	983,000
2 R01AG05394-07	Grimm, Richard H., fractures in older women	08-01-92	39-47-05	University of Minnesota Twin Cities	479,695
2 R01AG05407-07	Cummings, Steven R., fractures in older women	05-15-92	40-77-05	University of California San Francisco	1,164,989
5 R01AG05433-07	Prohovnik, Isak A., regional cerebral blood flow in Alzheimer's disease.	06-01-92	43-37-05	New York State Psychiatric Institute	253,837
5 F32AG05512-02	Peterson, Daniel A., synaptic integration of grafts to senescent hippocampus.	06-01-92	51-27-05	University of California San Diego	22,700
5 F32AG05515-03	Holmes, Donna J., factors influencing aging rate in Virginia opossums.	07-01-92	51-57-05	Harvard University	32,500
7 F32AG05518-03	Ng, Alexander V., aging: sympathetic-vasoconstrictor response to stress.	10-01-92	51-87-05	University of Colorado at Boulder	28,600
5 F32AG05526-03	Kim, Charlene B.Y., modifications in the visual pathways during aging.	09-01-92	52-67-05	University of Wisconsin Madison	28,600
5 F32AG05531-03	Dobrowsky, Rick T., sphingolipids in retinoic acid action	08-01-92	53-17-05	Duke University	22,200
5 F32AG05538-02	Hoptman, Matthew J., aging and regional cerebral function	01-22-92	53-87-05	University of Wisconsin Madison	22,700
5 F32AG05540-02	Korol, Donna L., neurophysiological mechanisms of forgetting in aging.	01-01-92	54-07-05	University of Arizona	22,700
5 F32AG05542-02	Hensel, Linda L., senescence mutant isolation in arabidopsis thaliana	03-01-92	54-27-05	University of Wisconsin Madison	22,700
5 F32AG05545-02	Goode, Patricia S., nutrition and nosocomial pneumonia in older persons.	06-01-92	54-57-05	University of Alabama at Birmingham	32,500

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Grant number	Principal investigator title	Budget start	Dates end	Institution	Total
5 F32AG05551-02	Georgieff, Irene S., distribution and cloning of high molecular weight tau PR.	09-01-92	55-17-05	Columbia University New York	8,550
5 F32AG05552-06	Hess, Thomas M., schematic knowledge influences on memory in adulthood.	04-01-92	55-27-05	North Carolina State University Raleigh	97,091
5 F32AG05555-02	Dengel, Donald R., exercise, blood pressure and metabolism in the elderly.	03-01-92	55-57-05	University of Maryland Baltimore Professional School	22,700
5 F32AG05556-02	Sutin, Ellen L., immediate early genes and the aging cirdadian system.	09-01-92	55-67-05	Stanford University	29,900
5 F32AG05558-02	Jones, Constance J., individual differences in personality change patterns.	09-01-92	55-87-05	University of California Berkeley	22,700
5 F32AG05561-02	Bondi, Mark W., implicit memory in aging and dementia	09-01-92	56-17-05	University of California San Diego	22,700
5 P01AG05561-07	House, James S., productivity, stress and health in middle and late life.	04-01-92	56-17-05	University of Michigan at Ann Arbor	297,733
5 F32AG05562-02	Viguie, Christine A., age-related recovery of skeletal muscle after inactivity.	10-01-92	56-27-05	University of Michigan at Ann Arbor	10,033
5 P01AG05562-08	Holloszy, John O., physiological adaptations to exercise in the elderly	05-01-92	56-27-05	Washington University	1,091,481
5 F32AG05564-02	Gardner, Andrew W., effect of age and endurance training on lipid metabolism.	08-29-92	56-47-05	University of Vermont & State Agriculture College	28,600
1 F32AG05568-01A1	Monti, Laura A., preserved perceptual learning in Alzheimer's disease	08-01-92	56-87-05	Rush-Presbyterian-Saint Luke Medical Center	32,500
5 F31AG05577-02	Gabaldon, Annette M., minority predoctoral fellowship program	10-01-92	57-77-05	University of California Davis	13,646
1 F32AG05579-01	Goodman, Laurie E., expression of interleukin-6 in human senescent cells.	04-01-92	57-97-05	University of Colorado at Boulder	21,600
5 F32AG05581-02	Oberyszyn, Tatiana M., cellular mechanism of photoaging	10-01-92	58-17-05	Ohio State University	22,700
1 F33AG05584-01	Eckert, J. Kevin, culture of care giving among providers of board and care.	07-01-92	58-47-05	University of Maryland Baltimore Professional School	35,300
1 F32AG05585-01	Beckman, Kenneth B., measurement of somatic mutations in mitochondrial DNA.	04-01-92	58-57-05	University of California Berkeley	14,492
1 F32AG05589-01	Morgan, Todd E., TGF-B1 and the hippocampal response to lesions	04-01-92	58-97-05	University of Southern California	22,700
1 F32AG05591-01	Warren, James T., Jr., mutation scanning in Alzheimer's diseases	08-01-92	59-17-05	University of Michigan at Ann Arbor	28,600
1 F32AG05593-01	Rozovsky, Irina, complement Mrnas in brain: experimental lesions and aging.	08-01-92	59-37-05	University of Southern California	35,300
1 F32AG05595-01	Prowse, Karen R., mouse telomere length regulation in aging	09-01-92	59-57-05	Cold Spring Harbor Laboratory	28,600
1 F32AG05598-01	Rebeck, G. William, regulation of APP in Alzheimer's and Down's brains.	10-01-92	59-87-05	Massachusetts General Hospital	22,700

5 R01AG05601-08	Monnier, Vincent M., browning of human collagen in diabetes and aging.	04-06-92	60-17-05	Case Western Reserve University	131,162
5 R37AG05604-07	Nixon, Ralph, dynamics of the neuronal cytoskeleton in aging brain	01-15-92	60-47-05	McLean Hospital (Belmont, MA)	203,596
3 F32AG05604-07S1	Nixon, Ralph, dynamics of the neuronal cytoskeleton in aging brain	05-01-92	60-47-05	McLean Hospital (Belmont, MA)	5,000
1 F31AG05613-01	Brown, Michael D., minority predoctoral fellowship program—NIGMS	09-01-92	61-37-05	University of Maryland College Park Campus	14,034
1 F31AG05614-01	Starks, Kenneth M., acetylcholinesterase inhibitors and dementias	10-01-92	61-47-05	Georgia Institute of Technology	11,452
1 F31AG05615-01	Hamblet, Natasha S., mitochondrial DNA mutations in Alzheimer's disease.	11-01-92	61-57-05	Eastern Virginia Medical School/Medical College Hampton Road	14,416
2 R01AG05627-08	Blaschke, Terrence F., aging and in vivo vascular responsiveness in man.	08-24-92	62-77-05	Stanford University	197,259
5 R37AG05628-08	Good, Robert A., cellular engineering to treat, prevent diseases of aging.	04-15-92	62-87-05	University of South Florida	146,643
5 R01AG05633-08	Good, Robert A., reduced calories, proliferation, immunity, cancer, aging.	05-01-92	63-37-05	University of South Florida	178,705
5 P50AG05681-09	Berg, Leonard, Washington University Alzheimer's disease research center.	06-01-92	68-17-05	Washington University	2,387,247
3 R37AG05683-07S1	Glenner, George G., cerebrovascular amyloid protein in Alzheimer's disease.	05-01-92	68-37-05	University of California San Diego	5,000
5 R37AG05683-08	Glenner, George G., cerebrovascular amyloid protein in Alzheimer's disease.	09-01-92	68-37-05	University of California San Diego	237,361
5 R01AG05731-05	Bondada, Subbarao, age associated changes in B Lymphocyte function.	08-01-92	73-17-05	University of Kentucky	137,462
5 R01AG05739-07	Ball, Karlene K., improvement of visual processing in older adults	04-01-92	73-97-05	Western Kentucky University	125,043
5 P01AG05793-07	Johnston, C. Conrad, Jr., some determinants of bone mass in the elderly.	01-01-92	79-37-05	Indiana University-Purdue University at Indianapolis	1,393,817
3 P01AG05793-07S1	Johnston, C. Conrad, Jr., some determinants of bone mass in the elderly.	09-01-92	79-37-05	Indiana University-Purdue University at Indianapolis	49,935
5 P01AG05842-07	Wise, David A., economics of aging-competing continuation	05-15-92	84-27-05	National Bureau of Economic Research	642,754
3 R01AG05885-03S2	Modan, Baruch, national epidemiological study of the oldest old	05-15-92	88-57-05	Chaim Sheba Medical Center	23,700
8 R01AG05885-04	Modan, Baruch, a national epidemiological study of the oldest old	09-30-92	88-57-05	Chaim Sheba Medical Center	204,650
3 R37AG05890-07S1	Budinger, Thomas F., cerebral blood flow patterns in Alzheimer's disease.	06-01-92	89-07-05	University of California-Lawrence Berkeley Lab	5,000
5 R37AG05890-08	Budinger, Thomas F., cerebral blood flow patterns in Alzheimer's disease.	07-01-92	89-07-05	University of California-Lawrence Berkeley Lab	340,103
5 R01AG05891-08	Frangione, Blas, amyloidosis and Alzheimer's disease	07-01-92	89-17-05	New York University	317,837
5 R01AG05892-11	Iqbal, Khalid, Alzheimer neurofibrillary tangles: biochemical studies	05-01-92	89-27-05	Institute for Basic Research in Developmental Disability	131,950
7 R01AG05893-13	Hersh, Louis B., choline acetyltransferase	07-01-92	89-37-05	University of Kentucky	131,694
5 R01AG05894-20	Fine, Richard E., coated vesicles: membrane transport in muscle, brain.	05-01-92	89-47-05	Boston University	279,821

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Grant number	Principal investigator title	Budget start	Dates end	Institution	Total
5 R01AG05917-08	Rotundo, Richard L., regulation of acetylcholinesterase synthesis/ assembly.	05-01-92	91-77-05	University of Miami	94,391
5 R01AG05940-07	Schwartz, Janice B., effect of aging on calcium blocker kinetics/ dynamics.	08-01-92	94-07-05	University of California San Francisco	278,993
5 R01AG05944-06	Herron, Paul, limbic-basal ganglia-cortex interactions	04-01-92	94-47-05	University of Tennessee at Memphis	85,580
2 R01AG05972-07	Bowles, Nancy L., an analysis of word retrieval deficits in the aged	05-01-92	97-27-05	Boston University	130,132
2 R01AG05977-04	Evans, William S., regulation of gonadotropin secretion in aging women.	01-01-92	97-77-05	University of Virginia Charlottesville	145,809
5 R01AG06036-07	Arnsten, Amy F., cognitive loss with age: role of cortical catecholamines.	01-01-92	03-67-06	Yale University	146,165
3 R01AG06036-07S1	Arnsten, Amy F., cognitive loss with age: role of cortical catecholamines.	09-30-92	03-67-06	Yale University	50,000
5 R01AG06041-05	Hoyer, William J., aging, skill, and knowledge use	07-01-92	04-17-06	Syracuse University at Syracuse	103,778
5 R37AG06060-07	Felten, David L., MPTP-Degeneration of monoamine systems and aging.	08-01-92	06-07-06	University of Rochester	158,809
5 R01AG06072-08	Czeisler, Charles A., disrupted sleep in the elderly: response to phototherapy.	08-01-92	07-27-06	Brigham and Women's Hospital	413,789
5 R37AG06079-09	Holick, Michael F., influence of age on 7-dehydrocholesterol in the skin.	06-01-92	07-97-06	Boston University	107,241
5 R01AG06088-06	Gage, Fred H., embryonic nerve cell transplantation in aged rat brain	02-01-92	08-87-06	University of California San Diego	252,083
5 R01AG06093-20	Nakajima, Yasuko, ultrastructure and function of nerve and muscle	02-01-92	09-37-06	University of Illinois at Chicago	183,504
3 R37AG06108-07S1	Hornsby, Peter J., aging of endocrine cells in culture	12-15-91	10-87-06	Medical College of Georgia	12,783
4 R37AG06108-08	Hornsby, Peter J., aging of endocrine cells in culture	04-15-92	10-87-06	Medical College of Georgia	76,479
3 R37AG06108-08S1	Hornsby, Peter J., aging of endocrine cells in culture	05-01-92	10-87-06	Medical College of Georgia	5,000
7 R37AG06108-09	Hornsby, Peter J., aging of endocrine cells in culture	08-01-92	10-87-06	Baylor College of Medicine	168,155
5 R37AG06116-08	Dice, James F., Jr., protein degradation in aging human fibroblasts	04-15-92	11-67-06	Tufts University Boston	252,993
3 R37AG06116-08S1	Dice, James F., Jr., protein degradation in aging human fibroblasts	07-01-92	11-67-06	Tufts University Boston	5,000
5 R01AG06127-06	Gilden, Donald H., neurobiology of varicella-zoster virus	07-01-92	12-77-06	University of Colorado Health Sciences Center	275,933
5-R01AG06157-06	Faulkner, John A. exercise injury and repair of muscle fibers in aged mice.	01-01-92	15-77-06	University of Michigan at Ann Arbor	132,853
5-R01AG06159-05	Vijayan, Vijaya K., reactive properties of brain neuroglia in aging rats.	04-01-92	15-97-06	University of California Davis	130,472
5-R01AG06168-07	Jazwinski, S. Michal., cellular aging in a yeast model system	05-10-92	16-87-06	Louisiana State University Medical Center New Orleans	173,386
5-R01AG06170-07	Potter, Lincoln T., cholinergic mechanisms in aging and Alzheimer's disease.	05-01-92	17-07-06	University of Miami	224,554

5-R37AG06173-07	Selkoe, Dennis J., aging in the brain: role of the fibrous proteins	02-01-92	17-37-06	Brigham and Women's Hospital	296,716
5-R01AG06221-07	Tate, Charlotte A., myocardial response to exercise during senescence.	04-01-92	22-17-06	University of Houston-University Park	161,781
5-R01AG06226-06	Meyer, Edwin M., aging and brain acetylcholine release	01-15-92	22-67-06	University of Florida	83,043
5-R01AG06246-07	Kelley Keith W., hormonial restoration of a functional thymus during aging.	09-01-92	24-67-06	University of Illinois Urbana-Champaign	237,567
5-R01AG06265-07	Park, Denise C., effects of context on the aging memory	07-01-92	26-57-06	University of Georgia	160,481
2-R01AG06268-03A2	Erber, Joan T., age and memory in perceptions of cognitive capability.	08-01-92	26-87-06	Florida International University	101,804
5-R01AG06278-07	Albright, Julia W., aging of immunity to parasites	05-01-92	27-87-06	George Washington University	209,735
3-R01AG06278-07S1	Albright, Julia W., aging of immunity to parasites	06-15-92	27-87-06	George Washington University	7,338
5-R01AG06299-08	Galili, Uri, anti-Gal IGG on human red cells: a model for cell aging	08-01-92	29-97-06	Medical College of Pennsylvania	296,561
5-R01AG06348-06	Gaskin, Felicia, autoantibodies in Alzheimer's disease and normal aging.	04-15-92	34-08-06	University of Virginia Charlottesville	139,176
2-R01AG06434-06	Gerhardt, Greg A., age-induced changes in monomine presynaptic function.	04-15-92	43-47-06	University of Colorado Health Sciences Center	113,529
2-R01AG06442-07	Paige, Gary D., sensory-motor/adaptive mechanisms in equilibrium control.	06-01-92	44-27-06	University of Rochester	237,462
5-R01AG06457-07	Horak, Fay B., peripheral and central postural disorders in the elderly.	09-01-92	45-77-06	Good Samaritan Hospital and Medical Center Portland, Oregon	208,874
5-R37AG06490-07	Dement, William C., sleep, exercise, aging and the circadian system	09-01-92	49-07-06	Stanford University	157,997
5-R01AG06528-07	Davidson, Jeffrey M., elastin and collagen in the aging process	08-01-92	52-87-06	Vanderbilt University	161,554
7-R01AG06537-07	Seals, Douglas R., sympathetic nervous system activity and human aging.	08-15-92	53-77-06	University of Colorado at Boulder	150,176
5-R37AG06559-05	Johnson, Colleen L., the social world of the oldest old	03-01-92	55-97-06	University of California San Francisco	155,097
3-R37AG06559-05S1	Johnson, Colleen L., the social world of the oldest old	04-15-92	55-97-06	University of California San Francisco	70,500
3-R37AG06559-05S2	Johnson, Colleen L., the social world of the oldest old	04-15-92	55-97-06	University of California San Francisco	5,000
5-P01AG06569-06	Harrell, Lindy E., Alzheimer's disease: a multidisciplinary approach	05-01-92	56-97-06	University of Alabama at Birmingham	1,000,676
5-R01AG06584-07	Given, Charles W., caregiver responses to managing elderly patients at home.	05-01-92	58-47-06	Michigan State University	149,231
5-R01AG06601-06	Kosik, Kenneth S., the pathobiology of Tau protein	01-15-92	60-17-06	Brigham and Women's Hospital	185,462
4-R37AG06605-06	Corkin, Suzanne H., theoretical analysis of learning in age-related disease.	03-17-92	60-57-06	Massachusetts Institute of Technology	250,627
3-R01AG06621-04S1	Schultz, Albert B., biomechanics of human falls in young adults	04-01-92	62-17-06	University of Michigan at Ann Arbor	59,479
2-R01AG06621-05A2	Schultz, Albert B., biomechanics of falls and balance in old adults	09-28-92	62-17-06	University of Michigan at Ann Arbor	138,153
5-R01AG06633-06	Sapolsky, Robert M., aging and hippocampal neuron loss: role of glucocorticoi.	01-15-92	63-37-06	Stanford University	173,983
5-R01AG06641-06	Robbins, Norman, plasticity of motor nerve terminals in young and old mice.	04-01-92	64-17-06	Case Western Reserve University	123,211
4-R37AG06643-06	Liang, Jersey, well-being among the American and Japanese elderly	08-01-92	64-37-06	University of Michigan at Ann Arbor	146,128

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Grant number	Principal investigator title	Budget start	Dates end	Institution	Total
5–R01AG06647–05	Morrison, John H., cortico-cortical loss in Alzheimers disease in the aged.	04–01–92	64–77–06	Mount Sinai School of Medicine	194,244
5 R01AG06656 –06	Younkin, Steven G., ache, chat and cholinergic neurons in aging and ad.	01–01–92	65–67–06	Case Western Reserve University	204,037
2–R37AG06665–05A1	Horwitz, Barbara A., aging and gender effects on responses to cold in rats.	08–01–92	66–57–06	University of California Davis	205,959
5–U01AG06781–06	Larson, Eric B., Alzheimer's disease patient registry	04–20–92	78–17–06	University of Washington	540,304
5 U01AG06786–07	Kurland, Leonard T., Alzheimer's disease patient registry	09–01–92	78–67–06	Mayo Foundation	439,041
5 U01AG06790–07	Heyman, Albert, consortium—establishing an Alzheimer's disease register.	09–01–92	79–07–06	Duke University	1,246,367
5 P01AG06803–06	Davies, Peter, fundamental studies on Alzheimers disease	06–01–92	80–37–06	Yeshiva University	1,087,288
5 R01AG06806–05	Kirasic, Kathleen C., aging, cognitive processing, and learning abilities.	05–01–92	80–67–06	University of South Carolina at Columbia	78,436
5 R37AG06826–07	Salthouse, Timothy A., adult age differences in reasoning and spatial abilities.	08–01–92	82–67–06	Georgia Institute of Technology	108,429
5 P01AG06836–05	Monk, Timothy H., aging, temperature and sleep—cyclic regulatory mechanisms.	04–01–92	83–67–06	University of Pittsburgh at Pittsburgh	617,051
5 R29AG06849–05	Ostergaard, Arne L., priming and memory in amnesia and Alzheimers disease.	03–01–92	84–97–06	University of California San Diego	92,153
5 R29AG06854–05	Schwab, rise, impaired proliferation of T lymphocytes from aged humans.	08–01–92	85–47–06	Cornell University Medical Center	103,034
2 R01AG06860–60	Cathcart, Edgar S., amyloid, aging and diet	09–01–92	86–07–06	Boston University	189,327
5 P01AG06872–06	Bowman, Barbara H., molecular genetic mechanisms of aging	06–01–92	87–27–06	University of Texas Health Science Center San Antonio	887,816
5 R01AG06886–06	McGue, Matthew K., a twin study of normal aging	09–05–92	88–67–06	University of Minnesota Twin Cities	190,008
2 R01AG06895–13A2	Schiavi, Raul C., psychophysiology of sexual function and dysfunction..	05–01–92	89–57–06	Mount Sinai School of Medicine	211,532
2 R01AG06943–06A1	Vlassara, Helen, glycation in diabetes and aging	09–30–92	94–37–06	Picower Institute for Medical Research	224,814
5 R01AG06945–06	Blair, Steven N., impact of physical fitness and exercise on health	04–01–92	94–57–06	Cooper Institute for Aerobics Research	231,875
5 R01AG06946–06	Orme, Ian M., aging and immunity to tuberculosis	08–01–92	94–67–06	Colorado State University	207,021
5 R01AG06969–05	Binder, Lester I., maps: segregation and function	04–01–92	96–97–06	University of Alabama at Birmingham	167,186
3 R37AG07001–05S1	Lawton, M. Powell, affect, normal aging, and personal competence	04–01–92	00–17–07	Philadelphia Geriatric Center—Friedman Hospital	5,000
4 R37AG07001–06	Lawton, M. Powell, affect, normal aging, and personal competence	09–18–92	00–17–07	Philadelphia Geriatric Center—Friedman Hospital	164,637
3 R37AG07025–05S1	Manton, Kenneth G., forecasting life expectancy and active life	06–01–92	02–57–07	Duke University	5,000
4 R37AG07025–06	Manton, Kenneth G., forecasting life and active life expectancy	09–30–92	02–57–07	Duke University	201,582
5 R01AG07057–03	Jackson, Rodwin A., normal aging and diabetes—metabolic distinction.	08–15–92	05–77–07	University of London	34,764

5 R01AG07114-06	Gilchrest, Barbara A., aging: cell growth and differentiation	08-15-92	11-47-07	Boston University	210,124
5 P01AG07123-05	Smith, James R., molecular approaches to the study of cellular aging	12-15-91	12-37-07	Baylor College of Medicine	735,919
2 R01AG07137-06	McArdle, J. Jack., growth curves of adult intelligence by time-lag testing.	06-01-92	13-77-07	University of Virginia Charlottesville	143,263
5 R01AG07146-04	Baron, John A., fracture epidemiology and outcomes in the elderly	04-01-92	14-67-07	Dartmouth College	232,618
3 R37AG07181-05S1	Barrett-Connor, Elizabeth L., risk factors for osteoporosis in the elderly.	04-15-92	18-17-07	University of California San Diego	5,000
4 R37AG07181-06	Barret-Connor, Elizabeth L., study of risk factors for osteoporosis in elderly.	09-28-92	18-17-07	University of California San Diego	347,919
3 R37AG07182-05S1	McKinlay, John B., pathways to provision of care for frail older persons.	04-01-92	18-27-07	New England Research Institute, Inc.	5,000
4 R37AG07182-06	McKinlay, John B., pathways to successful caregiving for frail older person.	08-01-92	18-27-07	New England Research Institute, Inc.	329,719
2 R01AG07195-04A1	Ford, Amasa B., use of services by black and white elderly (revised).	08-15-92	19-57-07	Case Western Reserve University	279,235
3 R37AG07189-05S1	Manton, Kenneth G., functional and health changes of the elderly—1982-1988.	04-02-92	19-87-07	Duke University	5,000
4 R37AG07198-06	Manton, Kenneth G., functional and health changes of the elderly—1982-1988.	07-06-92	19-87-07	Duke University	679,395
3 R37AG07198-06S1	Manton, Kenneth G., functional and health changes of the elderly—1982-1988.	09-30-92	19-87-07	Duke University	75,000
5 R01AG07218-06	Herman, Brian A., mechanisms of cell death in hepatocytes	07-01-92	21-87-07	University of North Carolina Chapel Hill	276,113
5 R01AG07225-04	Wei, Jeanne Y., orthostatic hypotension in older persons	01-15-92	22-57-07	Beth Israel Hospital Boston	109,163
5 P01AG07232-04	Mayeux, Richard P., epidemiology of dementia in an urban community.	02-15-92	23-27-07	Columbia University New York	1,509,729
3 P01AG07232-04S1	Mayeux, Richard, Harlem aging project	06-05-92	23-27-07	Columbia University New York	341,730
5 P01AG07347-05	Gilden, Donald H., chronic neurologic disease—neurotropic virus	05-01-92	34-77-07	University of Colorado Hlth Sciences Ctr	1,053,125
5 R29AG07352-05	Larish, Douglas D., economical walking in the aged	08-01-92	35-27-07	Arizona State University	89,911
5 R29AG07359-05	Burmer, Glenna C., cloning of the Werner's syndrome defect	04-01-92	35-01-07	University of Washington	113,067
3 R01AG07363-04S1	Weiss, Robert S., transition to retirement from managerial roles	08-01-92	36-37-07	University of Massachusetts Boston	2,560
5 R01AG07367-05	Rogers, Joseph, complementg activation in Alzheimer disease pathogenesis.	09-01-92	36-77-07	Institute for Biogerontology Research	169,407
5 R01AG07370-04	Stern Yaakov, predictors of severity in Alzheimer disease	02-01-92	37-07-07	Columbia University New York	374,830
5 R37AG07388-05	Young, Vernon R., regulation of energy metabolism in aging man	08-15-92	38-87-07	Massachusetts Institute of Technology	305,673
5 R01AG07410-02	Reitzes, Donald C., roles and self—factors in development and retirement.	09-01-92	41-07-07	Georgia State University	196,926
3 R01AG07410-02S1	Reitzes, Donald C., roles and self—factors in development and retirement.	09-30-92	41-07-07	Georgia State University	66,852
5 R29AG07424-05	Eckenstein, Felix P., neurotrophic support in aging and Alzheimer's disease.	04-01-92	42-47-07	Oregon Health Sciences University	101,996

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Grant number	Principal investigator title	Budget start	Dates end	Institution	Total
3 R01GA07425-04S1	Rice, Dorothy P., epidemiology of chronic disease in the oldest old	05-01-91	42-57-07	Kaiser Foundation Research Institute	26,602
2 R01AG07425-05	Rice, Dorothy P., epidemiology of chronic disease in the oldest old	09-30-92	42-57-07	Kaiser Foundation Research Institute	157,964
5 R01AG07433-04	Ried, L. Douglas, antihypertensive drug use and functioning in the elderly.	07-01-92	43-37-07	Kaiser Foundation Research Institute	75,341
5 R01AG07444-05	Wang, Yu-Hwa E., growth control in aging fibroblasts	03-01-92	44-47-07	McGill University	104,270
5 R01AG07449-04	Tinetti, Mary E., injury and functional decline in elderly fallers	05-01-92	44-47-07	Yale University	304,834
2 R01AG07450-04	Maciag, Thomas, endothelial cell senescence genes	05-01-92	45-07-07	American National Red Cross	242,158
5 R29AG07452-05	Matt Dennis W., reproductive aging and the hypothalamic-pituitary axes.	08-01-92	45-27-07	Virginia Commonwealth University	91,371
5 R29AG07465-05	Aldiwin, Carolyn M., psychosocial factors affecting health among older men.	08-01-92	46-57-07	University of California, Davis	95,234
5 R01AG07466-03	Perlmutter, Marion, age and activity effects on adult cognition	09-01-92	46-67-07	University of Michigan at Ann Arbor	125,672
5 R01AG07467-06	Ookhtens, Murad, aging on efflux and turnover of hepatic glutathione.	05-01-92	46-77-07	University of Southern California	186,622
5 R01AG07469-05	Manton, Kenneth G., active life expectancy in old and oldest-old populations.	04-01-92	46-97-07	Duke University	163,646
5 R01AG07476-05	Levenson, Robert W., aging and effective marital functioning	04-01-92	47-67-07	University of California, Berkeley	145,911
5 R29AG07480-05	Idler, Ellen L., epidemiology of chronic pain and self-assessed health	07-01-92	48-07-07	Rutgers the State Univ., New Brunswick	109,920
5 R44AG07522-03	McGowan, Edward J., biofeedback system for urinary and fecal incontinence.	05-15-92	52-27-07	E.J. McGowan and Associates, Inc.	231,675
5 R01AG07547-04	Peretz, Bertram, neuron viability in the adult nervous system	01-01-92	54-77-07	University of Kentucky	127,779
5 R01AG07552-05	Perry, George, amyloid precursor in Alzheimer disease	04-01-92	55-27-07	Case Western Reserve University	114,644
5 R37AG07554-05	Willott, James F., aging and central auditory system morphology	05-01-92	55-47-07	Northern Illinois University	74,776
3 R37AG07554-05S1	Willott, James F., aging and central auditory system morphology	05-01-92	55-47-07	Northern Illinois University	5,000
5 R01AG07562-04	Ganguli, Mary, epidemiology of dementia—a prospective community study.	01-01-92	56-27-07	University of Pittsburgh at Pittsburgh	331,588
2 R01AG07562-05	Ganguli, Mary, epidemiology of dementia—a prospective community study.	09-01-92	56-27-07	University of Pittsburgh at Pittsburgh	616,248
2 R01AG07569-04	Parasuraman, Raja, attention in aging and early Alzheimer's dementia.	05-01-92	56-97-07	Catholic University of America	109,639
5 R01AG07584-05	Kukull, Walter A., genetic differences in Alzheimers cases and controls.	05-01-92	58-47-07	University of Washington	281,436
2 R01AG07591-05A1	Kozikowski, Alan P., agents for the treatment of memory and learning disorders.	05-01-92	59-17-07	Mayo Foundation	230,069
5 R01AG07592-04	Barnard, Roy J., mechanisms of aging induced insulin resistance	01-01-92	59-27-07	University of California, Los Angeles	138,168

5 R29AG07597-05	Stull, Donald E., caring for elders—impact of social support and burden.	04-01-92	59-77-07	University of Akron	103,681
5 R01AG07607-03	Blanchard-Fields, Fredda H., attributional processes in adulthood and aging.	04-01-92	60-77-07	Louisiana State University College at Baton Rouge	95,367
5 R01AG07618-04	Beyene, Yewoubdar, menopause, aging and osteoporosis: cross-cultural inquiry.	05-01-92	61-87-07	University of California San Francisco	58,096
5 R01AG07624-04	Chui, Helena C., Alzheimer's disease and cerebral amyloid angiopathy	01-15-92	62-47-07	University of Southern California	158,755
5 R01AG07631-05	Brater, Donald C., clinical pharmacology of nsaids in the elderly	04-01-92	63-17-07	Indiana University-Purdue University at Indianapolis	271,292
5 R37AG07637-04	Hermalin, Albert I., comparative study of the elderly in four Asian contries.	03-01-92	63-77-07	University of Michigan at Ann Arbor	313,929
5 R01AG07648-03	Gold, Paul E., aging and memory	05-15-92	64-87-07	University of Virginia Charlottesville	117,092
5 R29AG07651-05	Garber, Alan M., health economics of aging	04-01-92	65-17-07	Stanford University	63,405
5 R01AG07654-05	Fisk, Arthur D., automatic and controlled processing and aging	09-01-92	65-47-07	Georgia Institute of Technology	147,089
2 R01AG07657-04A1	Sohal, Rajindar S., cellular aging and oxygen free radicals	04-01-92	65-77-07	Southern Methodist University	118,310
5 R01AG07660-06	Goldberg, Andrew P., aerobic capacity and metabolic function in seniors.	08-20-92	66-07-07	University of Maryland Baltimore Professional School	215,588
5 R29AG07676-03	Mittman, Brian S., reactions—older workers promotion and employment prospects.	01-17-92	67-67-07	Rand Corporation	107,354
5 P01AG07687-05	Simon, Melvin I., aging in the nervous system	05-01-92	68-77-07	California Institute of Technology	571,080
5 R01AG07695-05	Lal, Harbans, neurobehavioral and immunological markers of aging	04-01-92	69-57-07	Texas College of Osteopathic Medicine	124,966
5 R01AG07700-05	Friedman, Eitan, aging, protein kinase C and serotonin release	04-01-92	70-07-07	Medical College of Pennsylvania	110,723
5 R01AG07711-05	Reiser, Karen M., collagen crosslinks: biomarkers of aging	04-15-92	71-17-07	University of California Davis	97,342
5 R01AG07719-05	Murasko, Donna M., immune and neurologic parameters as biomarkers of aging.	04-01-92	71-97-07	Medical College of Pennsylvania	155,052
5 R01AG07723-05	Gallop, Paul M., biomarkers of aging—circulating/deposited osteocalcin.	04-15-92	72-37-07	Harvard University	207,622
3 R01AG07724-04S1	Wolf, Norman S., cell renewal, size, and cloning as biomarkers of aging.	01-15-92	72-47-07	University of Washington	19,595
5 R01AG07724-05	Wolf, Norman S., cell renewal, size, and cloning as biomarkers of aging.	04-15-92	72-47-07	University of Washington	228,833
3 R01AG07724-05S1	Wolf, Norman S., cell renewal, size, and cloning as biomarkers of aging.	06-01-92	72-47-07	University of Washington	30,869
5 R01AG07732-05	Diamond, Jack, peripheral NGF-related sensory markers of aging in skin.	04-01-92	73-27-07	McMaster University	75,527
5 R01AG07735-05	Olton, David S., behavioral and physiological biomarkers of aging	04-15-92	73-57-07	Johns Hopkins University	143,527
3 R01AG07735-05S1	Olton, David S., behavioral and physiological biomarkers of aging	06-01-92	73-57-07	Johns Hopkins University	2,515
5 R01AG07736-06	Davis, Paul J., cellular biomarkers of aging	04-01-92	73-67-07	Albany Medical College of Union University	156,771
5 R01AG07739-05	Busbee, David L., DNA polymerase alpha expression—miomarker of aging.	04-01-92	73-97-07	Texas Agriculture and Mechanical University College Station	106,180
5 R01AG07747-05	Bronson, Roderick T., age related legions as biomarkers of aging	04-01-92	74-77-07	Tufts University Boston	126,781

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Grant number	Principal investigator title	Budget start	Dates end	Institution	Total
5 R01AG07750–05	Randerath, Kurt, DNA modifications—I compounds as biomarkers of aging.	04–01–92	75–07–07	Baylor College of Medicine	102,705
5 R01AG07752–05	Sonntag, William E., growth hormone and GH-dependent biomarkers of aging.	04–01–92	75–27–07	Wake Forest University	109,994
5 R01AG07767–05	Landfield, Philip W., biomarkers of brain aging	04–01–92	76–77–07	University of Kentucky	170,220
5 R01AG07772–05	Guilleminault, Christian, sleep circadian rhythms activity and the heart.	06–01–92	77–27–07	Stanford University	162,594
5 R01AG07793–05	Jagust, William J., longitudinal spect and pet studies of dementia	07–06–92	79–37–0/	University of California-Lawrence Berkeley Laboratory	280,557
5 R01AG07795–03	Miller, Marilyn M., neuroendocrine regulation in the aging hypothalamus.	06–15–92	79–57–07	McGill University	93,506
1 R01AG07800–01A1	Gustman, Alan L., projecting pension incomes of the old and oldest old.	07–15–92	80–07–07	National Bureau of Economic Research	31,621
5 R01AG07801–05	Montgomery, Mark R., toxicology of pulmonary oxidant injury in aging.	08–01–92	80–17–07	University of South Florida	75,150
2 R01AG07805–04	Griffith, William H., III, physiology of cholinergic basal forebrain neurons.	05–01–92	80–57–07	Texas Agriculture and Mechanical University College Station	104,836
5 R01AG07812–03	Gilinsky, Alberta S., judgement and reasoning across the life span	01–15–92	81–27–07	Wesleyan University	65,447
5 R01AG07820–03	Morris, John N., high risk elders and community residence	09–01–92	82–07–07	Hebrew Rehabilitation Center for Aged	255,740
3 R37AG07823–03S1	Kahana, Eva F., adaptation to frailty among dispensed elderly	05–15–92	82–37–07	Case Western Reserve University	5,000
5 R237AG07823–04	Kahana, Eva F., adaptation to frailty among dispersed elderly	07–01–92	82–37–07	Case Western Reserve University	120,187
3 R37AG07823–04S1	Kahana, Eva F., adaptation to frailty among dispersed elderly	07–01–92	82–37–07	Case Western Reserve University	38,728
3 R37AG07823–04S2	Kahana, Eva F., adaptation to frailty among dispersed elderly	08–15–92	82–37–07	Case Western Reserve University	38,075
5 R01AG07831–04	Ershler, William B., calorie restriction and aging in non-human primates.	06–01–92	83–17–07	University of Wisconsin Madison	316,346
5 R01AG07849–04	Henretta, John C., joint retirement in two-worker couples	02–01–92	84–97–07	University of Florida	112,453
5 R29AG07854–05	Mitchell, David B., normal aging—evidence for multiple memory systems.	07–01–92	85–47–07	Southern Methodist University	56,605
5 R29AG07855–05	Peterson, Christine, altered calcium homeostasis to diagnose Alzheimer's.	07–01–92	85–57–07	University of Southern California	116,331
5 R29AG07857–05	Poehlman, Eric T., physical activity and energy metabolism in aging man.	08–01–92	85–77–07	University of Vermont and State Agriculture College	88,949
5 R01AG07886–05	Holland, Audrey L., discourse and everyday remembering in Alzheimer diseases.	07–01–92	88–67–07	University of Arizona	120,557
5 R01AG07891–04	Blanks, Janet M., mechanisms of retinal defects in Alzheimer's disease.	05–15–92	89–17–07	Doheny Eye Institute	123,943

5 R29AG07904-03	Williams, David R., SES differences in morbidity/mortality in mid/late life.	02-01-92	90-47-07	Yale University	69,592
7 R29AG07904-04	Williams David R., SES differences in morbidity/mortality in mid/late life.	09-24-92	90-47-07	University of Michigan at Ann Arbor	34,285
5 R29AG07907-06	McAuley, Edward, self-efficacy cognition, exercise, and aging	07-01-92	90-77-07	University of Illinois Urbana-Champaign	75,007
5 R35AG07909-04	Finch, Caleb E., leadership and excellence in Alzheimer's disease	01-15-92	90-97-07	University of Southern California	690,342
5 R35AG07911-05	Selkoe, Dennis J., leadership and excellence in Alzheimer's disease	08-01-92	91-17-07	Brigham and Women's Hospital	758,475
3 R35AG07911-05S1	Selkoe, Dennis J., leadership and excellence in Alzheimer's Disease	08-01-92	91-17-07	Brigham and Women's Hospital	91,000
5 R35AG07914-04	Price, Donald L., molecular neuropathology of aging and dementia	02-01-92	91-47-07	Johns Hopkins University	763,211
5 R35AG07918-04	Cotman, Carl W., neuronal plasticity versus pathology in Alzheimer's	01-17-92	91-87-07	University of California Irvine	548,669
5 R35AG07922-05	Roses, Allen D., genetics of late and early onset Alzheimer's disease	08-01-92	92-27-07	Duke University	696,518
2 U01AG07929-03A1	Defriese, Gordon H., national follow-up study of self-care among older adults.	09-21-92	92-97-07	University of North Carolina Chapel Hill	391,893
5 R29AG07933-04	Erickson, Kenneth R., evoked potentials early Alzheimer's disease detection.	07-01-92	93-37-07	Good Samaritan Hosp & Med Ctr—Portland, OR	86,254
5 R01AG07972-04	Denhardt, David T., altered gene expression in immortal/senescent cells.	06-01-92	97-27-07	Rutgers the State University New Brunswick	173,146
5 R37AG07977-10	Bengtson, Vern L., a longitudinal study of generations and mental health.	03-01-92	97-77-07	University of Southern California	593,518
3 R37AG07977-10S1	Bengtson, Vern L., a longitudinal study of generations and mental health.	08-01-92	97-77-07	University of Southern California	5,000
5 R01AG07980-02	Hurwitz, Aryeh, age-related gastric changes and drug absorption	02-01-92	98-07-07	University of Kansas Medical Center	185,607
5 R01AG07988-03	Boden, Guenther, nutritional effects of ethanol in the elderly	01-01-92	98-87-07	Temple University	163,433
5 R29AG07991-03	McDowd, Joan M., inhibitory process in selective attention and aging	09-01-92	99-17-07	University of Southern California	101,464
5 R01AG07992-04	Wright, Woodring E., mechanisms of cellular immortalization	07-01-92	99-27-07	University of Texas Southwest Medical Center Dallas	239,966
2 P01AG07996-04A1	Lotz, Martin, studies of joint aging and osteoarthritis	09-20-92	99-67-07	University of California San Diego	436,489
5 R01AG07998-04	Divenyi, Pierre L., speech perception under non-optimal conditions in aging.	03-01-92	99-87-07	East Bay Institute for Research and Education	101,904
5 R01AG08010-04	Burgio, Kathryn L., behavioral versus drug intervention—urinary incontinence.	07-01-92	01-07-08	University of Pittsburgh at Pittsburgh	11,846
7 R01AG08010-05	Burgio, Kathryn Larsen, behavioral versus drug intervention for urinary incontinence.	09-30-92	01-07-08	University of Alabama at Birmingham	120,488
5 P50AG08012-05	Whitehouse, Peter J., UHC/CWRU Alzheimer's disease research center.	07-15-92	01-27-08	Case Western Reserve University	1,165,889
3 P50AG08012-05S1	Whitehouse, Peter J., UHC/CWRU Alzheimers disease research center	06-01-92	01-27-08	Case Western Reserve University	252,255
5 P50AG08013-05	Rosenberg, Roger N., neurobiology of Alzheimers disease and aging	08-01-92	01-37-08	University of Texas Southwest Medical Center at Dallas	1,365,182
5 P30AG08014-03	Becker, Robert E., Alzheimers disease center core grant	07-01-92	01-47-08	Southern Illinois University School of Medicine	662,685
5 P30AG08017-03	Zimmerman, Earl A., Alzheimer's disease center core grant	07-15-92	01-77-08	Oregon Health Sciences University	504,448
5 P30AG08031-03	Kurland, Leonard T., Alzheimer's disease center core grant	06-15-92	03-17-08	Mayo Foundation	623,958
3 P30AG08031-03S1	Kurland, Leonard T., Alzheimer's disease center core grant	07-01-92	03-17-08	Mayo Foundation	232,204

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Grant number	Principal investigator title	Budget start	Dates end	Institution	Total
7 R29AG08047–03	Newman, Anne B., epidemiology of arterial disease in the elderly	01–15–92	04–77–08	Allegheny-Singer Research Institute	97,340
5 P30AG08051–03	Ferris, Steven H., Alzheimer's disease center core grant	06–01–92	05–17–08	New York University	784,175
5 R37AG08055–04	Schaie, K. Warner, longitudinal studies of adult cognitive development.	01–15–92	05–57–08	Pennsylvania State University-University Park	523,852
3 R37AG08055–04S1	Schaie, K. Warner, longitudinal studies of adult cognitive development.	04–01–92	05–57–08	Pennsylvania State University-University Park	5,000
5 R01AG08076–02	Iqbal, Khalid, neuronal cytoskeletal alterations in Alzheimer disease	02–01–92	07–67–08	Institute for Basic Research and Development Disability	152,432
2 R01AG08084–04	Potter, Huntington, amyloid deposition in aging and Alzheimer's disease.	03–15–92	08–47–08	Harvard University	162,723
5 R01AG08092–03	Schwab, Rise, subscellular basis for human t. cell senescence	02–01–92	09–27–08	Cornell University Medical Center	70,123
5 R01AG08094–04	Liang, Jersey, well-being among the aged—three nation study	09–01–92	09–47–08	University of Michigan at Ann Arbor	271,375
5 R01AG08099–04	Toran-Allerand, C. Dominique, interactions of NGF/estrogen in CNS development and aging.	04–01–92	09–97–08	Columbia University New York	216,758
3 R01AG08099–04S1	Toran-Allerand, C. Dominique, interactions of NGF/estrogen in CNS development and aging.	09–01–92	09–97–08	Columbia University New York	50,000
5 R01AG08109–08	O'Connor, Clare M., methylation of atypical protein aspartyl residues	08–01–92	10–97–08	Worchester Foundation for Experimental Biology	256,527
3 R01AG08117–03S1	Corkin, Suzanne H., effects of AD on basic and high-order sensory capacities.	04–01–92	11–77–08	Massachusetts Institute of Technology	40,950
2 R01AG08117–04A1	Corkin, Suzanne H., effects of AD on basic and high-order sensory capacities.	08–15–92	11–77–08	Massachusetts Institute of Technology	208,343
5 R01AG08122–04	Wolf, Philip A., epidemiology of dementia in the framingham cohort	01–01–92	12–27–08	Boston University	173,016
5 R01AG08131–03	Sutch, Richard C., work and retirement in the United States: 1900–1940.	09–01–92	13–17–08	University of California Berkeley	43,509
5 R29AG08133–04	Collier, Timothy J., norepinephrine supplementation in aging	01–01–92	13–37–08	University of Rochester	89,674
5 R29AG08134–05	Anderson, Trudy B., aging couples—last stage of family life	05–01–92	13–47–08	University of North Carolina Greensboro	86,522
5 R37AG08146–04	Wise, David A., pension plan provisions and early retirement	01–17–92	14–67–08	National Bureau of Economic Research	102,394
5 R44AG08151–03	Lerner, Neil D., smoke detector/emergency egress product for older users.	08–20–92	15–17–08	Comsis Corporation	146,050
5 R37AG08155–04	Gambetti, Pierluigi, molecular pathology of Alzheimer's disease	04–01–92	15–57–08	Case Western Reserve University	227,815
3 R37AG08155–04S1	Gambetti, Pierluigi, molecular pathology of Alzheimer's disease	04–01–92	15–57–08	Case Western Reserve University	5,000
5 R01AG08172–05	Moore, Robert Y., circadian rhythms and thermoregulation	06–01–92	17–27–08	University of Pittsburgh at Pittsburgh	95,966
5 R01AG08173–05	Porter, John C., impaired secretion by aging neurons	06–01–92	17–37–08	University of Texas Southwest Medical Center at Dallas	258,347
5 R01AG08174–05	Simpson, Evan R., acting and the regulation of aromatase in adipose tissue.	06–01–92	17–47–08	University of Texas Southwest Medical Center at Dallas	161,988
5 R01AG08175–05	Mason, James I., regulation of adrenal C19 steroid biosynthesis	06–01–92	17–57–08	University of Texas Southwest Medical Center at Dallas	139,696

5	R01AG08177-05	Abraham, George N., clonal B-cell analysis in human monoclonal gammapathies.	09-01-92	17-77-08	University of Rochester	182,814
5	R01AG08178-05	Leddy, John P., pathogenesis of erythrocyte autoantibody formation	09-01-92	17-87-08	University of Rochester	168,337
5	R01AG08179-05	Zauderer, Maurice, variable Gene Utilization in specific T-cell responses.	09-01-92	17-97-08	University of Rochester	127,578
2	R01AG08193-04	Cerny, Jan, repertoire of bacterial antibody in aging	01-15-92	19-37-08	University of Maryland Baltimore Professional School	174,543
5	R01AG08196-05	Riggs, Arthur D., x-chromosome inactivation and DNA methylation	07-01-92	19-67-08	Beckman Research Institute/City of Hope	287,258
5	R29AG08199-05	Turker, Mitchell S., somatic mutation and aging—a model system	07-01-92	19-97-08	University of Kentucky	125,159
5	R01AG08200-05	Robakis, Nilolaos K., cytoskeletal association of full length and truncated APP.	08-01-92	20-07-08	Mount Sinai School of Medicine	180,552
5	R01AG08201-05	Terry, Robert D., structure and function in Alzheimer's disease	08-01-92	20-17-08	University of California San Diego	550,844
5	R01AG08203-05	Murphy, Claire L., olfactory dysfunction in Alzheimer's disease	08-01-92	20-37-08	San Diego State University	29,946
5	R01AG08204-05	Butters, Nelson M., neuropathological—memory correlates in data	08-01-92	20-47-08	University of California San Diego	67,635
5	R01AG08205-05	Saitoh, Tsunao, altered protein kinases in Alzheimer's disease	08-01-92	20-57-08	University of California San Diego	179,081
5	R01AG08206-06	Armstrong, David M., transmitter neuroanatomy in Alzheimer's disease.	08-01-92	20-67-08	Georgetown University	108,938
5	R01AG08207-05	Finklestein, Seth P., Fibroblast growth factors in the aging brain	07-01-92	20-77-08	Massachusetts General Hospital	177,888
5	R01AG08211-02	Magaziner, Jay, epidemiology of dementia in aged nursing home admissions.	08-05-92	21-17-08	University of Maryland Baltimore Professional School	752,980
7	R01AG08226-04	Abernethy, Darrell R., calcium antagonists, aging, and hypertension	06-01-92	22-67-08	Rhode Island Hospital (Providence, RI)	166,853
3	R01AG08235-02S1	Hultsch, David F., individual differences in memory change in the aged.	04-15-92	23-57-08	University of Victoria	19,949
5	R01AG08249-02	Collins, Thomas J., LH function in aging female mice	08-01-92	24-97-08	University of Texas Medical Behavioral Research Galveston	59,424
3	R29AG08256-01A2S1	Cushman, Laura A., cognitive factors in the safety of older drivers	02-01-92	25-67-08	University of Rochester	7,000
5	R29AG08256-02	Cushman, Laura A., cognitive factors in the safety of older drivers	09-01-92	25-67-08	University of Rochester	94,211
5	R01AG08273-02	Morgan, David L., change over time in the social networks of recent widows.	07-01-92	27-37-08	Portland State University	147,739
5	R01AG08276-03	Silverman, Myrna, geriatric assessment—multicenter controlled evaluation.	02-01-92	27-67-08	University of Pittsburgh at Pittsburgh	178,245
5	R01AG08278-11	Nixon, Ralph A., human brain proteolysis in aging and Alzheimer's disease.	08-01-92	27-87-08	McLean Hospital, Belmont, MA	274,431
5	R01AG08279-02	Markus, Hazel, self-concept in later adulthood: past, current, possible.	03-01-92	27-97-08	University of Michigan at Ann Arbor	607,598
7	R01AG08288-03	Belgraave, Linda L., self-care and compliance of chronically ill aged	09-01-92	28-87-08	University of Miami	143,919
5	R01AG08289-03	Johnson, Mark, age-related changes in connective tissue permeability	12-15-91	28-97-08	Massachusetts Institute of Technology	173,140
5	R01AG08293-03	Humes, Larry E., speech recognition by the hearing-impaired elderly	05-10-92	29-37-08	Indiana University Bloomington	140,159
5	R37AG08303-04	Martin, George M., homozygosity mapping of the Werner syndrome locus.	06-01-92	30-37-08	University of Washington	228,576
3	R37AG08303-04S1	Martin, George M., homozygosity mapping of the Werner syndrome locus.	06-01-92	30-37-08	University of Washington	5,000

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Grant number	Principal investigator title	Budget start	Dates end	Institution	Total
5 R01AG08313–03	Kutas, Marta, brain potentials-ERPS—language, memory, and aging	05–01–92	31–37–08	University of California San Diego	156,983
2 R01AG08322–04	Johnson, Thomas E., molecular genetic specification of aging processes.	09–01–92	32–27–08	University of Colorado at Boulder	146,764
5 R01AG08324–03	Evans, Lois K., reducing restraints in nursing homes—clinical trial	02–01–92	32–47–08	University of Pennsylvania	206,021
5 R01AG08325–03	Kawas, Claudia H., risk factors and early signs in Alzheimer's disease/BLSA.	07–01–92	32–57–08	Johns Hopkins University	261,552
5 R01AG08327–04	Keyl, Penelope M., effects of Alzheimer's disease and aging on driving.	05–01–92	32–77–08	Johns Hopkins University	134,571
5 R01AG08332–02	Kowal, Jerome, metabolism and function in the aging adrenal gland	02–01–92	33–27–08	Case Western Reserve University	114,153
5 R37AG08346–03	Lillard, Lee A., intergenerational transfers in Malaysia	02–01–92	34–67–08	Rand Corp	152,137
5 R01AG08353–04	Fox, Robert A., age-related changes in the perception of speech	05–01–92	35–37–08	Ohio State University	122,089
3 R01AG08353–04S1	Fox, Robert A., age-related changes in the perception of speech	07–01–92	35–37–08	Ohio State University	18,831
5 R01AG08371–04	Pettegrew, Jay W., in vivo metabolism in Alzheimer's disease	08–01–92	37–17–08	University of Pittsburgh at Pittsburgh	227,434
5 R01AG08374–02	Rogers, Joseph, amygdala in Alzheimer's disease and normal aging	05–10–92	37–47–08	Institute for Biogerontology Research	154,449
5 R01AG08377–04	Raichle, Marcus E., brain microvasculature in aging and dementia	06–01–92	37–77–08	Washington University	225,916
5 R01AG08380–03	Hanlon, Joseph T., pharmacy interventions for polypharmacy in the elderly.	03–01–92	38–07–08	Duke University	106,979
5 R29AG08382–06	Stine, Elizabeth, A.L., adult age differences in online processing of discourse.	05–10–92	38–27–08	University of New Hampshire	97,365
5 R29AG08387–04	Cohn, Barbara A., age, sex and survival-stability of associations	04–01–92	38–77–08	California Public Health Foundation	89,465
5 R44AG08407–03	Churchill, Russell J., memory assist device to improve prescription compliance.	09–01–92	40–77–08	American Research Corp. of Virginia	204,226
5 R01AG08415–04	Ancoli-Israel, Sonia, sleep consolidation in a nursing home population	05–01–92	41–57–08	University of California at San Diego	146,191
3 R01AG08415–04S1	Ancoli-Israel, Sonia, sleep consolidation in a nursing home population	06–01–92	41–57–08	University of California at San Diego	30,068
3 R01AG08415–04S2	Ancoli-Israel, Sonia, sleep consolidation in a nursing home population	08–01–92	41–57–08	University of California at San Diego	41,442
2 R01AG08419–04A1	Raskind, Murray A., psychopathology of Alzheimer's—psychoneuro-endocrinology.	09–01–92	41–97–08	University of Washington	252,914
5 R01AG08435–02	Kramer, Arthur F., development of skilled performance in the elderly	03–01–92	43–57–08	Universtiy of Illinois Urbana-Champaign	70,509
3 R01AG08435–02S1	Kramer, Arthur F., development of skilled performance in the elderly	09–03–92	43–57–08	Universtiy of Illinois Urbana-Champaign	14,409
5 R01AG08438–02	Majumdar, Adhip N., gastric mucosal injury and aging	07–01–92	43–87–08	Wayne State University	98,963
5 R01AG08441–04	Schacter, Daniel L., aging memory	08–01–92	44–17–08	Harvard University	187,331
2 R01AG08444–05	Kay, Marguerite, M.B., membrane changes in neurologic and aging diseases.	08–01–92	44–47–08	University of Arizona	182,220
5 R01AG08459–04	Sohal, Rajindar S., antioxidant enzymes and aging in transgenic drosophila.	07–01–92	45–97–08	Southern Methodist University	191,504

2	R01AG08470-04	Lansbury, Peter T., Jr., amyloid deposition Alzheimer's disease	09-10-92	47-07-08	Massachusetts Institute of Technology	170,000
5	R01AG08475-02	Ronles, Graham D., family involvement in nursing home decisionmaking.	02-01-92	47-57-08	University of Kentucky	199,355
5	R01AG08476-03	Martin, John E., health effects of exercise in elderly hypertensives	05-01-92	47-67-08	San Diego State University	332,744
5	R01AG08479-04	Sonsalla, Patricia K., dopaminergic neurotoxins and aging	08-01-92	47-97-08	University of Med/Dent NJ—R.W. Johnson Medical School	130,803
5	R29AG08487-04	Hyman, Bradley T., pathological alterations in Alzheimer's disease	08-01-92	48-77-08	Massachusetts General Hospital	120,849
5	R01AG08491-03	Krause, Neal M., social support among aged	04-01-92	49-17-08	University of Michigan at Ann Arbor	101,832
5	R01AG08504-03	Jazwinski, S. Michal, control of proliferation in senescent yeast cells	06-01-92	50-47-08	Louisiana State University Medical Center at New Orleans	149,463
1	R01AG08505-01A2	Feldman, Martin L., hearing loss and aging in the auditory system	06-01-92	50-57-08	Boston University	133,942
5	R01AG08510-04	Baumgartner, Richard N., body composition method for the elderly	06-01-92	51-07-08	University of New Mexico at Albuquerque	100,673
5	R37AG08511-04	Diokno, Ananias C., geriatric urinary incontinence: long-term follow-up.	07-01-92	51-17-08	University of Michigan at Ann Arbor	225,099
5	R01AG08513-04	Boileau, Richard A., fat and fat-free body composition development in aging.	01-01-92	51-37-08	University of Illinois Urbana-Champaign	128,887
2	R01AG08514-04	Gage, Fred H., grafting genetically modified cells to the brain	09-01-92	51-47-08	University of California at San Diego	167,250
5	R01AG08523-02	Myers, George C., collaborative study of aging in the United States and Australia.	08-01-92	52-37-08	Duke University	246,230
2	R01AG08537-02	Joachim, Catharine L., plaque and tangle pathogenesis in Alzheimer's disease.	02-15-92	53-77-08	University of Oxford	75,981
1	R01AG08538-01A2	Blum, Mariann, growth factors in the adult and aging brain	05-01-92	53-87-08	Mount Sinai School of Medicine	107,285
2	R01AG08545-05A1	Dale, George L., studies on erythrocyte senescence	09-01-92	54-57-08	University of Oklahoma Health Sciences Center	130,415
5	R01AG08549-04	Breitner, John C., genetic epidemiology Alzheimer disease in twins	09-01-92	54-97-08	Duke University	1,103,345
5	R29AG08554-03	Umberson, Debra, death of a parent—impact on adult children and families.	06-01-92	55-47-08	University of Texas at Austin	96,945
5	R37AG08557-02	Haug, Marie R., stresses, strains and elderly physical health—revised.	03-01-92	55-77-08	Case Western Reserve University	174,195
3	R37AG08557-02S1	Haug, Marie R., stresses, strains and elderly physical health—revised.	04-01-92	55-77-08	Case Western Reserve University	5,000
2	R01AG08562-04	Williams, Pamela, trial of hypotensive verus normotensive anesthesia	08-15-92	56-27-08	Hospital for Special Surgery	187,180
5	R01AG08567-02	Davanipour, Zoreh, Alzheimer disease among Seventh-Day Adventists	02-15-92	56-77-08	Loma Linda University	264,366
5	R29AG08568-05	Francis, Joseph, outcomes of delirium in hospitalized elderly	07-01-92	56-87-08	University of Tennessee at Memphis	72,310
2	R01AG08572-04	Kirschner, Daniel A., abnormal fibrous assemblies of Alzheimer's disease.	09-10-92	57-27-08	Children's Hospital (Boston)	146,200
5	R01AG08573-10	Bandman, Everett, Immunobiochemical Study of Muscle Myosin Isoforms.	02-21-92	57-37-08	University of California Davis	187,053
5	R01AG08575-02	Arieff, Allen I., Dementia, Hyponatremia and Aging: peptide hormone role.	06-01-92	57-57-08	Unversity of California San Francisco	182,015
3	R01AG08575-02S1	Arieff, Allen I., Dementia, Hyponatremia and Aging: Peptide Hormone Role.	09-30-92	57-57-08	University of California San Francisco	42,400
5	R29AG08589-03	Tsang, Pamela, aging and pilot time-sharing performance	06-01-92	58-97-08	Wright State University	96,028

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Grant number	Principal investigator title	Budget start	Dates end	Institution	Total
5 R44AG08605-03	Sterns, Ronni S., video programming and formats to enhance older adult fun.	02-01-92	60-57-08	Evening Star Productions of Ohio	185,137
2 R44AG08608-02A1	Shaw, Thomas J., automated home tablet and capsule dispenser	09-21-92	60-87-08	Checkmate Engineering	249,990
5 R01AG08633-02	Markides, Kyriakos S., intergenerational relationships in Mexican Americans.	09-01-92	63-37-08	University of Texas Medical Br Galveston	197,842
3 R01AG08633-02S1	Markides, Kyriakos S., intergenerational relationships in Mexican Americans.	09-01-92	63-37-08	University of Texas Medical Br Galveston	73,853
7 R01AG08651-04	Wolf, Douglas A., intergenerational families—structure, dynamics, exchanges.	08-01-92	65-17-08	Syracuse University at Syracuse	150,551
5 R01AG08659-03	Murasko, Donna M., effect of age on retrovirus disease and immunosuppression.	12-15-91	65-97-08	Medical College of Pennsylvania	196,012
5 P50AG08664-04	Appel, Stanley H., Alzheimer's Disease Research Center	07-15-92	66-47-08	Baylor College of Medicine	766,264
5 P30AG08665-03	Coleman, Paul D., Alzheimer's Disease Center Core Grant	07-17-92	66-57-08	University of Rochester	707,150
5 P50AG08671-04	Gilman, Sid, Michigan Alzheimer's Disease Research Center	08-01-92	67-17-08	University of Michigan at Ann Arbor	1,442,693
3 P50AG08671-04S1	Gilman, Sid, Michigan Alzheimer's Disease Research Center	09-30-92	67-17-08	University of Michigan at Ann Arbor	117,000
3 P50AG08671-04S3	Gilman, Sid, SDTC—Michigan—Munson	09-30-92	67-17-08	University of Michigan at Ann Arbor	64,116
5 R01AG08673-02	Schwartz, Robert S., Adipose Distribution and Adrenergic Mechanisms in Aging.	05-01-92	67-37-08	University of Washington	199,751
5 R29AG08674-04	Rohrer, James E., Mental Illness and Outcomes of Nursing Home Care.	05-01-92	67-47-08	University of Iowa	69,797
5 R01AG08675-07	Cohen-Mansfield, Jiska Mental Health Agitation in Elderly Persons	07-01-92	67-57-08	Hebrew Home of Greater Washington	187,724
5 R37AG08678-03	Ouslander, Joseph G., assessment and retirement of incontinence in nursing homes.	01-15-92	67-87-08	University of California Los Angeles	231,087
3 R37AG08678-03S1	Ouslander, Joseph G., assessment and treatment of incontinence in nursing homes.	04-01-92	67-87-08	University of California Los Angeles	5,000
5 P50AG08702-04	Shelanski, Michael L., Alzheimer's Disease Research Center	07-15-92	70-27-08	Columbia University New York	1,067,443
5 R37AG08707-03	Weksler, Marc E., autoimmune reactions in aging	01-01-92	70-77-08	Cornell University Medical Center	124,179
3 R37AG08707-03S1	Weksler, Marc E., autoimmune reactions in aging	04-15-92	70-77-08	Cornell University Medical Center	5,000
5 R01AG08708-03	Goldstein, Samuel, molecular genetics of Werner Syndrome and biological aging.	12-15-91	70-87-08	University of Arkansas Medical Science-Little Rock	156,494
5 R29AG08710-03	Roberts, Eugene L., Jr., age-related changes in brain metabolic neurophysiology.	08-01-92	71-07-08	University of Miami	90,703
5 R29AG08713-03	Beck, Thomas J., structural analysis of hip bone mineral image data	01-01-92	71-37-08	Johns Hopkins University	110,311
5 R01AG08714-02	Oken, Barry S., age-related changes in alertness and visual processing.	05-01-92	71-47-08	Oregon Health Sciences University	92,960

1	R01AG08717-01A2	Freiberger, Walter, patterns of decline in nursing home patients	09-01-92	71-77-08	Brown University	31,999
5	R29AG08718-03	Swartz, Kenneth P., neuropsychology of music in aging and Alzheimers dementia.	03-01-92	71-87-08	University of Rochester	101,161
5	R01AG08721-03	Frangione, Blas, amyloid angiopathy, early plaques, and aging	01-01-92	72-17-08	New York University	207,144
2	R01AG08724-03	Gatz, Margaret J., dementia in Swedish twins	08-20-92	72-47-08	University of Southern California	317,628
5	R29AG08729-03	Leibson, Cynthia, trends in elderly mortality morbidity and hospital use.	08-01-92	72-97-08	Mayo Foundation	82,797
5	R01AG08740-03	Frost, J. James, opiate receptor quantification in Alzheimer's disease	04-01-92	74-07-08	Johns Hopkins University	466,795
3	R01AG08740-03S1	Frost, J. James, opiate receptor quantification in Alzheimer's disease	06-15-92	74-07-08	Johns Hopkins University	3,165
5	R01AG08751-03	Klaiber, Edward L., estrogen treatment of mood disturbances in the menopause.	01-01-92	75-17-08	Worcester Foundation for Exper Biology	122,679
7	P01AG08761-03	Vaupel, James W., oldest-old mortality—demographic models and analyses.	02-05-92	76-17-08	Duke University	522,820
3	P01AG08761-03S2	Vaupel, James W., oldest-old mortality: demographic models and analyses.	07-01-92	76-17-08	Duke University	41,104
5	R01AG08768-02	Nissinen, Mirja A., determinants of disability in elderly men	09-01-92	76-27-08	University of Kuopio	174,598
5	R01AG08768-03	Seltzer, Marsha M., aging mothers of retarded adults—impacts of caregiving.	02-01-92	76-87-08	University of Wisconsin Madison	223,008
5	R29AG08776-03	Cody, Dianna D., strength density and microstructure in the proximal femur.	02-01-92	77-67-08	Henry Ford Hospital	107,505
5	P01AG08777-02	Mann, Kenneth G., regulation of bone formation	06-01-92	77-77-08	University of Vermont and State Agriculture College	417,679
5	R01AG08796-03	Disterhoft, John F., mechanisms of nimodipine learning enhancement in aging.	03-01-92	79-67-08	Northwestern University	194,091
5	P01AG08802-03	Kurland, Leonard T., epidemiology of dementia in Micronesia	02-05-92	80-27-08	Mayo Foundation	934,633
5	P30AG08808-04	Halter, Jeffrey B., Michigan Geriatrics Research and Training Center	09-30-92	80-87-08	University of Michigan at Ann Arbor	1,040,987
5	P30AG08812-03	Wei, Jeanne Y., center of excellence in geriatric research and training.	03-01-92	81-27-08	Harvard University	1,172,094
5	R01AG08816-03	Carstensen, Laura L., social interaction in old age	09-01-92	81-67-08	Stanford University	129,777
5	R29AU08820-03	Smith, Stanley D., Alzheimer's disease—lexicalsemantic and event knowledge.	01-01-92	82-07-08	Good Samaritan Hospital and Medical Center, Portland, OR	106,368
3	R01AG08825-02S1	Friedman, Howard S., social and emotional predictors of health and longevity.	03-05-92	82-57-08	University of California Riverside	8,533
5	R01AG08825-03	Friedman, Howard S., social and emotional predictors of health and longevity.	08-01-92	82-57-08	University of California Riverside	138,351
5	R01AG08835-03	Burke, Deborah M., memory and language in old age	12-15-91	83-57-08	Pomona College	110,776
3	R01AG08836-01A2S1	Rubinstein, Robert L., lifestyles and generativity of childless older men.	04-15-92	83-67-08	Philadelphia Geriatric Center—Friedman Hospital	15,390
5	R01AG08836-02	Rubinstein, Robert L., lifestyles and generativity of childless older men.	09-01-92	83-67-08	Philadelphia Geriatric Center—Friedman Hospital	147,664

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Grant number	Principal investigator title	Budget start	Dates end	Institution	Total
5 R01AG08837-03	Hampson, Sarah E., older patients personal models of chronic disease.	08-01-92	83-77-08	Oregon Research Institute	194,728
5 R29AG08843-02	Anderson, Kevin J., excitatory amino acid systems in the aged brain	02-91-92	84-37-08	University of Florida	102,419
5 R01AG08849-02	Dalton, Arthur J., dementia in Down's syndrome—longitudinal evaluation.	02-01-92	84-97-08	New York State Office of Mental Health	66,609
5 R01AG08861-03	McClearn, Gerald E., origins of variance in the old-old: octogenarian twins.	09-01-92	86-17-08	Pennsylvania State University, University Park	296,818
5 R01AG08870-02	Coslett, Harry B., neuropsychology of perceptual disorders in dementia.	02-29-92	87-07-08	Temple University	116,327
5 R01AG08885-03	Altschuler, Richard A., mechanisms of age-related auditory sensory deficits.	03-01-92	88-57-08	University of Michigan at Ann Arbor	317,689
5 R01AG08886-04	Robbins, Norman, mechanisms of aging at the neuromuscular junction.	04-01-92	88-67-08	Case Western Reserve University	192,391
5 R01AG08887-04	Lasek, Raymond J., aging changes in neuronal function and structure.	04-01-92	88-77-08	Case Western Reserve University	192,981
2 R44AG08889-02	Carignan, Forest J., stability force platform	05-01-92	88-97-08	Advanced Mechanical Technology, Inc	203,147
5 R44AG08895-03	Card, Josefina J., microcomputer data archive of social research on aging.	08-01-92	89-57-08	Sociometrics Corporation	223,017
2 R44AG08903-02	Walker, Bonnie L., fire safety certification system for the elderly	02-01-92	90-37-08	Bonnie Walker and Associates	289,071
2 R44AG08916-02	Nappi, Bruce, solid state sphincter manometer	03-05-92	91-67-08	Foster-Miller, Inc	318,946
5 R01AG08918-04	Christian, Joe C., Huntington disease: a neurological marker of aging	08-15-92	91-87-08	Indiana University—Purdue University at Indianapolis	279,669
3 R01AG08920-06S1	Rosenthal, Nadia A., developmental control of myosin light chain genes.	03-15-92	92-07-08	Boston University	29,151
5 R29AG08921-04	Graves, Amy Borenstein, aluminum in the epidemiology of Alzheimer's disease.	09-01-92	92-17-08	Battelle Seattle Research Center	133,220
5 R01AG08932-12	Caplan, Arnold I., proteoglycan synthesis during development and aging.	08-01-92	93-27-08	Case Western Reserve University	197,748
5 R01AG08936-03	Effros, Rita B., major histocompatibility complex—aging and transgenic mice.	08-01-92	93-67-08	University of California Los Angeles	223,914
3 R37AG08937-01S1	Heyman, Albert, race differences in prevalence and incidence of dementia.	12-01-91	93-77-08	Duke University	33,656
5 R37AG08937-02	Heyman, Albert, race differences in prevalence and incidence of dementia.	02-01-92	93-77-08	Duke University	451,793
3 R37AG08937-02S1	Heyman, Albert, race differences in prevalence and incidence of dementia.	05-15-92	93-77-08	Duke University	5,000

5 P01AG08938-08	Epstein, Charles J., biology of downs syndrome	02-20-92	93-87-08	University of California San Francisco	973,661
5 R01AG08948-03	Teresi, Jeanne A., impact of special care units in nursing homes	09-05-92	94-87-08	Hebrew Home for the Aged at Riverdale	155,518
5 R01AG08951-02	Schuman, Howard, generational effects—past present and future	02-01-92	95-17-08	University of Michigan at Ann Arbor	105,553
5 R01AG08957-02	Schmitt, Madeline H., quality of geriatric team functioning	06-01-92	95-77-08	University of Rochester	182,203
5 R01AG08958-02	Jerger, James F., auditory rehabilitation of the elderly	05-10-92	95-87-08	Baylor College of Medicine	131,976
5 R29AG08959-02	Bell, Theodore S., receptive communication problems of the elderly	02-29-92	95-97-08	University of California Los Angeles	160,379
5 R01AG08961-02	Fraser, Gary E., effect of health habits on survival in adventists	09-01-92	96-17-08	Loma Linda University	204,863
5 R35AG08967-03	Prusiner, Stanley B., leadership and excellence in Alzheimer's disease	05-01-92	96-77-08	University of California San Francisco	821,441
5 R29AG08969-04	Springer, Joe E., CNS regeneration—effects of NGF-rich transplants	08-01-92	96-97-08	Hahnemann University	101,483
5 R01AG08973-02	Becker, Gaylene, gender and the disruption of life course structure	02-01-92	97-37-08	University of California San Francisco	183,256
3 R01AG08973-02S1	Becker, Gaylene, gender and the disruption of life course structure	09-01-92	97-37-08	University of California San Francisco	24,841
5 R35AG08974-02	Pettegrew, Jay W., molecular studies in Alzheimer's disease	07-01-92	97-47-08	University of Pittsburgh at Pittsburgh	763,435
1 R01AG08979-01A2	Ryff, Carol D., community relocation and health—psychosocial linkages.	04-01-92	97-97-08	University of Wisconsin Madison	272,669
5 R01AG08991-03	Varshavsky, Alexander J., stress, repair, and aging	05-01-92	99-17-08	Massachusetts Institute of Technology	40,629
7 R01AG08991-04	Varshavsky, Alexander J., studies on stress, repair and aging	07-01-92	99-17-08	California Institute of Technology	185,173
5 R35AG08992-02	Gambetti, Pierluigi, cellular and molecular pathology of Alzheimer's disease.	08-01-92	99-27-08	Case Western Reserve University	782,430
5 R01AG09000-03	Enoka, Roger M., aging and training effects on motor units in exercise.	08-01-92	00-07-09	University of Arizona	88,177
5 R01AG09006-03	Sipe, Jean D., cellular metabolism of amyloid proteins in aging	05-01-92	00-67-09	Boston University	173,435
5 R01AG09009-03	Cole, Gregory M., metabolism of Alzheimer amyloid B-protein precursor.	05-01-92	00-97-09	University of California San Diego	121,345
5 R35AG09014-02	Blass, John P., clinical-cell biological studies in Alzheimer's disease	05-15-92	01-47-09	Winifred Masterson Burke Medical Research Institute	538,180
5 R35AG09016-03	Coleman, Paul D., leadership and excellence in Alzheimer's disease	05-15-92	01-67-09	University of Rochester	707,067
5 P01AG09017-03	Carp, Richard I., search for a transmissible agent in Alzheimer's disease.	05-01-92	01-77-09	Institute for Basic Res in Dev Disabil	613,628
5 R15AG09020-02	Callahan, Phyllis A., age related changes in pituitary lactotrophs	07-01-92	02-07-09	Miami University Oxford	32,940
5 R01AG09029-02	Farrer, Lindsay A., genetic epidemiological studies of Alzheimer's disease.	05-15-92	02-97-09	Boston University	496,147
5 R01AG09031-03	Binder, Lester I., microtubule proteins in Alzheimer's disease	05-15-92	03-17-09	University of Alabama at Birmingham	140,209
5 R01AG09033-02	Seybert, David W., lipid peroxidation in disease and aging	06-01-92	03-37-09	Duquesne University	54,895
5 R29AG09055-03	Shimamura, Arthur P., aging and memory—a neuropsychological analysis.	05-01-92	05-57-09	University of California Berkeley	93,489
5 R01AG09063-03	Connor, James R., ferritin and transferrin in CNS aging and disease	05-01-92	06-37-09	Pennsylvania State University Hershey Medical Center	132,409
5 R01AG09065-02	Luborsky, Mark R., continuity of personal meaning and well being in old age.	02-01-92	06-57-09	Philadelphia Geriatric Center-Friedman Hospital	172,345
3 R01AG09065-02S1	Luborsky, Mark R., continuity of personal meaning and well being in old age.	05-01-92	06-57-09	Philadelphia Geriatric Center-Friedman Hospital	42,877

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Grant number	Principal investigator title	Budget start	Dates end	Institution	Total
5 U01AG09078-03	Fiatarone, Maria A., muscle strengthening intervention in the frail elderly.	03-01-92	07-87-09	Hebrew Rehabilitation Center for Aged	255,179
3 U01AG09087-02S3	Tinetti, Mary E., community-based multiple fall risk factor intervention.	02-05-92	08-77-09	Yale University	18,559
5 U01AG09087-03	Tinetti, Mary E., community-based multiple fall risk factor intervention.	03-15-92	08-77-09	Yale University	277,280
5 U01AG09089-03	Hornbrook, Mark C., behavorial approach to falls prevention in the elderly.	03-01-92	08-97-09	Kaiser Foundation Research Institute	396,970
5 U01AG09095-03	Buchner, David M., health status effects of endurance and strength training.	03-01-92	09-57-09	University of Washington	309,971
5 U01AG09098-03	Miller, J. Philip, reducing frailty and injuries in older persons	03-01-92	09-87-09	Washington University	362,272
5 U01AG09117-03	Mulrow, Cynthia D., effects of physical therapy in nursing home residents.	03-01-92	11-77-09	University of Texas Heath Science Center at San Antonio	266,664
7 R01AG09121-03	Langston, J. William, aging and environmental toxins	04-01-92	12-17-09	California Parkinsons Foundation	186,418
3 R01AG09121-03S1	Langston, J. William, aging and environmental toxins	06-01-92	12-17-09	California Parkinsons Foundation	16,744
3 R01AG09121-03S2	Langston, J. William, detecting preclinical parkinsonism in humans	09-15-92	12-17-09	California Institute for Medical Research	377,030
3 R01AG09121-03S3	Langston, J. William, detecting preclinical parkinsonism in humans	09-30-92	12-17-09	California Parkinsons Foundation	73,459
5 U01AG09124-03	Wolf, Steven L., reducing frailty in elders—two exercise interventions.	03-01-92	12-47-09	Emory University	357,995
5 R01AG09127-03	Reisberg, Barry, behavioral and psychotic symptoms in Alzheimer's disease.	07-01-92	12-77-09	New York University	222,369
5 R01AG09140-03	Meydani, Simin N., vitamin E and the aging immune response	05-01-92	14-07-09	Tufts University Boston	128,336
5 R01AG09145-03	Fedson, David S., maintoba influenza study	03-01-92	14-57-09	University of Virginia Charlottesville	106,631
5 R44AG09167-03	Trapnell, Gordon R., long-term care insurance—manual for regulators.	09-01-92	16-77-09	Actuarial Research Corporation	74,327
2 R44AG09171-02	Cordell, Barbara L., Alzheimer's disease inhibitor protein and cognate protease.	01-15-92	17-17-09	California Biotechnology, Inc	246,636
2 R44AG09174-02A1	Pass, Theodore M., a model to evaluate long-term care insurance policies.	06-01-92	17-47-09	Stratecision, Inc	250,000
5 R01AG09176-02	Becker, Gay, from independence to dependence among the oldest old	09-01-92	17-67-09	University of California San Francisco	156,602
5 R01AG09179-03	Jagacinski, Richard J., auditory aiding for perceptual motor decline in aging.	08-01-92	17-97-09	Ohio State University	92,678
5 R01AG09186-02	Malmgren, Leslie T., aging human laryngeal protective mechanism	08-01-92	18-67-09	Health Science Center at Syracuse	140,080
5 R01AG09188-02	Burke, William J., degeneration—epinephrine neurons in Alzheimer's disease.	06-01-92	18-87-09	St. Louis University	57,514

5	R01AG09191-02	Gordon-Salant, Sandra M., auditory temporal processes, speech perception and aging.	02-29-92	19-17-09	University of Maryland College Park Campus	149,268
5	R01AG09195-02	Glisky, Elizabeth L., computer training for older adults	09-01-92	19-57-09	University of Arizona	120,823
5	R01AG09199-02	Hayashi, Masando, vertebral endochondral ossification	02-29-92	19-97-09	University of Medical/Dental NJ-RW Johnson Medical School	184,691
5	R01AG09200-02	Talamo, Barbara R., human olfactory tissue—aging Alzheimer's disease.	08-01-92	20-27-09	Tufts University Boston	228,811
5	R01AG09202-02	Ganguli, Mary, Indo-US cross national dementia epidemiology study	07-01-92	20-27-09	University of Pittsburgh at Pittsburgh	352,951
5	R01AG09203-02	Labouvie-Vief, Gisela, cognitive emotional maturity in adulthood and aging.	07-01-92	20-37-09	Wayne State University	257,110
5	R29AG09208-2	Zabrucky, Karen M., aging and evaluation and regulation of understanding.	07-01-92	20-87-09	Georgia State University	81,028
1	R01AG09210-01A3	Rubinstein, Robert L., caregiving from the care receiver's perspective	09-30-92	21-07-09	Philadelphia Geriatric Center-Friedman Hospital	153,405
5	R29AG09214-02	Rance, Naomi E., reproductive aging and the human hypothalamus	06-01-92	21-47-09	University of Arizona	98,247
5	P01AG09215-03	Trojanowski, John Q., molecular substrates of aging and neuron death.	05-01-92	21-57-09	University of Pennsylvania	946,059
5	R01AG09216-02	Crain, Barbara J., pathology of fascia dentata in Alzheimer's disease	07-01-92	21-67-09	Duke University	104,017
5	R01AG09219-02	Barnes, Carol A., transcription factor genes, neuronal plasticity, and aging.	06-01-92	21-97-09	University of Arizona	168,179
5	R01AG09220-02	Nelson, James F., aging and the regulation of estrogen action in the brain.	02-01-92	22-07-09	University of Texas Health Science Center San Antonio	178,731
5	R01AG09221-02	Krause, Neal M., well-being in the aged/personal control and self-esteem.	04-01-92	22-17-09	University of Michigan at Ann Arbor	84,668
5	R29AG09229-03	Yankner, Bruce A., amyloid neurotoxicity and biological function	08-01-92	22-97-09	Children's Hospital at Boston	110,460
3	R01AG09231-02S1	Loy, Rebekah, NGF receptor, memory and aging	09-01-92	23-17-09	University of Rochester	16,946
5	R01AG09231-03	Loy, Rebekah, NGF receptor, memory and aging	09-01-92	23-17-09	University of Rochester	149,082
5	R01AG09235-03	Nebert, Daniel W., oxidative stress cell death and the AH gene battery.	09-01-92	23-57-09	University of Cincinnati	246,833
1	R01AG09238-01A1	Mortimer, James A., epidemiology of Alzheimer disease in a total population.	09-01-92	23-87-09	University of Minnesota Twin Cities	410,721
5	R01AG09241-02	Wronski, Thomas J., restoration of lost bone mass after ovariectomy	07-15-92	24-17-09	University of Florida	70,574
5	R01AG09246-02	O'Leary, James J., effect of advanced age on human naive and memory T-cells.	09-01-92	24-67-09	University of Minnesota Twin Cities	157,723
5	R01AG09253-03	Silber, David, effects of aging on memory for source of information	08-01-92	25-37-09	George Washington University	141,804
3	R01AG09253-03S1	Silber, David, effects of aging on memory for source of information	08-01-92	25-37-09	George Washington University	2,217
1	R01AG09254-01A2	Morrow, Daniel G., improving medication instructions for the elderly	08-20-92	25-47-09	Decision Systems	122,432
1	R01AG09258-01A1	Kay, Marguerite M., immunochemistry of an aging antigen	08-01-92	25-87-09	University of Arizona	147,951
5	R01AG09265-03	Kinney, Jennifer M., caregiver burden over time—stress and coping approach.	08-01-92	26-57-09	Bowling Green State University Bowling Green	108,544
5	R01AG09276-03	Barefoot, John C., gender and age differences in hostility	08-01-92	27-67-09	Duke University	156,499
5	R01AG09278-03	Wang, Yu-Hwa E., fibroblast aging and programmed cell death	09-01-92	27-87-09	McGill University	67,101

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Grant number	Principal investigator title	Budget start	Dates end	Institution	Total
5 R01AG09279-02	Millis, Albert J., gene expression in senescent cells	01-01-92	27-97-09	State University of New York at Albany	136,737
5 R01AG09282-02	Allen, Philip A., adult age differences in cognitive noise	08-01-92	28-27-09	Cleveland State University	80,788
5 R01AG09287-03	Perry, George, neurofibrillary pathology in Alzheimer's disease	09-01-92	28-77-09	Case Western Reserve University	114,453
5 R01AG09291-02	Bourgeois, Michelle S., interventions to change caregiver and ad patient outcomes.	09-01-92	29-17-09	University of Pittsburgh at Pittsburgh	173,841
5 R01AG09295-02	McLaughlin, Steven D., parents marital history and support from adult children.	04-01-92	29-57-09	Battelle Seattle Research Center	234,915
5 R01AG09297-02	Turek, Fred W., effects of age on mammalian circadian clock	05-01-92	29-77-09	Northwestern University	148,054
1 R01AG09299-01A1	Mizumori, Sheri J., hippocampal spatial representations	05-01-92	29-97-09	University of Utah	70,593
5 R01AG09300-02	Felson, David T., longitudinal osteoarthritis study in an elderly cohort	05-01-92	30-07-09	Boston University	456,819
5 R01AG09301-03	Satlin, Andrew, senile changes in circadian rhythems and behavior	09-01-92	30-17-09	McLean Hospital (Belmont, MA)	174,680
5 R01AG09302-03	Ready, Donald F., cellular and genetic analysis of cell death	09-01-92	30-27-09	Indiana University-Purdue University at Indianapolis	88,910
5 R01AG09304-02	Winchurch, Richard A., nutritional requirements for immunity in the aged.	09-01-92	30-47-09	Johns Hopkins University	100,180
5 R01AG09309-03	Sengelaub, Dale R., steroids as trophic factors—aging neuromuscular system.	08-01-92	30-97-09	Indiana University Bloomington	135,525
5 R01AG09320-03	Goldgaber, Dmitry Y., regulation of Alzheimer amyloid precursor gene	09-01-92	32-07-09	State University New York Stony Brook	146,577
5 R01AG09321-02	Flood, James F., model of dementia—senescence accelerated	06-01-92	32-17-09	St. Louis University	123,802
7 R01AG09326-03	Edelman, Gerald M., control of cam expression in transgenic mice	07-01-92	32-67-09	Scripps Research Institute	301,034
5 R01AG09331-03	Alter, George C., kin, saving, and households of the elderly	01-15-92	33-17-09	Indiana University Bloomington	50,403
5 R01AG09337-02	Klein, William L., molecular cell biology of amyloid precursor protein	05-10-92	33-77-09	Northwestern University	95,685
3 R01AG09337-02S1	Klein, William L., molecular cell biology of amyloid precursor protein	06-01-92	33-77-09	Northwestern University	51,660
3 R01AG09341-06A1S1	Swan, Gary E., CVD and cognitive decline in the elderly	09-30-92	34-17-09	SRI International	46,166
5 R01AG09341-07	Swan, Gary E., CVD and cognitive decline in the elderly	08-01-92	34-17-09	SRI International	450,444
5 R01AG09344-03	Lawrence, Renee H., physican and emotional health among the elderly.	02-01-92	34-47-09	Philadelphia Geriatric Center-Friedman Hospital	96,519
5 R01AG09375-03	McGarvey, Stephen T., adiposity insulin electrolytes and Samoan blood pressure.	02-01-92	37-57-09	Miriam Hospital	224,258
5 R01AG09383-02	Greider, Carol W., structure and function of telomeres in Mammalian aging.	08-01-92	38-37-09	Cold Spring Harbor Laboratory	245,701
1 R01AG09389-01A2	Tager, Ira B., epidemiology of aging and physical performance	09-24-92	38-97-09	University of California San Francisco	450,000
1 R01AG09396-01	Mitteness, Linda S., adaptation to lower-limb amputation	09-30-92	39-67-09	University of California San Francisco	100,000
5 R01AG09399-02	Grossman, Murray, congnitive profiles in Alzheimer's disease and aging.	03-01-92	39-97-09	University of Pennsylvania	207,723

1	R01AG09400-01A1	Schupf, Nicole, Down syndrome and Alzheimer's disease—Familial aggregation.	06-01-92	40-07-09	Institute for Basic Research in Development Disability		297,572
5	R01AG09411-02	Glenner, George G., paired helical filament and plaque amyloid proteins.	05-01-92	41-17-09	University of California San Diego		153,849
5	R01AG09412-03	Ruff, Christopher B., effects of aging and exercise on bone mass	05-01-92	41-27-09	Johns Hopkins University		66,523
5	R01AG09413-02	Shmookler-Reis, Robert J., polymorphic genes modulating lifespan in C elegans.	08-01-92	41-37-09	University of Arkansas Medical Sciences Little Rock		141,581
5	R01AG09416-02	Miller, Baila H., gender and race in care of the cognitively impaired	09-01-92	41-67-09	University of Illinois at Chicago		60,847
5	P01AG09417-02	Schneck, Stuart A., metabolic studies in dementia, aging and demyelination.	03-20-92	41-77-09	University of Colorado Health Sciences Center		547,498
1	R29AG09425-01A2	Masters, Jeffrey N., neuroendocrine mechanisms of brain aging	06-01-92	42-57-09	Ohio State University		84,831
7	R01AG09430-02	Theofilopoulos, Argyrios N., T-cell receptor gene repertoire in aging	02-01-92	43-07-09	Scripps Research Institute		238,643
5	R29AG09433-02	Hummert, Mary L., stereotypes of the elderly and communication	08-01-92	43-37-09	University of Kansas Lawrence		99,735
5	R01AG09439-02	Silverman, Wayne P., aging and mental retardation: changes in processing rate.	03-01-92	43-97-09	New York State Office of Mental Health		219,625
1	R01AG09440-01A2	Talley, Nicholas J., impact of functional bowel disease in the elderly	06-15-92	44-07-09	Mayo Foundation		93,394
5	R01AG09458-02	Lipschitz, David A., neutrophil function and aging	09-05-92	45-87-09	University of Arkansas Medical Sciences Little Rock		169,416
1	R01AG09461-02	Prineas, Ronald J., epidemiology of Alzheimer's disease in 3 ethnic groups.	06-15-92	46-17-09	University of Miami		758,121
5	R29AG09462-02	Levin, Jeffrey S., religion, health and psychological well-being in the aged.	01-15-92	46-27-09	Eastern Virginia Medical School/Medical College Hampton Roads		101,174
5	P30AG09463-02	Cohen, Harvey J., geriatric research and training centers	03-01-92	46-37-09	Duke University		328,720
5	P01AG09464-02	Greengard, Paul, signal transduction and Alzheimer's disease	02-01-92	46-47-09	Rockefeller University		1,194,589
5	P01AG09466-02	Detoledo-Morrell, Leyla, anatomic, physiologic and cognitive pathology of AD.	04-01-92	46-67-09	Rush-Presbyterian-St. Lukes Medical Center		511,399
5	R01AG09468-02	Sloan, Frank A., effects of public subsidies on use of long-term care	09-01-92	46-87-09	Vanderbilt University		136,265
5	R01AG09470-02	Glorioso, Joseph C., Alzheimer's disease studies using HSV gene transfer.	02-01-92	47-07-09	University of Pittsburgh at Pittsburgh		157,042
5	P01AG09480-02	Llinas, Rodolfo R., aging and neuronal death—role of cytosolic calcium.	02-01-92	48-07-09	New York University		607,265
1	R55AG09483-01A2	Drew, Kelly L., calcium, gaba and dopamine release in striatum	09-30-92	48-37-09	University of Alaska Fairbanks		100,000
5	R29AG09486-02	Chapman, Sandra B., cognitive discourse processing in elderly populations.	09-01-92	48-67-09	University of Texas Dallas		91,452
5	R01AG09488-02	Meaney, Michael J., glucocorticoids, stress, and hippocampal aging	05-01-92	48-87-09	McGill University		87,846
5	R01AG09519-02	Keefover, Robert, screening for Alzheimer's disease in a rural population.	06-08-92	51-97-09	West Virginia University		1,222,367
5	R01AG09521-06	Blau, Helen M., activators of human muscle genes	04-15-92	52-17-09	Stanford University		216,167
3	R01AG09521-06S1	Blau, Helen M., activators of human muscle genes	05-15-92	52-17-09	Stanford University		61,566
1	P01AG09524-01A1	Frisinia, D. Robert, aging auditory system: presbycusis and its neural bases.	05-01-92	52-47-09	Rochester Institute of Technology		786,253

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Grant number	Principal investigator title	Budget start	Dates end	Institution	Total
5 P01AG09525-02	Blusztajn, Jan K., aging of brain effects of perinatal choline-exposure..	02-29-92	52-57-09	Boston University	548,560
1 R01AG09538-01	Lipsitz, Lewis A., drug-related hypotension in the aged with heart disease.	09-28-92	53-87-09	Hebrew Rehabilitation Center for Aged	159,606
1 R01AG09542-01A2	Szilagyi, Juliana E., aging and cardiovascular function	09-01-92	54-27-09	University of Houston-University Park	100,641
5 R01AG09550-02	Schwartz, Janice B., regulation of cardiac rhythm and conduction with aging.	02-15-92	55-07-09	University of California San Francisco	194,686
5 R01AG09557-02	Strong, Randy, modulation of TH gene expression by reserpine and age.	02-01-92	55-77-09	St. Louis University	114,993
5 R01AG09559-02	Vestal, Robert E., age-related cardiac response to theophylline in man.	03-01-92	55-97-09	University of Washington	73,570
5 R01AG09560-02	Voelker, James R., captopril and angiotensin vascular effects in senescence.	02-01-92	56-07-09	Indiana University-Purdue University at Indianapolis	131,936
5 R01AG09568-02	Jinks, Martin J., reduction in ADR's via computerized pharmacy intervention.	02-01-92	56-87-09	Washington State University	220,586
7 R01AG09574-02	Rubin, Robert L., neutrophil mediated drug toxicity in the elderly	02-01-92	57-47-09	Scripps Research Institute	219,679
5 R01AG09587-02	Unnerstall, James R., neurochemical plasticity of locus coeruleus in aging.	08-01-92	58-77-09	University of Illinois at Chicago	115,874
3 R01AG09594-01S1	Smith, Philip C., protein clycation by acyl glucuronides in the elderly...	12-01-92	59-47-09	University of Texas Austin	9,109
5 R01AG09594-02	Smith, Philip C., protein glycation by acyl glucuronides in the elderly..	02-01-92	59-47-09	University of Texas Austin	59,241
7 R01AG09594-03	Smith, Philip C., protein glycation by acyl glucuronides in the elderly ..	12-01-92	59-47-09	University of North Carolina Chapel Hill	108,509
5 R01AG09597-02	Hoffman, Brian B., molecular pharmacology of adrenergic receptors in aging.	02-01-92	59-77-09	Stanford University	144,856
5 R01AG09611-02	Lipton, Helene L., reducing geriatric drug therapy—two approaches	02-01-92	61-17-09	University of California San Francisco	337,601
5 R01AG09632-02	Gravenstein, Stefan, use of amantadine in the nursing home	09-15-92	63-27-09	University of Wisconsin Madison	205,961
5 R01AG09634-02	Avorn, Jerome L., drug-induced parkinsonian symptoms in the elderly..	02-01-92	63-47-09	Beth Israel Hospital (Boston)	52,110
7 R01AG09634-03	Avorn, Jerome L., drug-induced parkinsonian symptoms in the elderly..	06-01-92	63-47-09	Brigham and Women's Hospital	78,164
1 R01AG09644-01A2	McNeill, Thomas H., aging of the striatal motor system in man	09-30-92	64-47-09	University of Southern California	133,595
5 P20AG09646-03	Hogan, Dennis P., exploratory center on aging and health in rural america.	09-01-92	64-67-09	Pennsylvania State University University Park	250,000
5 P20AG09648-03	Defriese, Gordon H., health research for older rural populations	09-01-92	64-87-09	University of North Carolina Chapel Hill	249,945
5 P20AG09649-02	Coward, Raymond T., Florida Exploratory Center on the health of rural elders.	06-01-92	64-97-09	University of Florida	243,221
5 R01AG09657-02	Landefeld, C. Seth, anticoagulant therapy in older patients	07-01-92	65-77-09	Case Western Reserve University	226,245

1	R01AG09661-01A1	Caplan, David N., processing resources and sentence comprehension in DAT.	05-01-92	66-17-09	Massachusetts General Hospital	225,092
3	R01AG09662-01S1	Kamen, Gary P., control properties of aged human motor units	09-01-91	66-27-09	Boston University	24,000
5	R01AG09662-02	Kamen, Gary P., control properties of aged human motor units	09-01-92	66-27-09	Boston University	76,934
5	R01AG09663-02	Reves, J.G., aging and cognition after cardiac surgery	02-01-92	66-37-09	Duke University	209,438
5	R01AG09665-07	Potter, Huntington, expression studies on Alzheimer's disease related genes.	07-01-92	66-57-09	Harvard University	145,910
5	U01AG09675-03	Wolfson, Leslie, training balance/strength of elderly—improve function.	03-01-92	67-57-09	University of Connecticut Health Center	284,319
5	R01AG09681-02	Tokes, Zoltan A., study of metalloproteases MP MP-130-100 in Alzheimer BRA.	02-01-92	68-17-09	University of Southern California	141,465
5	P20AG09682-02	Wallace, Robert B., center for research on older rural populations	09-01-92	68-27-09	University of Iowa	250,000
5	R01AG09683-02	Kim, Helen, acetylated tubulin in developing and aging rat brain	09-01-92	68-37-09	University of Alabama at Birmingham	77,356
5	R01AG09686-02	Baker, Harriet D., plasticity in the aging olfactory system	02-01-92	68-67-09	Winifred Masterson Burke Medical Res Institute	174,405
5	R01AG09690-02	Floyd, Robert A., age influence on ischemia reperfusion in brain	05-01-92	69-07-09	Oklahoma Medical Research Foundation	139,604
3	R37AG09692-02S1	Wolinsky, Fredric D., panel analysis of the aged's use of health services.	05-01-92	69-27-09	Indiana University-Purdue University at Indianapolis	5,000
5	R37AG09692-03	Wolinsky, Fredric D., panel analysis of the aged's use of health services.	06-01-92	69-27-09	Indiana University-Purdue University at Indianapolis	134,125
5	R01AG09693-02	Baloh, Robert W., dizziness in older people	05-10-92	69-37-09	University of California Los Angeles	407,963
9	R01AG09699-03A1	Goldman, Noreen, marital status, health and mortality among the elderly.	08-01-92	69-97-09	Princeton University	110,001
1	R43AG09712-01A1	Syed, Daniel, advisor for caregivers to Alzheimer's patients	09-30-92	71-27-09	Atlantic Microsystems Inc.	50,000
2	R44AG09725-02	Vertrees, James C., integrated database for aging research	08-10-92	72-57-09	Solon Consulting Group, Ltd	233,295
5	R01AG09735-11	Bradshaw, Ralph A., structure and function of nerve growth factor	09-01-92	73-57-09	University of California Irvine	215,453
2	R44AG09739-02	McNees, Michael P., management of incontinence care in nursing homes.	08-15-92	73-97-09	North RIM Systems	248,026
5	U01AG09740-03	Juster, F. Thomas, health and retirement study	06-01-92	74-07-09	University of Michigan at Ann Arbor	3,720,421
3	U01AG09740-03S1	Juster, F. Thomas, health and retirement study	06-01-92	74-07-09	University of Michigan at Ann Arbor	451,325
3	U01AG09740-03S2	Juster, F. Thomas, health and retirement study	09-30-92	74-07-09	University of Michigan at Ann Arbor	46,879
5	P01AG09743-02	Burkhauser, Richard V., wellbeing of the elderly in a comparative context.	06-01-92	74-37-09	Syracuse University at Syracuse	520,518
5	R01AG09744-02	Johnson, Marcia K., semantic memory and Alzheimer's disease	08-01-92	74-47-09	Princeton University	148,731
1	R01AG09747-01A1	Alwin, Duane F., aging and errors of measurement	02-06-92	74-77-09	University of Michigan at Ann Arbor	140,050
3	R01AG09752-01S1	Woodruff-Pak, Diana S., aging, classical conditioning, and memory systems.	04-01-92	75-27-09	Philadelphia Geriatric Ctr-Friedman Hospital	21,427
5	R01AG09752-02	Woodruff-Pak, Diana S., aging, classical conditioning, and memory systems.	05-01-92	75-27-09	Philadelphia Geriatric Ctr-Friedman Hospital	138,145
5	R01AG09755-02	Mackay, Don G., the organization of cognitive processes in old age	05-01-92	75-57-09	University of California Los Angeles	102,953
5	R01AG09761-03	Gafni, Ari, laser spectroscopy of triplet states in proteins	09-01-92	76-17-09	University of Michigan at Ann Arbor	205,924

Grant number	Principal investigator title	Budget start	Dates end	Institution	Total
3 R01AG09769-01S2	Larson, Eric B., epidemiology of dementia in older Japanese Americans.	03-01-92	76-97-09	University of Washington	137,881
5 R01AG09769-02	Larson, Eric B., epidemiology of dementia in older Japanese Americans.	07-15-92	76-97-09	University of Washington	713,334
1 R01AG09771-01A1	Applegate, William B., dietary interventions in the elderly trial (DIET).	09-15-92	77-17-09	University of Tennessee at Memphis	419,893
5 R01AG09773-02	Espeland, Mark A., dietary Intervention in the elderly trial (DIET)	09-01-92	77-37-09	Wake Forest University	434,081
1 R55AG09774-01A1	Staplin, Loren K., improved navigational efficiency for older drivers	09-30-92	77-47-09	West Chester University of Pennsylvania	100,000
5 R01AG09775-02	Hauser, Robert M., longitudinal study—parents and children at age 50.	06-01-92	77-57-09	University of Wisconsin Madison	1,065,353
3 R01AG09775-02S3	Hauser, Robert M., longitudinal study—parents and children at age 50.	09-30-92	77-57-09	University of Wisconsin Madison	23,368
1 R29AG09777-01A1	Wallsten, Sharon M., elderly caregivers, care receivers and their interaction.	08-01-92	77-77-09	Duke University	95,334
5 R01AG09778-03	Phillips, Paul D., cell aging—growth factor control of early response gene.	08-01-92	77-87-09	Medical College of Pennsylvania	126,852
5 R01AG09779-05	Lang, Peter J., emotion and aging: cognitive psychophysiology	02-01-92	77-97-09	University of Florida	71,562
1 R01AG09781-01	Wachter, Kenneth W., projecting kinship resources for the elderly	09-30-92	78-17-09	University of California Berkley	82,024
5 R29AG09785-02	Haan, Mary, epidemiology of survival in older blacks and whites	08-01-92	78-57-09	Kaiser Foundation Research institute	68,702
5 R13AG09787-02	Schaie, K. Warner, conference program on structure and aging	04-01-92	78-77-09	Pennsylvania State University-University Park	18,502
1 R01AG09791-01A1	Young, Rosalie F., cultural impact on caregiving outcome—Alzeimer's PTS.	06-01-92	79-17-09	Wayne State University	152,361
3 R01AG09791-01A1S1	Young, Rosalie F., cultural impact on caregiving outcome—Alzheimer's PTS.	09-01-92	79-17-09	Wayne State University	10,540
5 P01AG09793-02	Hefti, Franz F., dopaminergic and basal plasticity inaging	06-01-92	79-37-09	University of Southern California	708,730
1 R01AG09799-01A1	Ettinger, Walter H., dietary interventions in the elderly trial	05-01-92	79-97-09	Wake Forest University	456,399
3 R01AG09799-01A1S1	Ettinger, Walter H., dietary interventions in the elderly trial	09-01-92	79-97-09	Wake Forest University	50,000
3 R37AG09801-02S1	Miller, Richard A., activation defects in aging T cells	04-15-92	80-17-09	University of Michigan at Ann Arbor	5,000
5 R37AG09801-03	Miller, Richard A., activation defects in aging T cells	08-01-92	80-17-09	University of Michigan at Ann Arbor	229,158
1 R01AG09822-01A1	Hobbs, Monte V., cytokine gene expression by CD4+ cells in aging mice.	01-15-92	82-27-09	Scripps Research Institute	184,211
1 R01AG09825-01A1	Lacroix, Andrea A., thiazide diuretics and rate of bone loss in the elderly.	09-30-92	82-57-09	Center for Health Studies	379,991
5 R01AG09827-02	Weaver, David S., anabolic steroid effects on bone and arteries	05-01-92	82-77-09	Wake Forest University	286,242
5 R01AG09833-02	Welle, Stephen L., effect of age on muscle protein synthesis	09-01-92	83-37-09	University of Rochester	130,184

5 R01AG09834-02	Stabler, Sally P., prevalence and spectrum of B12 deficiency in the aged.	06-01-92	83-47-09	University of Colorado Health Sciences Center	184,596
1 R01AG09837-01	Kinosian, Bruce, assessment of malnutrition in the hospitalized elderly.	09-30-92	83-77-09	University of Pennsylvania	112,511
5 R01AG09839-02	Ross, Alta C., nutrition and aging—vitamin A and immune functions	06-01-92	83-97-09	Medical College of Pennsylvania	172,969
1 R01AG09853-01A1	Liao, Warren S.L., inflammation- and aging-induced liver gene expression.	09-30-92	85-37-09	University of Texas System Cancer Center	100,000
1 R01AG09857-01A2	Gerber, John G., aged-related changes in abrenergia clinical pharmacology.	09-30-92	85-77-09	University of Colorado Health Sciences Center	193,931
5 R01AG09862-03	Snowdon, David A., independent and dependent life in the elderly	09-01-92	86-77-09	University of Kentucky	192,715
1 R01AG09868-01A1	Park, Denise C., aging, arthritis and medication adherence	02-01-92	86-87-09	University of Georgia	290,520
5 R01AG09869-02	Vaughan, Deborah W., age, axon injury and motor neuron synaptology.	06-01-92	86-97-09	Boston University	146,149
1 R01AG09872-01A1	Nadel, Ethan R., body fluid regulation in aging adults with exercise	06-15-92	87-27-09	John B. Pierce Foundation Laboratory, Inc	305,226
5 R01AG09873-02	Longo, Frank M., aging and neuronal death—first generation of NGF analog.	05-01-92	87-37-09	University of California San Francisco	87,999
5 R01AG09884-02	Wolfe, Barry B., aging and central cholingeric systems	06-01-92	88-47-09	Georgetown University	178,988
1 R01AG09892-01A2	Pelchat, Marcia L., food preferences and aversions in the elderly	08-01-92	89-27-09	Monell Chemical Senses Center	102,725
5 R01AG09900-02	Eberwine, James, gene expression in single aging neurons and GLIA	05-01-92	90-07-09	University of Pennsylvania	179,469
1 R37AG09901-01A1	Magaziner, Jay, determinants of recovery from hip fracture (bone/muscle).	07-01-92	90-17-09	University of Maryland Baltimore Professional School	238,742
5 R01AG09902-02	Magaziner, Jay, determinants of recovery from hip fracture/supplemental (proxy).	04-01-92	90-27-09	University of Maryland Baltimore Professional School	141,381
5 R01AG09905-02	Abraham, Carmela R., amyloidogenesis role of reactive astrocytes	05-05-92	90-57-09	Boston University	225,308
5 R01AG09909-03	Campisi, Judith, cellular senescence and control of gene expression	09-10-92	90-97-09	University of California Berkeley	215,775
5 R29AG09927-03	Peacocke, Monica, effect of aging—retinoic acid receptor gene expression.	09-10-92	92-77-09	New England Medical Center Hospitals, Inc	125,874
5 R01AG09931-02	Stewart, Anita, increasing physical activity of elders in the community.	06-01-92	93-17-09	University of California San Francisco	271,954
1 R13AG09935-01A1	Ikels, Charlotte, home health care and elders—international perspectives.	04-01-92	93-57-09	Case Western Reserve University	35,000
5 R01AG09936-02	Horn, John L., causes in adult development of differences in abilities	09-01-92	93-67-09	University of Southern California	121,349
1 R01AG09948-01A1	Thoman, Marilyn L., T-cell maintenance and thymmic activity in the aged.	09-01-92	94-87-09	Scripps Memorial Hospital-La Jolla	203,434
1 R01AG09951-01A1	Gustman, Alan L., pension, trends, retirement incomes and behavior	06-15-92	95-17-09	National Bureau of Economic Research	99,690
5 R01AG09956-02	Hendrie, Hugh C., dementias—Indianapolis-Ibadan comparative prevalence.	07-10-92	95-67-09	Indiana University—Purdue University at Indianapolis	518,181
3 R01AG09956-02S1	Hendrie, Hugh C., dementias—Indianapolis-Ibadan comparative prevalence.	07-10-92	95-67-09	Indiana University—Purdue University at Indianapolis	48,214
5 R01AG09965-02	Bartlett, James C., aging in perception and cognition of music	09-01-92	96-57-09	University of Texas Dallas	126,089

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Grant number	Principal investigator title	Budget start	Dates end	Institution	Total
5 R01AG09966-02	Evans, Denis A., epidemiologic study of persons with Alzheimer's disease.	09-01-92	96-67-09	Rush-Presbyterian—St. Lukes Medical Center	211,429
1 P01AG09970-01A1	Rose, Michael R., postoned aging in drosophila	08-01-92	97-07-09	University of California at Irvine	580,732
5 P01AG09973-02	Gallagher, Michela, cognition and hippocampal/cortical systems in aging.	08-01-92	97-37-09	University of North Carolina at Chapel Hill	948,410
5 P01AG09975-02	Czeisler, Charles A., sleep aging and circadian rhythm disorders	08-01-92	97-57-09	Brigham and Women's Hospital	777,511
5 R29AG09976-02	Johnson, Mitzi M., age differences in decisionmaking performance	09-01-92	97-67-09	University of Kentucky	97,391
5 R01AG09984-02	Brannon, Diane, test of transfer of training effects in nursing homes	08-07-92	98-47-09	Pennsylvania State University—University Park	148,628
1 R29AG09986-01A1	Means, Kevin M., functional performance-based rehabilitation of fallers.	07-01-92	98-67-09	University of Arkansas Medical Sciences at Little Rock	86,182
5 R01AG09988-02	Friedman, David, age-related ERP measures in Alzheimer's disease	08-01-92	98-87-09	New York State Psychiatric Institute	167,497
5 R01AG09989-10	Cowan, Nicholas J., Mammalian tubulin isotypes and their interaction with maps.	05-01-92	98-97-09	New York University	253,296
1 R01AG09991-01A1	Haskell, William L., community exercise training in older women and men.	07-01-92	99-17-09	Stanford University	363,165
1 R01AG09997-01	Welsh, Kathleen A., Neuropsychological study of Alzheimer's disease	09-30-92	99-77-09	Duke University	114,460
5 R01AG10002-02	Fasman, Gerald D., synthetic models of Alzheimer's proteins	09-01-92	00-27-10	Brandeis University	202,199
1 R01AG10003-01A1	Poirier, Judes, synaptic plasticity during aging and Alzheimer's disease.	09-01-92	00-37-10	McGill University	70,890
5 R01AG10004-05	Campisi, Judith, growth regulation in normal and transformed cells	09-05-92	00-47-10	Boston University	228,115
5 R01AG10009-02	Furman, Joseph M., vestibulo-ocular function in the elderly	08-01-92	00-97-10	Eye and Ear Institute of Pittsburgh	103,804
1 R01AG10014-01A1	Rowland, Neil E., thirst mechanisms in aging	09-30-92	01-47-10	University of Florida	142,460
5 R01AG10015-02	Olton, David S., aging, memory and septohippocampal function	08-01-92	01-57-10	Johns Hopkins University	118,914
1 R29AG10025-01A1	Houmard, Joseph A., glucose transporters and the insulin resistance of aging.	09-30-92	02-57-10	East Carolina University	77,982
1 R29AG10026-01A1	Cartee, Gregory D., age effects on exercise-stimulation of glucose transport.	05-01-92	02-67-10	University of Wisconsin at Madison	87,247
1 R01AG10030-01	Kalaria, Rajesh N., amyloid proteins of cerebral microvessels in aging	09-30-92	03-07-10	Case Western Reserve University	124,133
3 R01AG10034-01S1	Dubinsky, Janet M., interaction of hypoxic and excitotoxic neuronal injury.	02-15-92	03-47-10	University of Texas Health Science Center at San Antonio	1,050
5 R01AG10034-02	Dubinsky, Janet M., interaction of hypoxic and excitotoxic neuronal injury.	08-01-92	03-47-10	University of Texas Health Science Center at San Antonio	99,029
5 R29AG10047-02	Mutter, Sharon A., judgment and decisionmaking across the life span.	03-01-91	04-77-10	Western Kentucky University	89,780

1	R01AG10053-01A1	Supiano, Mark A., role of sympathetic function in geriatric hypertension.	09-01-92	05-37-10	University of Michigan at Ann Arbor	88,217
1	R55AG10057-01A1	Mbawuike, Innocent N., enhancement of influenza vaccines for aged recipients.	09-30-92	05-77-10	Baylor College of Medicine	100,000
1	R29AG10059-01A1	Crisp, Terriann, age-related changes in spinal opiate-induced analgesia.	06-01-92	05-97-10	Northeastern Ohio University College of Medicine	88,091
1	R01AG10070-01A1	Baker, John R., carilage matrix protein interactions—changes with age.	05-01-92	07-07-10	University of Alabama at Birmingham	161,769
5	R01AG10101-02	Lockshin, Richard A., cell death in a high connectivity invertebrate model.	06-01-92	10-17-10	St. John's University	185,841
3	R01AG10102-01S1	Gorelick, Philip B., dementia in the black aged—ad and mid	06-01-92	10-27-10	Rush-Presbyterian—St. Lukes Medical Center	2,000
5	R01AG10102-02	Gorelick, Philip B., dementia in the black aged—ad and mid	09-01-92	10-27-10	Rush-Presbyterian—St. Lukes Medical Center	333,039
5	R01AG10104-02	Herman, Brian A., calcium and cell growth	06-01-92	10-47-10	University of North Carolina at Chapel Hill	170,847
1	R13AG10105-01	Woollacott, Marjorie H., international symposium of posture and gait	01-15-92	10-57-10	University of Oregon	36,350
1	R01AG10106-01	Katzman, Robert, incidence and course of dementia in Shanghai	09-15-92	10-67-10	University of California at San Diego	250,852
1	R01AG10109-01	Seidenberg, Mark, semantic memory in normal aging and Alzheimer's disease.	06-05-92	10-97-10	University of Southern California	131,837
1	R01AG10111-01A1	Emerson, Robert M., caregiving practices in Hispanic and Anglo families.	09-01-92	11-17-10	University of California at Los Angeles	98,296
1	R13AG10116-01	Longino, Charles F., Jr., Planning and Travel—1993 International Congress of Gerontology.	03-15-92	11-67-10	Gerontological Society of America	8,726
1	R01AG10118-01	Goidl, Edmond A., heterogeneous antibody responses in aging	01-15-92	11-87-10	University of Maryland—Baltimore Professional School	122,141
1	P01AG10120-01	Fogel, Robert W., early indicators of later work levels, disease and death.	03-05-92	12-07-10	National Bureau of Economic Research	409,961
1	R01AG10121-01	Beckley, Dennis J., posture in age related neurodegenerative disease	09-05-92	12-17-10	University of California at Davis	110,706
5	P30AG10123-02	Cummings, Jeffrey L., UCLA Alzheimers Disease Center	07-15-92	12-37-10	University of California at Los Angeles	563,497
3	P30AG10123-02S1	Cummings, Jeffrey L., UCLA Alzheimers Disease Center	09-30-92	12-37-10	University of California at Los Angeles	59,200
5	P30AG10124-02	Trojanowski, John Q., Alzheimers Disease Center Core	07-15-92	12-47-10	University of Pennsylvania	643,668
3	P30AG10124-02S1	Trojanowski, John Q., Alzheimers Disease Center Core	07-15-92	12-47-10	University of Pennsylvania	199,452
1	R01AG10127-01	Wallace, Robert B., preserving cognitive and physical function in oldest.	05-20-92	12-77-10	University of Iowa	282,847
5	P30AG10129-02	Jagust, William J., UC Davis Alzheimers Disease Center Core	07-15-92	12-97-10	University of California at Davis	598,883
3	P30AG10129-02S1	Jagust, William J., UC Davis Alzheimers Disease Center Core	07-15-92	12-97-10	University of California at Davis	208,108
5	P30AG10130-02	Mirra, Suzanne S., Alzheimers Disease Center Core	07-15-92	13-07-10	Emory University	626,900
3	P30AG10130-02S1	Mirra, Suzanne S., Alzheimers Disease Center Core	07-15-92	13-07-10	Emory University	200,000
1	R55AG10131-01A1	Kayser-Jones, Virgene S., behavioral context of eating and nutritional support.	09-30-92	13-17-10	University of California at San Francisco	100,000
5	P30AG10133-02	Ghetti, Bernardino, Indiana Alzheimers Disease Core Center	07-15-92	13-37-10	Indiana University at Indianapolis	591,766
1	R01AG10135-01A1	Taylor, Robert J., religious participation among older blacks and whites.	09-25-92	13-57-10	University of Michigan at Ann Arbor	131,097

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Grant number	Principal investigator title	Budget start	Dates end	Institution	Total
1 R01AG10138-01A1	Haroutunian, Vahram, synthesis of B-app in transmitter deficient models of ad.	08-01-92	13-87-10	Mount Sinai School of Medicine	132,947
5 R01AG10143-10	Clark, Richard A., fibronectin and cell recruitment	06-01-92	14-37-10	State University of New York at Stony Brook	166,342
1 R01AG10145-01	Morris, John C., attention, cognition and driving performance in SDAT.	04-01-92	14-57-10	Jewish Hospital of St. Louis	146,151
1 R01AG10152-01	Kronenberg, Mitchell E., thymus involution and aging in TL transgenic mice.	01-15-92	15-27-10	University of California Los Angeles	161,953
5 R01AG10154-05	Greenough, William T., physical exercise, mental activity, and brain plasticity.	04-01-92	15-47-10	University of Illinois Urbana-Champaign	61,503
1 R01AG10156-01A1	Spencer, Bruce D., uncertainty intervals—population and functional forecasts.	07-01-92	15-67-10	National Opinion Research Center	169,241
1 R29AG10160-01	Balin, Brian J., neuronal cytoskeleton in aging and Alzheimer's disease.	04-01-92	16-07-10	Medical College of Pennsylvania	125,633
5 P30AG10161-02	Evans, Denis A., Rush Alzheimer's Disease Center core	07-15-92	16-17-10	Rush-Presbyterian—St. Lukes Medical Center	600,362
5 P30AG10163-02	Harrell, Lindy E., Alzheimer's Disease Center core	07-15-92	16-37-10	University of Alabama at Birmingham	585,282
1 R37AG10168-01	Preston, Samuel H., African-American mortality, 1930-1990	02-03-92	16-87-10	University of Pennsylvania	317,806
1 R01AG10172-01A1	Cohen-Mansfield, Jiska treatment of agitation in the nursing home	08-18-92	17-27-10	Hebrew Home of Greater Washington	154,151
5 R01AG10173-02	Sarter, Martin, F., aging, attention, and benzodiazepine receptor ligands.	06-01-92	17-37-10	Ohio State University	74,594
1 R01AG10175-01A1	Pedersen, Nancy L., genetic and environmental influences—biobehavioral aging.	09-18-92	17-57-10	Pennsylvania State University—University Park	351,809
1 P01AG10179-01A1	Juster, F.T., wealth, savings and financial security among older persons.	09-21-92	17-97-10	University of Michigan at Ann Arbor	265,395
1 R01AG10181-01	McFadden, Daniel L., demographics, housing, and welfare of the elderly.	08-10-92	18-17-10	National Bureau of Economic Research	90,000
5 P30AG10182-02	Koller, William C., Alzheimer's Disease Center core grant	07-15-92	18-27-10	University of Kansas Medical Center	552,258
3 P30AG10182-02S1	Koller, William C., Alzheimer's Disease Center core grant	07-15-92	18-27-10	University of Kansas Medical Center	204,158
1 P01AG10184-01	West, Sheila K., visual impairment and functional status in older persons.	08-05-92	18-47-10	Johns Hopkins University	1,131,799
1 R01AG10193-01	Balota, David A., automatic and attentional mechanisms and SDAT	06-01-92	19-37-10	Washington University	100,188
1 R01AG10197-01	Hale, Sandra S., aging and cognitive slowing—the information-loss model.	07-01-92	19-77-10	Washington University	112,397
1 R29AG10199-01	Donahue, Henry J., age-related changes in bone cell signal transduction.	01-15-92	19-97-10	State University New York Stony Brook	101,877
1 P01AG10207-01	Kelsoe, Garnett, mechanisms of immunosenesence	04-01-92	20-77-10	University of Maryland Baltimore Professional School	715,570

1 P01AG10208-01	Azmitia, Efrain C., S-100B—neuronal-glial link to Alzheimer's disease.	05-15-92	20-87-10	New York University	840,479
1 R01AG10210-01	Lee, Virginia M., biology of Alzheimer paired helical filaments	06-15-92	21-07-10	University of Pennsylvania	154,095
1 R01AG10213-01A1	Culp, Lloyd A., matrix adhesion of aging human dermal fibroblasts	08-01-92	21-37-10	Case Western Reserve University	139,016
1 R29AG10215-01A1	Yeowell, Heather N., lysyl hydroxylase: structure and regulatory studies.	09-01-92	21-57-10	Duke University	94,803
1 R01AG10217-01	Holden, James E., pet probes of dopamine neurons in young and aged Macaque.	06-01-92	21-77-10	University of Wisconsin Madison	147,967
1 R01AG10220-01	Mungas, Dan M., English and Spanish assessment of cognition in elderly.	07-15-92	22-07-10	University of California Davis	129,390
5 R01AG10248-02	Johnson, Thomas E., RFLP-mapping of QTLS for life span and life history.	06-15-92	24-87-10	University of Colorado at Boulder	169,907
1 R01AG10252-01A1	Levine, Michael S., neurophysiology of aging neostriatum	09-30-92	25-27-10	University of California Los Angeles	148,072
1 R01AG10255-01	Wolf, Douglas A., migration and the proximity of elderly to their children.	02-15-92	25-57-10	Urban Institute	21,276
7 R01AG10255-02	Wolf, Douglas A., migration and the proximity of elderly to their children.	08-01-92	25-57-10	Syracuse University at Syracuse	99,949
5 R01AG10257-02	Barber, B.J., age-related changes in protein and water distribution	06-15-92	25-77-10	University of Kentucky	125,768
3 R01AG10257-02S1	Barber, B.J., age-related changes in protein and water distribution	06-15-92	25-77-10	University of Kentucky	18,000
1 R01AG10263-01	Hiramoto, Raymond N., physiological functions of old mice and longevity.	04-01-92	26-37-10	University of Alabama at Birmingham	132,554
1 R55AG10264-01A1	Glicksman, Allen, cultural and social sources of well-being in normal aged.	09-30-92	26-47-10	Philadelphia Geriatric Center—Friedman Hospital	100,000
1 R01AG10266-01	Bumpass, Larry L., aging and the family over the life course	05-15-92	26-67-10	University of Wisconsin Madison	400,000
1 R29AG10267-01	Cress, Marie E., physical function performance and exercising in aging.	05-15-92	26-77-10	University of Washington	111,815
1 R01AG10269-01	Heistad, Donald D., effects of aging on cerebral blood vessels	06-01-92	26-97-10	University of Iowa	147,615
1 R01AG10279-01	Vorbrodt, Andrzej W., transport of modified albumin across blood-brain barrier.	05-01-92	27-97-10	Institute for Basic Research in Developmental Disabilities	100,289
3 R01AG10279-01S1	Vorbrodt, Andrzej W., transport of modified albumin across blood-brain barrier.	05-01-92	27-97-10	Institute for Basic Research in Developmental Disabilities	27,213
1 R01AG10280-01A1	Schneider, Jay S., degeneration, repair and aging in the CNS	09-30-92	28-07-10	Hahnemann University	204,833
1 R29AG10282-01	Geula, Changiz, cholinergic system in Alzheimer's disease	07-15-92	28-27-10	Beth Israel Hospital (Boston)	121,797
1 R55AG10283-01A1	Miller, Carol A., motor neuron disease in the aged—role of glycoconjugat.	09-30-92	28-37-10	University of Southern California	100,000
1 R01AG10295-01A1	Stevens, Joseph C., cutaneous sensitivity and aging	09-18-92	29-57-10	John B. Pierce Foundation Lab, Inc.	128,652
1 R01AG10297-01A1	Lahiri, Debomoy K., regulation of beta-amyloid gene promoter in cell types.	09-01-92	29-77-10	Indiana University-Purdue University at Indianapolis	153,791
1 R01AG10299-01	Schmidt, Robert E., neuropathology of the aging sympathetic nervous system.	05-01-92	29-97-10	Washington University	207,153

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Grant number	Principal investigator title	Budget start	Dates end	Institution	Total
1 R29AG10303-01	Amin, Ashok R., characterization of murine and human IG-D-receptors on T.	02-01-92	30-37-10	New York University	120,572
5 U01AG10304-02	Lawton, M. Powell, stimulation-retreat program for Alzheimer's patients.	09-01-92	30-47-10	Philadelphia Geriatric Center-Friedman Hospital	260,165
5 U01AG10305-02	Morris, John N., evaluating a family partnership program in SCUS	09-22-92	30-57-10	Hebrew Rehabilitation Center for Aged	283,899
5 U01AG10306-02	Kutner, Nancy G., Budd Terrace—SCU care model—multidimensional analysis.	09-15-92	30-67-10	Emory University	240,786
5 U01AG10311-02	Lindeman, David A., Alzheimer's special care units—longitudinal outcome study.	09-22-92	31-17-10	East Bay Institute for Research and Education	342,582
5 U01AG10313-02	Sloane, Philip D., outcome of Alzheimer's special care units in four states.	09-10-92	31-37-10	University of North Carolina Chapel Hill	282,909
1 U01AG10315-01	Evans, Denis A., longitudinal study of 4 types of AD special care units.	04-15-92	31-57-10	Rush-Presbyterian—St. Lukes Medical Center	231,000
5 U01AG10317-02	Leon, Joel, national evaluation of special care units	09-10-92	31-77-10	George Washington University	346,200
7 U01AG10318-02	Montgomery, Rhonda J., special care units—impact on AD residents/family/staff.	08-15-92	31-87-10	University of Kansas Lawrence	352,242
1 R01AG10321-01	Beck, Cornelia M., reducing disruptive behaviors in demented elderly	01-15-92	32-17-10	University of Arkansas Medical Sciences Little Rock	691,697
3 R01AG10321-01S1	Beck, Cornelia M., reducing disruptive behaviors in demented elderly	05-15-92	32-17-10	University of Arkansas Medical Sciences Little Rock	71,072
5 R01AG10327-02	Yu, Elena S.H., Alzheimer's disease and dementia in China	06-08-92	32-77-10	San Diego State University	178,310
5 U01AG10328-02	Grant, Leslie A., special care units in Minnesota nursing homes	09-10-92	32-87-10	University of Minnesota Twin Cities	255,636
5 U01AG10330-02	Holmes, Douglas, differential costs and inputs for special care units	09-28-92	33-07-10	Hebrew Home for the Aged at Riverdale	365,856
1 R43AG10338-01A1	Albani, Christopher R., low cost portable sleep apnea monitoring system.	09-22-92	33-87-10	NIM, Inc.	50,000
1 R43AG10341-01	McClain, Daniel, computer information system for elder supportive housing.	06-01-92	34-17-10	New Solutions, Ltd.	38,835
5 R44AG10347-03	Baca, Fidel L., using telephone media to plan for retirement	09-01-92	34-77-10	Associated Enterprises, Inc.	95,097
7 R43AG10350-02	Byrd, Cecilia Annette, elders' comprehension and acceptance of health education.	09-25-92	35-07-10	Elder Source, Inc.	44,848
1 R43AG10351-01	Wade, Stephen E., noninvasive measurement of melatonin for sleep studies.	09-28-92	35-17-10	Hammersmith Laboratories, Inc.	49,846
5 U01AG10353-02	Dawson-Hughes, Bess, effect of calcium and vitamin D on bone loss from hip.	09-28-92	35-37-10	Tufts University Boston	518,428
5 R01AG10358-02	Gallagher, J. Christopher, pathophysiology of senile type 11 osteoporosis.	09-01-92	35-87-10	Creighton University	308,720
3 U01AG10373-01S1	Gallagher, J. Christopher, treatment for osteoporosis of the hip	06-01-92	37-37-10	Creighton University	42,000

5	U01AG10373-02	Gallagher, J. Christopher, treatment for osteoporosis of the hip	09-30-92	37-37-10	Creighton University	611,046
5	R01AG10374-02	Cody, Dianna D., proximal femur architecture in older women	09-01-92	37-47-10	Henry Ford Hospital	83,355
5	R01AG10381-02	Parfitt, A. Michael, ert and focal balance between resorption and formation.	09-01-92	38-17-10	Henry Ford Hospital	148,818
5	U01AG10382-02	Dalsky, Gail P., effect of exercise on femoral bone mass in older adults.	09-30-92	38-27-10	University of Connecticut Health Center	680,850
3	U01AG10383-01S1	Rudman, Daniel, effect of testosterone on bone density/hypogonadal men.	02-05-92	38-37-10	Medical College of Wisconsin	1,153
5	U01AG10383-02	Rudman, Daniel, effect of testosterone on bone density/hypogonadal men.	09-20-92	38-37-10	Medical College of Wisconsin	205,193
5	U01AG10407-02	Kleerekoper, Michael, estrogen in the prevention of bone loss from the hip.	09-30-92	40-77-10	Henry Ford Hospital	613,435
5	R01AG10412-02	Ross, Philip D., falls and fractures and elderly Japanese-Americans	07-01-92	41-27-10	Staub Pacific Health Foundation Health Research Institute	207,897
5	P60AG10415-02	Beck, John C., UCLA Older Americans Independence Center	07-15-92	41-57-10	University of California Los Angeles	1,109,295
1	R01AG10425-01A1	Tucker, Katherine L., nutrition and frailty among elderly Hispanic groups in M.	09-01-92	42-57-10	Tufts University Boston	247,937
1	R01AG10428-01	Waller, John B., Jr., prevention and control physical frailty in minority aged.	09-01-92	42-87-10	Wayne State University	198,436
5	R01AG10430-02	Miles, Toni P., Black elderly twin study	07-01-92	43-07-10	University of Illinois at Chicago	298,616
5	P01AG10435-02	Gage, Fred H., gene therapy for Alzheimer's disease	08-12-92	43-57-10	University of California San Diego	641,132
5	R01AG10436-02	Miller, Douglas K., physical frailty in urban African-Americans	07-10-92	43-67-10	St. Louis University	202,185
5	R01AG10444-02	Hazuda, Helen P., SALSA—San Antonio longitudinal study of aging	07-01-92	44-47-10	University of Texas Health Sciences Center San Antonio	205,430
5	P01AG10446-02	Parker, William D., Jr., drug mechanisms in ad treatment	08-01-92	44-67-10	University of Colorado Health Sciences Center	402,557
5	R01AG10454-02	Kelsey, Jennifer L., osteoporosis and falls in Mexican-American elders	09-01-92	45-47-10	Stanford University	219,132
5	R01AG10462-02	Anderson, Stephen, biochemistry and biophysics of BPTI folding mutants.	07-01-92	46-27-10	Rutgers, the State University New Brunswick	140,332
5	P60AG10463-02	Hamill, Robert W., Rochester Area Pepper Center	09-30-92	46-37-10	University of Rochester	1,638,238
1	P60AG10469-01A1	Tinetti, Mary E., Claude D. Pepper Older Americans Independence Center.	09-30-92	46-97-10	Yale University	680,877
5	P01AG10480-02	Hefti, Franz F., Theraeutic potential-neurotrophins/Alzheimer's disease.	08-01-92	48-07-10	University of Southern California	381,227
5	P01AG10481-02	Kraft, Grant A., neural proteases—new Alzheimer's disease drug targets.	08-12-92	48-17-10	Abbott Laboratories	763,058
5	U01AG10483-02	Thal, Leon J., Alzheimer Disease Cooperative Study Unit	07-15-92	48-37-10	University of California San Diego	3,677,663
5	P60AG10484-02	Ettinger, Walter H., Jr., Claude D. Pepper Older Americans Independence Center.	08-01-92	48-47-10	Wake Forest University	1,495,340
5	P01AG10485-02	Simpkins, James W., discovery of novel drugs for Alzheimer's disease.	08-01-92	48-57-10	University of Florida	775,938
5	R01AG10489-02	Lantigua, Rafael, active life expectancy among urban minority elderly	07-01-92	48-97-10	Columbia University New York	207,962

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Grant number	Principal investigator title	Budget start	Dates end	Institution	Total
5 P01AG10491-02	Greengard, Paul, interdisciplinary approach to Alzheimer drug discovery.	08-01-92	49-17-10	Rockefeller University	419,829
1 R01AG10496-01	Zurif, Edgar B., cognitive aging—real time language processing	05-01-92	49-67-10	Brandeis University	149,538
5 R01AG10499-03	Norr, Kathleen F., peer education for AIDS prevention	09-01-92	49-97-10	University of Illinois at Chicago	172,507
1 R13AG10500-01	Grodzicker, Terri I., conference—molecular biology of aging	04-01-92	50-07-10	Cold Spring Harbor Laboratory	24,525
1 R13AG10503-01	Iqbal, Khalid, conference on Alzheimer's disease and related disorders.	06-01-92	50-37-10	New York State Council for Mental Hygiene Planning	20,000
1 P01AG10514-01	Papaconstantinou, John, effects of aging on molecular responses to stress.	06-01-92	51-47-10	University of Texas Medical Branch Galveston	737,912
1 R01AG10518-01	Horiuchi, Shiro, old-age mortality—life-table aging rate analysis	08-01-92	51-87-10	Rockefeller University	65,012
1 R13AG10519-01	Traugott, Michael W., research issues and data resources in gerontology.	04-02-92	51-97-10	University of Michigan at Ann Arbor	16,821
1 R29AG10523-01	Peterson, Charlotte A., enolase gene regulation in differentiation and aging.	06-01-92	52-37-10	University of Arkansas Medical Sciences Little Rock	89,310
1 R01AG10536-01	Weindruch, Richard H., calories, fat and spontaneous prostate cancer in aging rat.	05-01-92	53-67-10	University of Wisconsin Madison	150,034
1 R01AG10538-01	Fitzgerald, Malinda E., choroidal blood flow and retinal pathology in aging.	06-01-92	53-87-10	University of Tennessee at Memphis	89,694
5 R01AG10559-01	Ji, Tae H., identification of LH-receptor gene regulatory sequences	08-01-92	55-97-10	University of Wyoming	153,766
5 R01AG10560-02	Levitt, Pat R., role of non-neuronal cells in CNS formation and injury	08-01-92	56-07-10	Medical College of Pennsylvania	183,813
1 R01AG10565-01	Heinrich, Gerhard, aging and Alzheimer disease—involvement of neurotrophi.	09-30-92	56-57-10	University Hospital (Boston)	155,548
1 R15AG10576-01	Costill, David L., aging and endurance running—a 25-year follow up	06-25-92	57-67-10	Ball State University	83,718
1 R15AG10584-01	Grigsby, Jill S., gender differences in health and longevity	05-01-92	58-47-10	Pomona College	100,283
1 R15AG10591-01	Hartley, Alan A., sources of age differences in speed of response	07-06-92	59-17-10	Scripps College	107,679
1 R29AG10593-01	Hartman, Marilyn D., age difference in attention—consequences for memory.	07-01-92	59-37-10	University of North Carolina Chapel Hill	94,863
5 R01AG10598-10	Cunningham, Dennis D., regulation of protease nexin 1 activity and secretion.	09-01-92	59-87-10	University of California Irvine	190,941
5 R01AG10599-02	Cooperman, Barry S., antichymotrypsin interaction with serine proteases.	09-01-92	59-97-10	University of Pennsylvania	189,089
7 R01AG10604-02	Polich, John M., assessment of Alzheimer's disease with P300	09-01-92	60-47-10	Scripps Research Institute	124,495
1 R01AG10606-01	Rapp, Peter R., cognitive function in the aged primate	09-20-92	60-67-10	Salk Institute for Biological Studies	176,377
1 R29AG10607-01	Magnusson, Kathy R., effects of aging on the HMDA receptor complex.	05-01-92	60-77-10	Colorado State University	94,812

1 R01AG10608-01	Benson, Merrill D., amyloid precursor protein (app) and Alzheimer's disease.	07-01-92	60-87-10	Indiana University-Purdue University at Indianapolis		201,474
3 R01AG10608-01S1	Benson, Merrill D., amyloid precursor protein (app) and Alzheimer's disease.	09-30-92	60-87-10	Indiana University-Purdue University at Indianapolis		18,469
1 R13AG10611-01	Wilking, Spencer V., 1992 summer institute in geriatric medicine	07-01-92	61-17-10	Boston University		36,821
3 R01AG10612-06S1	Hansen, Barbara C., obesity and the regulation of appetite	09-01-91	71-73-37	University of Maryland Baltimore Professional School		158,395
1 R01AG10624-01	Frost, J. James, partial volume correction in pet imaging in aging	07-01-92	62-47-10	Johns Hopkins University		284,194
1 R55AG10627-01	Farrell, Peter A., aging effects on single pancreatic beta cells	09-30-92	62-77-10	Pennsylvania State University—University Park		100,000
5 R01AG10634-02	Sanes, Jerome N., neural control of voluntary movements	09-05-92	63-47-10	Brown University		178,401
1 R01AG10637-01	Mabry, Tom J., plant toxins and dementia in the western pacific	05-01-92	63-77-10	University of Texas at Austin		78,174
5 R01AG10638-02	Prohovnik, Isak, ad-like pathology in elderly schizophrenia	09-01-92	63-87-10	New York State Psychiatric Institute		259,791
5 R01AG10641-02	Jackson, Mary E., estimates, predictors and outcomes of behavior problems.	09-01-92	64-17-10	Systemetrics/McGraw-Hill		145,879
5 R01AG10642-02	Cohen-Mansfield, Jiska, management of screaming in nursing home residents.	07-01-92	64-27-10	Hebrew Home of Greater Washington		116,195
5 R01AG10643-02	Dement, William C., sundown syndrome in a skilled nursing facility	08-01-92	64-37-10	Stanford University		99,170
5 R01AG10644-02	Mitchell, Carol A., management of resistance to bathing activities	07-01-92	64-47-10	Montefiore Medical Center (Bronx, NY)		80,953
5 R01AG10646-02	Bonder, Bette R., assessment and intervention: ADL in Alzheimer's disease.	07-01-92	64-67-10	Cleveland State University		95,640
5 R01AG10647-02	Gilley, David W., aggressive behavior in persons with Alzheimer's disease.	07-01-92	64-77-10	Rush-Presbyterian—St. Lukes Medical Center		117,282
5 R01AG10648-02	Horner, Jennifer, dysphagia in Alzheimer's disease	07-01-92	64-87-10	Duke University		90,532
1 R43AG10650-01	Schafer, Mark E., ultrasound/collagen treatment of full thickness wounds.	09-30-92	65-07-10	Sonic Technologies		50,000
1 R42AG10653-01	Forray, Carlos, functional assay systems for human adronergic receptors.	06-01-92	65-37-10	Synaptic Pharmaceutical Corporation		50,000
1 R43AG10659-01	Leirer, Von O., community voice mail for routine and disaster services.	09-20-92	65-97-10	Decision Systems		50,000
5 R01AG10664-02	Markesbery, William R., Alzheimer's disease, dental amalgams and mercury.	07-01-92	66-47-10	University of Kentucky		141,088
5 R01AG10665-02	Cordell, Barbara L., transgenic mouse model Alzheimer's disease amyloidosis.	09-01-92	66-57-10	California Biotechnology, Inc		110,099
5 R01AG10667-02	Moises, Hylan C., NGF and cholinergic function in adult and aging brain.	07-01-92	66-77-10	University of Michigan at Ann Arbor		152,069
5 R01AG10668-02	Mufson, Elliott J., galanin in Alzheimer's disease	07-01-92	66-87-10	Rush-Presbyterian-St. Lukes Medical Center		142,545
5 R01AG10669-02	Marsh, Richard F., study of the protein in mink encephalopathy	07-01-92	66-97-10	University of Wisconsin Madison		93,421
5 R01AG10670-02	Otvos, Laszlo, conformation of phosphorylated brain peptides	07-01-92	67-07-10	Wistar Institute of Anatomy and Biology		132,704
5 R01AG10671-02	Bredesen, Dale E., a genetically tractable in vitro model of AD	07-01-92	67-17-10	University of California at Los Angeles		107,655
5 R01AG10672-02	Mobley, William C., neurotrophic factor therapy for Alzheimer's disease.	07-01-92	67-27-10	University of California at San Francisco		177,265

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Grant number	Principal investigator title	Budget start	Dates end	Institution	Total
5 R01AG10673-02	Johnson, Steven A., complement expression in Alzheimer's disease brain.	07-01-92	67-37-10	University of Southern California	142,833
5 R01AG10675-03	Malter, James S., APP MRNA dysregulation and Alzheimer's disease	07-01-92	67-57-10	University of Wisconsin Madison	110,681
5 R01AG10676-02	Salton, Stephen R., regulation of VGF by neurotrophic growth factors	07-01-92	67-67-10	Mount Sinai School of Medicine	159,427
5 R01AG10677-02	Brown, Gregory G., spectroscopy of Alzheimer's disease and vascular dementia.	07-01-92	67-77-10	Henry Ford Hospital	208,423
5 R01AG10678-02	Geddes, James W., map 5, sprouting, and Alzheimer's disease pathology.	07-01-92	67-87-10	University of Kentucky	123,778
5 R01AG10679-02	Gonzalez, R. Gilberto, neuroimaging in the diagnosis of Alzheimer's disease.	07-01-92	67-97-10	Massachusetts General Hospital	161,483
5 R01AG10681-02	Carlson, George A., transgenic mouse models for Alzheimer's disease	07-01-92	68-17-10	McLaughlin Research INS for Biomed SCIS	152,084
5 R01AG10682-02	Stopa, Edward G., Heparin-binding growth factors in aging and Alzheimer's.	07-01-92	68-27-10	Health Science Center at Syracuse	176,425
5 R01AG10683-02	Viola, Michael V., a transomic mouse model for Alzheimer's disease	07-01-92	68-37-10	State University New York Stony Brook	165,124
5 R01AG10684-02	Simons, Elizabeth R., platelet-endothelia cell interactions in Alzheimer's.	07-01-92	68-47-10	Boston University	279,554
5 R01AG10684-02S1	Simons, Elizabeth R., platelet-endothliall cell interactions in Alzheimer's.	07-01-92	68-47-10	Boston University	10,172
5 R01AG10685-02	Frautschy, Sally A., mechanism of b-amyloid neurotoxicity in the rat brain.	07-01-92	68-57-10	Whittier Institute for Diabetes and Endoc	128,043
5 R01AG10686-02	Krueger, Bruce K., glial-neuronal interactions in neurodegeneration	07-01-92	68-67-10	University of Maryland—Baltimore Professional School	149,376
5 R01AG10687-02	Levine, Robert A., biopterin/catecholamine metabolism in Alzheimer's aging.	07-01-92	68-77-10	Wayne State University	96,071
5 R01AG10689-02	Masliah, Eliezer, subcellular basis of synaptic pathology Alzheimer's disease.	07-01-92	68-97-10	University of California San Diego	121,461
1 R01AG10691-01A1	Fink, John K., analysis of the APP gene in Alzheimer's disease	09-15-92	69-17-10	University of Michigan at Ann Arbor	196,436
1 R01AG10738-01	Stange, Kurt C., buffers of impairment-disability cascade among the old.	06-05-92	73-87-10	Case Western Reserve University	247,967
3 R01AG10738-01S1	Stange, Kurt C., buffers of impairment-disability cascade among the old.	09-01-92	73-87-10	Case Western Reserve University	25,691
1 R43AG10739-01	Tway, Linda E., multimedia expert system model for senior housing	09-30-92	73-97-10	Sapphire Pacific	49,985
1 R01AG10746-01	Kelner, Michael J., genetic insight into oxidative damage	01-15-92	74-67-10	University of California at San Diego	209,854
5 R01AG10747-02	Booze, Rosemarie M., progressive cholinergic dysfunction in aging brain.	09-01-92	74-77-10	University of Kentucky	123,837

5 R01AG10755-02	Rose, Gregory M., cholinergic circuits and hippocampal function in aging.	07-01-92	75-57-10	University of Colorado Health Sciences Center		66,100
5 R29AG10756-02	Wrigley, J. Michael, demographic study of dementia among the elderly.	09-01-92	75-67-10	University of Alabama at Birmingham		96,177
5 R01AG10757-02	Wortman, Camille B., widowhood, bereavement and coping	09-01-92	75-77-10	State University New York Stony Brook		316,020
5 R01AG10760-02	Vitaliano, Peter P., caregiver mental health and AD patient outcomes	09-01-92	76-07-10	University of Washington		169,041
1 R43AG10761-01	Konneker, Lloyd K., assessing people tracking for elderly health care	09-01-92	76-17-10	Individual Award—Konneker, Lloyd K		5,900
1 R13AG10763-01	Papaconstantinou, John, 1992 Gordon Conference on the biology of aging.	08-24-92	76-37-10	University of Rhode Island		31,862
1 R01AG10765-01	Fleming, Sharon E., nutrient utilization by intestinal cells of aged animals.	06-15-92	76-57-10	University of California Berkeley		194,271
1 R01AG10772-01	Shea, Dennis Gerard, the effect of health on saving by elderly persons.	09-01-92	77-27-10	Pennsylvania State University—University Park		68,407
1 R43AG10782-01	Schwartz, Marc D., information system to improve home health care	02-07-92	78-27-10	Computers in Psychiatry/Psychology		50,000
1 P01AG10794-01	Sack, Robert L., sleep, melatonin and the aging circadian clock	07-01-92	79-47-10	Oregon Health Sciences University		850,399
1 R55AG10798-01	Friedman, Robert H., telecom system to improve function of elderly with angina.	09-30-92	79-87-10	University Hospital (Boston)		100,000
1 R29AG10801-01	Fredman, Lisa, caregivers to the elderly—risks and outcomes of stress.	08-01-92	80-17-10	University of Maryland—Baltimore Professional School		107,052
1 R13AG10802-01	Levine, Elliot M., molecular genetic studies of cellular aging	07-02-92	80-27-10	Tissue Culture Association		8,496
1 R01AG10819-01	Sager, Ruth, molecular basis of senescence in breast epithelial cells	08-01-92	81-97-10	Dana-Farber Cancer Institute		219,295
1 R01AG10827-01	Geller, Alfred I., HSV vector systems for gene therapy of aging disorders.	09-30-92	82-77-10	Children's Hospital (Boston)		167,207
1 R01AG10828-01	Williams, Mark E., functioning and medication management in older people.	09-30-92	82-87-10	University of North Carolina Chapel Hill		217,881
1 P01AG10836-01	Landfield, Philip W., calcium regulation in brain aging and Alzheimer's disease.	08-20-92	83-67-10	University of Kentucky		627,698
1 R01AG10837-01	Elble, Rodger J., gait disturbances in the elderly: initiation of gait	09-01-92	83-77-10	Southern Illinois University School of Medicine		107,690
1 R01AG1038-01	Harrison, David E., effects of HDL cholesterol levels on aging	09-15-92	83-87-10	Jackson Laboratory		234,907
1 R29AG10848-01	Ober, Beth A., semantic and repetition priming in normal and abnormal aging.	08-01-92	84-87-10	University of California Davis		103,645
1 R01AG10853-01	Conley, Kevin E., age and exercise—muscle function by NMR and performance.	09-11-92	85-37-10	University of Washington		217,717
1 R29AG10869-01	Udom, Celestine E., neuronal aging and neurodegenerative diseases	08-01-92	86-97-10	University of Colorado Health Sciences Center		95,572
1 R01AG10870-01	Turek, Fred W., aging and circadian rhythms in the TAU mutant hamster.	09-30-92	87-07-10	Northwestern University		192,739
1 R01AG10876-01	Lawrence, Renee H., intergenerational connections, ethnicity and the elderly.	09-01-92	87-67-10	Philadelphia Geriatric Center—Friedman Hospital		109,960
1 R29AG10879-01	Sano, Mary, maintaining functions in aged community residents	09-30-92	87-97-10	Columbia University New York		115,060

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Grant number	Principal investigator title	Budget start	Dates end	Institution	Total
1 R01AG10880–01	Craft, Suzanne, glucose regulation and memory in Alzheimer's disease.	09–10–92	88–07–10	Washington University	93,755
1 R29AG10885–01	Evers, Bernard M., surgical studies of ontogeny, aging and the gut	08–01–92	88–57–10	University of Texas Medical Branch Galveston	92,595
9 R01AG10897–09	Weiner, Michael W., 1H and 31P MRSI of aging brain and senile dementia.	08–10–92	89–77–10	University of California at San Francisco	239,966
1 R03AG10905–01	Stewart, Deneen R., friend virus susceptibility in young and aged mice.	09–01–92	90–57–10	Medical College of Pennsylvania	17,820
1 R35AG10916–01	Nixon, Ralph A., proteolysis in Alzheimer's disease pathogenesis	09–30–92	91–67–10	McLean Hospital (Belmont, Maine)	735,341
1 R35AG10917–01	Martin, George M., leadership and excellence in Alzheimer's disease award.	09–01–92	91–77–10	University of Washington	706,763
1 R01AG10924–01	Kleerekoper, Michael, effect of estrogen on femoral neck bone mass	09–30–92	92–47–10	Henry Ford Hospital	200,161
1 R01AG10936–01	Becerra, Rosina M., older Mexican Americans—social support and health care U.S.	09–30–92	93–67–10	University of California at Los Angeles	290,000
1 R01AG10939–01	Markides, Kyriakos S., longitudinal study of Mexican American elderly health.	09–30–92	93–97–10	University of Texas Medical Branch Galveston	776,998
1 R01AG10940–01	Hamman, Richard F., Hispanic health and aging, San Luis Valley, Colorado.	08–01–92	94–07–10	University of Colorado Health Sciences Center	455,728
1 R01AG10941–01	Lindeman, Robert D., New Mexico survey of health in elderly Hispanics.	09–01–92	94–17–10	University of New Mexico at Albuquerque	406,494
1 R01AG10942–01	Maclean, David B., growth hormone and/or exercise for the frail elderly.	09–25–92	94–27–10	Rhode Island Hospital (Providence, Rhode Island)	259,767
1 R01AG10943–01	Schwartz, Robert S., growth factors and exercise in older women	09–01–92	94–37–10	University of Washington	216,652
1 R01AG10947–01	Gitlin, Laura N., dementia management—home intervention for caregivers.	08–01–92	94–77–10	Thomas Jefferson University	184,824
1 R35AG10953–01	Frangione, Blas, Alzheimer's disease and amyloid proteins	09–30–92	95–37–10	New York University	722,118
1 R01AG10954–01	Snyder, Peter J., will testosterone increase muscle strength in elderly	09–01–92	95–47–10	University of Pennsylvania	147,842
1 R35AG10963–01	Mayeux, Richard, gene-environment interactions in Alzheimer's disease.	09–25–92	96–37–10	Columbia University—New York	659,891
1 R01AG10975–01	Tenover, Joyce S., testosterone therapy in the hypogonadal aging male.	09–01–92	97–57–10	Emory University	196,368
1 R01AG10979–01	Yen, Samuel S., beneficial effects of GHRH and melatonin in aging	09–30–92	97–97–10	University of California at San Diego	120,818
1 R55AG10982–01	Hurwicz, Margo L., cultural factors in illness behavior of Hispanics elders.	09–30–92	98–27–10	University of Missouri–St. Louis	100,000
1 R01AG10997–01	Hartman, Mark L., growth hormone and physical training in older persons.	09–01–92	99–77–10	University of Virginia at Charlottesville	230,246

1	R01AG10998-01	Falanga, Vincent, stanozolol in the elderly with venous ulcers	09-01-92	99-87-10	University of Miami	154,588
1	R01AG10999-01	Hoffman, Andrew R., GH and IGF—I treatment of elderly women	09-01-92	99-97-10	Stanford University	229,958
1	R01AG11002-01	Blackman, Marc R., growth hormone and sex steroid effects on skeletal muscle.	09-01-92	00-27-11	Johns Hopkins University	260,045
9	R01AG11026-14	McCormick, J. Justin, carcinogen induction of infinite lifespan in human cells.	04-01-92	02-67-11	Michigan State University	218,459
1	R01AG11066-01	Smith, James R., senescent cell derived inhibitors of DNA synthesis	09-30-92	06-67-11	Baylor College of Medicine	233,537
9	R01AG11093-08	Johnson, Larry, control of sertoli cell number and testicular size	06-01-92	09-37-11	Texas Agriculture and Mechanical University at College Station	113,174
1	S15AG11109-01	Carlson, George A., small instrumentation grant	09-01-92	10-97-11	McLaughlin Research Institute for Biomedical Sciences	9,026
1	S15AG11110-01	Kaminskas, Edvardas, small instrumentation grant	09-01-92	11-07-11	Hebrew Rehabilitation Center for Aged	18,949
1	S15AG11111-01	Aten, Marilyn J., small instrumentation grant	09-01-92	11-17-11	University of Rochester	16,574
1	S15AG11112-01	McDowell, Fletcher H., small instrumentation grant	09-01-92	11-27-11	Winifred Masterson Burke Rehabilitation Hospital	19,540
1	S15AG11113-01	Lawton, M. Powell, small instrumentation grant	09-01-92	11-37-11	Philadelphia Geriatric Center—Friedman Hospital	20,317
1	S15AG11114-01	Wayner, Matthew J., small instrumentation grant	09-01-92	11-47-11	University of Texas at San Antonio	9,228
1	S15AG11115-01	Atwater, Anne E., small instrument grant	09-01-92	11-57-11	University of Arizona	10,200
1	S15AG11116-01	McBurney, Wendell F., small instrumentation grant	09-01-92	11-67-11	Indiana University—Purdue University at Indianapolis	10,887
9	R01AG11123-12	Wood, John G., functional compartmentalization of neurons and glia	06-15-92	12-37-11	Emory University	153,219
1	R03AG11134-01	Alexander, Mark, racial differences in mortality at older ages	09-01-92	13-47-11	Kaiser Foundation Research Institute	19,571
1	R01AG11138-01	Van Eldik, Linda J., cell biology of a neurotrophic protein from glial cells.	05-15-92	13-87-11	Vanderbilt University	146,160
1	R03AG111309-01	Santiago De Snyder, Soami, age effects on DPOE and speech discrimination.	09-04-92	13-97-11	Ohio State University	25,114
1	R01AG11142-01	Hogan, Dennis P., health and living arrangements of minority elders	09-30-92	14-27-11	Pennsylvania State University—University Park	99,990
1	R01AG11143-01	McCormick, Wayne C., long-term care use in Japanese American elderly.	09-30-92	14-37-11	University of Washington	195,978
1	R01AG11152-01	Chapleski, Elizabeth, long-term care—social networks and American Indian age.	09-30-92	15-27-11	Wayne State University	185,455
1	R03AG11159-01	Black, Shelia R., semantic satiation, lexical ambiguity and age	09-04-92	15-97-11	Washington University	24,984
1	R01AG11161-01	Rabin, David L., minorities' characteristics, changing residence and long-term care U.S.	09-30-92	16-17-11	Georgetown University	154,835
1	R01AG11171-01	Tennstedt, Sharon L., predictors of long-term care use—ethnicity versus class.	09-30-92	17-17-11	New England Research Institute, Incorporated	212,535
1	R01AG11175-01	Kington, Raynard S., black-white differences in the use of long-term care.	09-30-92	17-57-11	Rand Corporation	121,490
1	R01AG11182-01	Lubben, James E., older Korean Americans—social support and long-term care.	09-30-92	18-27-11	University of California at Los Angeles	165,404
1	R01AG11183-01	Coward, Raymond T., race and residence differences in long-term care.	09-30-92	18-37-11	University of Florida	200,675
1	R25AG11191-01	Bennett, Ruth, community outreach on AD in North Manhattan and Harlem.	09-30-92	19-17-11	Columbia University New York	107,873

NATIONAL INSTITUTE ON AGING ACTIVE GRANTS IN FISCAL YEAR 1992—Continued

Grant number	Principal investigator title	Budget start	Dates end	Institution	Total
1 R25AG11196–01	Gwyther, Lisa P., dementia outreach to minorities—linking care networks.	09–30–92	19–67–11	Duke University	108,000
1 R25AG11197–01	Rankin, Eric D., three-tiered Alzheimer's training for West Virginia professionals.	09–30–92	19–77–11	West Virginia University	107,799
1 R25AG11204–01	Lieberman, Morton A., Alzheimer educational progress in Chinese and Hispanic community.	09–30–92	20–47–11	University of California at San Francisco	106,123
1 R25AG11213–01	Potter, Jane F., reaching rural communities with Alzheimer's education.	09–30–92	21–37–11	University of Nebraska Medical Center	107,840
1 R25AG11216–01	Lombardo, Nancy, Boston minority dementia outreach and education program.	09–30–92	21–67–11	Hebrew Rehabilitation Center for Aged	107,981
1 R25AG11219–01	Gilman, Sid, Michigan Alzheimer's disease community education	09–30–92	21–97–11	University of Michigan at Ann Arbor	107,998
1 S15AG11228–01	Pairent, Frederick W., small instrument grant	09–07–92	22–87–11	University of Wisconsin at Milwaukee	5,452
1 R29AG11248–01	Mintzer, Jacobo E., caregiving for Hispanic Alzheimer's patients	06–15–92	24–87–11	Medical University of South Carolina	100,479
1 P60AG11268–01	Cohen, Harvey J., Claude D. Pepper older Americans independence centers.	09–30–92	28–87–11	Duke University	1,310,306
1 R01AG11283–01	Kasper, Judith, understanding race differences in long-term care	09–30–92	28–37–11	Johns Hopkins University	142,549
1 R01AG11285–01	Miller, Baila H., minority use of long-term care—method and meaning.	09–30–92	28–57–11	University of Illinois at Chicago	195,853
1 R01AG11294–01	John, Kenneth R., Navajo nation comprehensive long-term care study	09–30–92	29–47–11	University of Kansas at Lawrence	176,197
1 R25AG11325–01	Cummings, Jeffrey L., Los Angeles area Alzheimer's outreach project	09–30–92	32–57–11	University of California at Los Angeles	107,633
1 R01AG11331–01	Caplan, Arnold I., extracellular matrix and aging (skin)	06–01–92	33–17–11	Case Western Reserve University	231,030
3 R01AG1133–01S1	Caplan, Arnold I., extracellular matrix and aging (skin)	08–15–92	33–17–11	Case Western Reserve University	62,917
1 U01AG11343–01	French, Frank S., transcription regulator mutations in prostate cancer.	07–20–92	34–37–11	University of North Carolina at Chapel Hill	235,082
1 R01AG11352–01	McKinlay, John B., improving breast cancer care through patient activation.	09–21–92	35–27–11	New England Research Institute, Inc	382,737
1 R01AG11354–01	Zarit, Steven H., mental health of caregivers of the elderly-day care use.	08–15–92	35–47–11	Pennsylvania State University—University Park	422,784
1 R01AG11382–01	Pollak, Charles P., disruptive nocturnal behaviors in elder-caregiver pairs.	09–10–92	38–27–11	Cornell University Medical Center	174,285
1 R01AG11383–01	Schubert, David R., biology of extracellular beta-amyloid protein precursor.	08–01–92	38–37–11	Salk Institute for Biological Studies	173,040
1 R01AG11384–01	Potter, Pamela E., cholinergic receptor changes in Alzheimer model	09–01–92	38–47–11	Montefiore Medical Center (Bronx, New York)	92,314
1 R01AG11385–01	Mucke, Lennart, transgenic models to study Alzheimer's disease	09–01–92	38–57–11	Scripps Research Institute	223,700
1 R01AG11386–01	Monteiro, Mervyn J., characterization of a novel neurofilament kinase	09–01–92	38–67–11	University of Maryland—Baltimore Professional School	88,077

1	R43AG11391-01	Prolman, Michael R., pill dispenser for Alzheimer's disease patients	09-30-92	39-17-11	Lowell Technology Group, Inc	27,060
1	R01AG11398-01	Goodman, Myron F., DNA enzymes in aging in dividing and nondividing cells.	08-01-92	39-87-11	University of South California	320,938
1	R01AG11431-01	McKinlay, Sonja M., transmenopausal changes in sex hormones and lipids.	09-30-92	43-17-11	New England Research Institute, Inc	129,592
1	R01AG11432-01	Jette, Alan M., risk factors for transmenopausal bone loss	09-30-92	43-27-11	New England Research Institute, Inc	225,652
1	R43AG11439-01	Humes, Larry E., complete hearing aid selection and evaluation	09-20-92	43-97-11	Communication Disorders Technology	49,912
1	R01AG11480-01	Vogt, Brent A., Alzheimer's disease classes and cingulate reorganization.	09-30-92	48-07-11	Wake Forest University	106,708
1	R01AG11481-01	Levy, Efrat, expression and processing of APP variants	09-30-92	48-17-11	New York University	200,744
1	R01AG11482-01	Mufson, Elliott J., galanin plasticity in Alzheimer's disease	09-30-92	48-27-11	Rush-Presbyterian—St. Lukes Medical Center	134,306
1	R01AG11486-01	Lindeman, David A., costs of advance special care units	09-21-92	48-67-11	University of California Davis	197,001
1	R01AG11501-01	Algase, Donna L., wandering—cognition and environment	09-30-92	50-17-11	University of Michigan at Ann Arbor	97,236
1	R01AG11502-01	Cohen-Mansfield, Jiska, management of pacing in nursing home residents.	09-30-92	50-27-11	Hebrew Home of Greater Washington	107,085
1	R01AG11503-01	Green, Robert C., behavior management interventions in Alzheimer's disease.	09-30-92	50-37-11	Emory University	114,416
1	R01AG11504-01	Hoeffer, Beverly M., reducing aggressive behavior during bathing situations.	09-30-92	50-47-11	Oregon Health Sciences University	100,130
1	R01AG11505-01	Reisberg, Barry, non-pharmacologic modifications of behavior in Alzheimer's disease.	09-30-92	50-57-11	New York University	123,252
1	R01AG11506-01	Sloane, Philip D., reducing disruptive behaviors in dementia during bathing.	09-30-92	50-67-11	University of North Carolina at Chapel Hill	103,181
1	R01AG11508-01	Gandy, Samuel E., molecular cell biology of Alzheimer amyloidogenesis.	09-20-92	50-87-11	Cornell University Medical Center	167,646
1	R01AG11525-01	Anderson, Stephen, structural aspects of ABPP function and pathology.	09-30-92	52-57-11	Rutgers, the State University New Brunswick	316,564
1	R01AG11526-01	Davies, Theresa A., amyloid precursor protein in normal/dementia platelets.	09-30-92	52-67-11	Boston University	233,423
1	R01AG11527-01	Douglas, Michael G., beta amyloid precursor binding to molecular chaperones.	09-30-92	52-77-11	University of North Carolina Chapel Hill	210,143
1	R55AG11530-01	McCallum, Roderick E., aging and TNF-gluocorticoid interactions in sepsis.	09-30-92	53-07-11	Texas Agricultural and Mechanical College Station	100,000
9	P01AG11531-06	Wisniewski, Henry M., changes in functioning among mentally retarded adults.	09-30-92	53-17-11	New York State Off of MR and Dev Disab	599,999
1	R01AG11534-01	Austad, Steven N., manipulation of aging—dietary	09-30-92	53-47-11	University of Idaho	163,794
1	R01AG11535-01	Musch, Timothy I., vascular transport capacity of muscle in heart failure.	09-30-92	53-57-11	Pennsylvania State University Hershey Medical Center	124,100
9	R01AG11536-04	Weitzman, Sigmund A., oxygen-radical-induced malignant transformation.	09-30-92	53-67-11	Northwestern University	110,500

NATIONAL INSTITUTE ON AGING ACTIVE GRANTS IN FISCAL YEAR 1992—Continued

Grant number	Principal investigator title	Budget start	Dates end	Institution	Total
Total					301,364,207

NATIONAL INSTITUTE OF MENTAL HEALTH—PROGRAM ON ALZHEIMER'S DISEASE, RELATED DEMENTIAS, AND MENTAL DISORDERS OF AGING

INTRODUCTION

The National Institute of Mental Health (NIMH) conducts and supports a wide range of research and related activities with direct and indirect relevance to issues of aging. This includes basic research in the neurosciences and behavioral sciences, clinical research in the geriatric mental disorders, and services research related to the utilization and financing of mental care. Clinical and research training programs as well as service demonstration programs are also supported.

In fiscal year 1992 the NIMH budget for research, training and demonstrations directly concerned with aging was $28,389,000. An additional $15,884,000 was spent for basic research and research training related to issues of aging. Thus, total NIMH direct and related expenditures for aging in FY 1992 were $46,749,000.

Expenditures were made in the following categories:

NIMH EXPENDITURES IN AGING, FISCAL YEAR 1992

	Direct	Related
Extramural Research	$22,322	$14,674
Intramural Research	6,500	
Research Training	698	1,988
Clinical Training	567	
Total	30,087	16,662
Grand total		46,749

This report provides information on program developments in research, research training, and clinical training, and also provides information on developments in mental health services demonstrations for the elderly.

EXTRAMURAL PROGRAMS—CLINICAL RESEARCH

The Institute supports a broad spectrum of research projects in the area of clinical research. The core of the research program is to understand and address more effectively the causes, prevention, treatments, and rehabilitation of mental illness in the elderly. Special attention is paid to research in Alzheimer's disease.

THE GENERAL RESEARCH PROGRAM IN GERIATRIC PSYCHOPATHOLOGY

Research in the geriatric mental disorders has developed into a coherent and sophisticated body of knowledge. Investigators using the best of contemporary research approaches are addressing the board range of mental disorders in late life. Significant bodies of knowledge have developed around questions of risk factors, etiology and pathophysiology, diagnosis, clinical course, treatment assessment, and prevention. The scope of disorders under investigation includes Alzheimer's disease and related dementing disorders, depressive disorders, sleep disorders, delirium and other metabolic encephalopathies, anxiety, and personality disorders. Methods of study employ the full range of molecular, neurobiological, neuropsychological, and psychosocial techniques of contemporary investigation.

The general orientation of research supported in the program has served to underscore the significance of the heterogeneity of the population, the contribution of normal, age associated changes in function, and the complex picture of comorbidity that characterize mental disorders in late life. Each of these factors, alone and in combination, serves to complicate and enrich approaches to diagnosis, treatment, and prevention of mental disorders.

The significance of age of first onset of disorder is a common thread through much of the research program in as much as this may well represent a significant source of clinical and neurobiological heterogeneity as well as have major implications for treatment and followup.

A final common factor in much of the research program is the significance of the family, the contribution of the family to care of the older patient with mental disorder, and the stresses associated with this burden of patient care. A rich body of knowledge has developed around this question of the impact of chronic stress associ-

ated with caregiving and has led to important new approaches to psychobiological study.

Basic Research

The Institute provides support for basic research in the neurosciences, behavioral sciences, and in the area of health and behavior. General program areas include biological aspects of behavior; molecular biology; neurobiology; psychopharmacology; cognitive processes; personality, emotion, and psychosocial processes; factors influencing behavioral development and modification; biological, psychological, and psychosocial aspects of stress and other psychological states; behavioral medicine, psychoimmunology; and research on Acquired Immunodeficiency Syndrome (AIDS).

Services Research and Demonstrations

The major report entitled *Caring for People with Severe Mental Disorders: A National Plan of Research to Improve Services,* issued in Fiscal Year 1991 by the National Institute of Mental Health and the National Advisory Mental Health Council in response to a Congressional request, identified a number of areas for needed mental health services research in relation to mentally ill aged persons. The report called for more research in the area of rehabilitation and habilitation of older persons with mental illness. It also recommended greater research on the various organizational approaches that might best serve the mentally ill elderly. Studies are needed, the report noted, to evaluate the role of nursing homes in serving the severely mentally ill, including the impact of the nursing home preadmission screening program now in operation under the Omnibus Budget and Reconciliation Act of 1987 (OBRA 1987). Recommendations were also made for expanded research in the public financing of services for the severely mentally ill, including Medicaid and support housing.

Research Training

National Research Service Awards, including individual fellowships and institutional awards at the predoctoral or postdoctoral levels, provide support for the training of research scientists in the area of mental health and aging. The major orientation is toward postdoctoral training in departments and institutions with major research programs in mental health and aging. In particular, program emphasis in FY 1992 was to establish research training programs for basic and clinical scientists at each of the NIMH supported Clinical Research Centers.

Clinical Training

In FY 1988 the NIMH established a new program, the Clinical Faculty Scholar award, to support the development of clinician scholar/investigators about to launch academic careers. This program was continued in FY 1991 and a program of institutional awards to support stipends for trainees was continued in each of the core mental health disciplines.

Intramural Programs

The NIMH Intramural Research Program (IRP) plans and administers a comprehensive long-term research program dealing with the causes, diagnosis, treatment, and prevention of mental disorders, as well as the biological and psychosocial factors that determine human behavior and development and provide a focus for national attention in the area of mental health research. The intramural research program contains approximately 400 investigators and operates 24 laboratories and clinical branches on the campus of the National Institutes of Health, at the Poolesville Animal Facilities, and at the Neuropsychiatric Research Hospital on the campus of Saint Elizabeth's Hospital in Washington, D.C. Several hundred active research projects in the basic neurosciences, clinical pharmacology, clinical psychiatry, and behavioral sciences are conducted in these facilities each year. Listed below are selected accomplishments and current program plans directly related to Alzheimer's Disease and mental disorders of aging.

NIMH Laboratory of Clinical Science

Cell Culture Model

The NIMH intramural Unit on Geriatric Psychopharmacology, headed by Dr. Trey Sunderland, in the Laboratory of Clinical Science, whose Chief is Dr. Dennis

Murphy, has concentrated on the underlying biology and treatment of Alzheimer's disease and geriatric depression. During the last year there has been the continued development of a nasal epithelial cell culture model to study the underlying cause of Alzheimer's disease. Specifically, cells from the nasal cavity of living Alzheimer disease patients have been obtained and successfully propagated in the laboratory. These dividing cells show many characteristics of brain neurons and offer a unique opportunity to directly test the processing of amyloid and other cellular mechanisms in Alzheimer's versus normal elderly subjects. Not only do these investigations have possible diagnostic implications but they also provide a potential model for the neurochemical changes accompanying Alzheimer's disease.

Pharmacological Studies

In the clinical area Dr. Trey Sunderland and the Unit investigators are proceeding with a number of new drug studies. The medication studies with scopolamine and other "challenge" drugs are designed to establish a better pharmacologic model of the memory deficit associated with Alzheimer's disease, while others are more directly related to potential therapies. Therapeutically, it is our goal to establish a method to combine the modest effects of multiple medications to create a more effective overall treatment strategy (e.g., physostigmine plus deprenyl). This combination approach has proven successful in other major medical illnesses such as cancer and may well prove useful with the dementias. Already in the first pilot study the investigators have learned that these medications can be given together safely in demented subjects. Together with the basic science studies, these clinical projects afford a broadly based program in Alzheimer's disease which is aimed at understanding the cause of the illness as well as toward the development of new therapies. As for the clinical studies with older depressives, the scientists are completing a successful project with high-dose deprenyl in treatment-resistant depressives. The scientists are also continuing to compare the biochemical and clinical profiles of Alzheimer and depressed subjects to better understand the overlap in behavioral symptoms between these two populations.

Cognitive Studies

The Cognitive Studies Unit, led by Dr. Alex Martin, in the NIMH Laboratory of Clinical Science has continued to develop and test models of cognition via study of the way specific processes break down following brain injury or disease. The Unit has completed a series of studies on the ability of Alzheimer's patients to learn and remember objects and spatial patterns by contrasting performance under explicit recall conditions with indirect or implicit measures of memory. These studies indicate that, under certain conditions, Alzheimer's patients can show normal implicit learning. This finding suggests that some form of cognitively mediated memory may be preserved even in patients with wide-spread limbic and cortical pathology. Interestingly, this appears to be true for pictures of real objects, but not for novel, spatial configurations. In fact, not only Alzheimer's patients, but normal elderly and young controls failed to show evidence of implicit learning of spatial information, even though the normal subjects could explicitly recognize the previously presented spatial patterns. These findings suggest that implicit learning may be dependent on the use of material that is amenable to a structural object description.

A related series of studies have addressed the question of whether the object naming deficit in patients with Alzhemier's disease is due to a loss of knowledge versus impaired retrieval from an intact knowledge store. Using semantic priming paradigms, evidence has been obtained in support of a model that posits that damage to posterior regions of the temporal lobe if the disease results in an actual loss of degradation of the semantic representations of objects. These degraded representations are, in turn, proposed to be responsible for impaired naming and other types of word-finding problems in patients with Alzheimer's disease.

Neurotoxicity

The MPTP-lesioned primate has been proven to be a most useful animal model of idiopathic Parkinson's disease in man. The mechanism of action of this and related neurotoxins may be relevant to the human disease process, and attempts to identify neurotoxic environmental agents may lead to effective preventative measures for a common disease of aging. Methods of measuring oxidized DNA bases may be particularly useful chemical monitors for human exposure to neurotoxins which cause oxidative damage, particularly to DNA repair enzymes.

General mechanisms of neurotoxicity have been investigated over the past several years by Dr. Sanford Markey, Chief of the Section on Analytical Biochemistry in the Laboratory of Clinical Science, principally using the parkinsonian syndrome producing toxin 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP) and its analogues. Studies have been completed assessing the occurrence of compounds structurally related to MPTP or its major metabolite 1-methyl-4-phenylpyridinium (MPP+) in post-mortem brain tissue from patients with idiopathic Parkinson's disease. An immunoassay procedure was developed by the scientists for the detention of MPP+ and shown to be very sensitive in tissues from animals that had been exposed to MPTP or one of its analogs. Based upon a survey of immunoactivity in extracts of several regions of normal human control brain tissue, there was no evidence for increased immunoactivity in Parkinson's disease patients. Thus, there is no evidence for an environmental neurotoxin chemically related to MPTP in the pathogensesis of idiopathic Parkinson's disease.

Dr. Sanford Markey and the scientists in the Section on Analytical Biochemistry, Laboratory of Clinical Science, are pursuing several lines of evidence that suggest that hydorxyl radicals generated either by redox cycling a toxin utilizing endogenous enzymes, or as a result of metabolism which has been activated by a toxin, may be involved in the pathogenesis of neurodegenerative disorders. Hydroxyl radical damage may effect many different cell constituents. However, oxidative damage to neuronal DNA could result in impaired neuronal function if the damage remained unrepaired and accumulated. The analysis of thymine glycol, one product of DNA oxidation, is being investigated with respect to neurodegenerative disorders. Future efforts will concentrate on improving and applying present methods to DNA isolates from human and animal tissues. In order to measure oxidative damage to neuronal or mitochondrial DNA, gas chromatographic-mass spectrometric methods are being developed for the detection of thymine glycol.

Calretinin

In the last two years Dr. David Jacobowitz and the investigators in the NIMH Laboratory of Clinical Science, Section on Histopharmacology, have been focusing their work on calretinin, a neuron specific calcium binding protein that they isolated and purified. The scientists have raised an antibody to this protein and have performed immunocytochemical, *in situ* hybridization histochemical, radioimmunoassay, and biochemical studies, and molecular biological studies with the isolation of a cDNA clone from a rat brain library. The research has revealed that calretinin is contained primarily in subsets of neurons in the brain and is present in all species studied. It is also present in human cerebrospinal fluid. These data imply that the calcium binding protein may confer protection to some neurons against excitotoxic injury. As with other calcium binding proteins, the suggested mechanism for this phenomenon is that calretinin may buffer calcium increases and thereby protect against neurodegeneration.

RESEARCH HIGHLIGHTS FROM OTHER INTRAMURAL LABORATORIES/BRANCHES

Intramural scientists are using sophisticated imaging techniques and animal models as well as new classes of drugs and are continuing to build a base of knowledge about diseases afflicting the aged.

Brain Imaging

Investigators led by Dr. Alan Zametkin in the NIMH Laboratory of Cerebral Metabolism, Section on Clinical Brain Imaging, are collaborating with scientists in the Unit on Geriatric Psychopharmacology. The scientists are using the double [^{18}F]FDG technique to examine the effects of scopolamine on regional brain metabolism in elderly adults in order to understand better the memory impairment associated with Alzheimer's disease. Initial results suggest altered metabolism in brain regions related to cholinergic functions.

Altered Proteins in Neurodegenerative Disorders

In the NIMH intramural Laboratory of Biochemical Genetics, Dr. Carl Merril and investigators have discovered a defect in the metabolism of brain tissue from patients with Alzheimer's disease. This defect which slows down protein synthesis has been shown to be due to an abnormally modified protein, elongation factor-2 (EF2). The abnormal modification involves the increased phosphorylation of this protein.

Cerebrospinal Fluid Proteins

NIMH intramural scientists, led by Dr. Carl Merril in the Laboratory of Biochemical Genetics, have identified a spinal fluid protein that exhibits increased levels in Alzheimer's disease patients. This protein may be a potentially useful diagnostic marker for Alzheimer's disease. This diagnostic marker was found in spinal fluid, and its identity is alpha-2-haptoglobin. The protein is known to increase during inflammation and also during iron metabolism problems.

Brain Grafting and Plasticity of Striatal Afferents

Parkinson's disease is caused by the degeneration of a small group of dopamine-containing neurons which are located in the substantial nigra (SN) and project to the corpus striatum. These ascending neuronal circuits are of crucial importance in the regulation of motor function, feeding and drinking, and other behaviors that are deficient in Parkinson's disease. It has been hypothesized that if tissue from the adrenal medulla, a region with an abundant supply of dopamine-producing neurons, is transplanted into the substantia nigra of Parkinson's patients, normal functioning can be restored. In testing this hypothesis, Dr. William Freed and investigators in the NIMH Intramural Neuropsychiatry Branch, headed by Dr. Richard Wyatt, have found that bilateral substantia nigra (SN) lesions in the rat brain produce pronounced behavioral abnormalities, including severe deficits in eating and drinking. Adrenal medulla and SN grafts into the brain seem to alleviate some of the manifestations of the SN lesions. Dr. Freed and the researchers in his Section on Preclinical Neuroscience are now conducting several experiments to investigate the factors that control the efficacy of these grafts, and, in the case of the adrenal medulla grafts, to investigate how grafts influence brain function.

One series of experiments used the intraventricular SN graft model to study the factors which limit the efficacy of these grafts. When embryonic striatum was transplanted into the host brain in combination with SN, the transplanted striatum was entirely reinnervated to the exclusion of the denerated host striatum. This suggested that the immature striatum is a "preferred" target for reinnervation, while reinnervation of the mature host brain is limited. To translate this finding to a functional model, SN (or sciatic nerve control tissue) was transplanted into normal immature hosts on the first day after birth. The hosts were allowed to mature, and then received bilateral SN lesions. Animals that had received SN grafts were substantially protected from the effects of the SN lesions; these animals showed increased eating, drinking, and activity, and appeared less rigid than sciatic nerve controls. The changes in eating and drinking were particularly interesting because it has generally not been possible to influence eating and drinking with SN grafts in mature SN-lesioned animals. These data suggest that the functional effects of SN grafts may be primarily limited by the adequacy of mature striatum as a target tissue. In contrast, varying the age of the embryonic donors had a limited effect on SN grafts. The optimal age was 15 days, but further decreases in donor age resulted in no greater functional effect. In fact, grafts from 11 and 13 day gestational donors required long delays (12 weeks) for the appearance of maximal functional changes. Thus, age of the host, rather than age of the donor, appears to be the major factor influencing the success of intraventricular SN grafts.

To advance the work already performed in this Section with rats, adrenal medulla tissue was grafted to the denervated putamen of the rhesus monkey in the continuing research on brain tissue transplantation. Graft survival is erratic. In the most successful animal the behavioral response produced by the graft has lasted 1 year. An instrument (the brain grafter) that facilitates grafting was developed, and a patent has been awarded. Adrenal survival may be enhanced by the addition of nerve growth factor and other trophic factors.

These brain grafting studies by Dr. Freed may lead to the development of tissue transplantation as a clinically therapeutic procedure for degenerative diseases such as Parkinson's disease and destructive lesions of the brain. Also they may lead to an increased knowledge about development and regeneration in the brain in general.

Because work with primates is inherently slow, progress will also be slow. Nevertheless, there do appear to be incremental enhancements in the scientists' ability to graft tissue in primates. Further work awaits the development of viable engineered cells. Development of these cells is occurring in a number of laboratories, including the Section on Preclinical Neuroscience in the Neuropsychiatry Branch. As soon as these cells have been demonstrated to work in rodents, the efficacy of these cells will be tested on nonhuman primates.

Since there is considerable evidence that some schizophrenic patients have altered brain structure (perhaps through degeneration, and degeneration is clearly involved

in diseases such as Alzheimer's), learning more about brain plasticity is of primary importance in understanding these illnesses.

Plasticity

Plasticity, the capacity of the nervous system to respond to changes in the environment, is one of the most fundamental properties of nervous tissue. Learning, a form of plasticity, is a process of intense interest to neurochemists the world over. In an attempt to study some of the biochemical processes underlying plastic changes, Dr. Carolyn Smith in the Laboratory of Cerebral Metabolism, headed by Dr. Louis Sokoloff, has embarked on studies of two model systems of plasticity: (1) the developing monkey visual system, and (2) the developing and adult mouse somatosensory system. The purpose of these projects are to study the biochemical events associated with development, plasticity, and involution of the nervous system. The scientists have used the quantitative autoradiographic [1-^{14}C]leucine method to study the sites of origin and the process underlying changes in nervous system organization that take place during these events and the [^{14}C]deoxyglucose method to examine the outcome of the changes, i.e. the functional reorganization that has occurred.

Studies of normal development in rats show decreasing rates of protein synthesis in most brain regions from day 14 to the adult stage except in the paraventricular and supraoptic nuclei of the hypothalamus. Results of the studies of chronic monocular deprivation in monkeys early and late in the critical period show that the biochemical response that may underlie the function reorganization of the striate cortex is a decrease in the rate of protein synthesis indicative of a decrease in the growth rate in the deprived geniculate cells. Results of deoxyglucose studies on the effects of whisker follicle removal in neonatal mice show that when the lesioned mice reach adulthood metabolic maps in both somatosensory cortex and in trigeminal brainstem nuclei are altered. When adult mice are similarly lesioned, metabilic maps in the cortical barrel field are also found to be altered after 160 days. These results indicate functional reoganization in both the neonatal and the adult whisker-barrel pathway in the mouse. The results suggest that this system may serve as a useful model of both developmental and adult plasticity.

Insofar as the aging population is rapidly increasing, research focused on senescent changes in the ability of the brain to function may be of considerable importance to the medical community. Results indicate that some of the changes which occur in the nervous system with age may be the consequences of a decreased functional activity. Further understanding of the basic biochemical processes underlying plastic changes in the nervous system of either an involutional or developmental nature, may be useful in trying to prevent and/or reverse such senescent changes.

Pharmacology of Cognitive Memory and Habit Formation

Evidence from patients with Alzheimer's disease suggests that the basal forebrain cholinergic system is critical for normal mnemonic function. In support of this proposal Dr. T.G. Aigner, a research pharmacologist in the Laboratory of Neuropsychology which is headed by Dr. Mortimer Mishkin, has found that visual recognition memory in macaques is impaired following either excitotoxic lesions of this system or administration in normal monkeys of the muscarinic receptor antagonist scopolamine. Furthermore, these studies indicate that scopolamine affects other forms of memory besides recognition, such as object-reward association and spatial memory, though the latter to a lesser degree. In addition, the scientists found that scopolamine affects primary as well as secondary memory, storage, not retrieval. On a computer-automated memory test, the investigators have shown that the cholinesterase inhibitors physostigmine, THA, and E2020 all produce significant, though small, improvements in performance. Conversely, the NMDA receptor antagonist MK-801 impairs recognition memory, and it does so to the same degree as scopolamine, although MK-801 also produces an increase in response bias, suggesting that the two drugs act via different mechanisms. These results continue to provide convincing evidence that cholinergic mechanisms are essential to cognitive processes in monkeys.

Galanin

NIMH intramural scientist Dr. Jacqueline Crawley, Chief of the Unit on Behavioral Neuropharmacology in the Experimental Therapeutics Branch, headed by Dr. David Pickar, continues to investigate the functional significance of neuropeptides coexisting within the same nueron as "classical" neurotransmitters in the awake,

behaving rat. New galanin receptor antagonists were found to block the behavioral actions of galanin on feeding and memory tasks in rats. The inhibitory actions of galanin in the cholinergic spetohippocampal pathway suggest that galanin antagonists may be useful in the treatment of Alzheimer's disease. Immediate plans include memory testing and food consumption testing for galanin antagonists administered alone to determine the contribution of endogenous galanin to these behaviors.

Longitudinal Effects of Social Environments and Psychological Functioning

The NIMH Laboratory of Socio-Environmental Sciences headed by Dr. Carmi Schooler, in collaboration with the National Institute on Aging are planning a longitudinal study of the reciprocal effects of social environments and psychological functioning in older people. The empirical basis of this investigation would be a resurvey of the 1974 respondents. The research from the 1964-74 survey demonstrated that the complexity of social environments (e.g. the job or the home) has a positive effect upon cognitive functioning. Regardless of their age, workers engaged in more substantively complex and self-directed jobs were more likely to have improved in their cognitive functioning over 10 years than those engaged in less complex jobs.

During the past year, in addition to locating 650 (95%) of the 1974 respondents, the investigators have developed and successfully pretested an initial version of an interview. The interview deals with a variety of important issues in aging such as the socio-environmental determinants of effective intellectual functioning and the coping with health and financial problems. This initial version also gets information about the occupational conditions of those who are still employed, measures the nature of housework, voluntary, and leisure time activities and provides measures of the relevant psychological variables. The scientists are also carrying out experiments aimed at determining the best way to have the respondents recall and provide information about what happened in their lives since they were last seen. Full implementation of the proposed study will now begin.

DHHS Council on Alzheimer's Disease

The DHHS Council on Alzheimer's Disease is essentially the former DHHS Secretary's Task Force on Alzheimer's Disease renamed. The Council was established by the Alzheimer's Disease and Related Dementias Services Research Act of 1986 (Title IX of P.L. 99-660). Key functions of the Council include identifying promising areas of Alzheimer's disease research, coordinating this research, sharing information, and facilitating the translation of the research into practice. The Council is chaired by the Assistant Secretary for Health. Other membership consists of: the Surgeon General; the Assistant Secretary for Health Planning and Evaluation; the Commissioner of the Administration on Aging; the Administrator of the Agency for Health Care Policy and Research (AHCPR); the Directors of the National Institute on Aging (NIA), National Institute of Mental Health (NIMH), National Institute of Neurological Disorders and Stroke, National Institute of Allergy and Infectious Diseases and National Center for Nursing Research; and representatives of the Department of Veterans Affairs, Health Care Financing Administration (HCFA), Health Resources and Services Administration, and National Center for Health Statistics.

The Council meets twice annually, and is required to submit an annual report to Congress and to the public detailing the plans of four member agencies (NIA, NIMH, AHCPR, and HCFA) regarding research on services for demential patients and their families. Prior reports, which have been submitted in January of each year since 1988, have also detailed progress in federally sponsored Alzheimer research supported by all member agencies of the Council. The Council met most recently in October 1992 to discuss the draft of the next report/update of plans. The NIMH plan in this regard was mandated to provide for research concerning: (a) mental health services and treatment modalities relevant to mental, behavioral and psychological problems associated with Alzheimer's disease; (b) methods for providing comprehensive multidimensional assessments; (c) the optimal range and cost-effectiveness of community and institutional services; (d) the efficacy of special care units; (e) methods of combining the services of health care professionals with informal support services provided by family and friends; (f) interventions to reduce the psychological, social and physical problems of caregiving family members; and (g) methods of improving service delivery.

DHHS Advisory Panel on Alzheimer's Disease

The DHHS Advisory Panel on Alzeimer's Disease was established by Title IX of Public Law 99-660 ("Alzheimer's Disease and Related Dementias Services Research

Act of 1986") to assist the DHHS Secretary and DHHS Council on Alzheimer's Disease in identifying priorities and emerging issues regarding Alzheimer's disease and related dementias, and the care of afflicted individuals. The Panel is composed of 15 non-Federal appointees who are prominent researchers or other experts on Alzheimer's disease, and five members of the DHHS Council (including the NIMH Director) who serve ex officio. Members serve for the four-year life legislated for the Panel (FY88-91).

The Panel is mandated to center its advice on emerging issues and promising initiatives, or research directions, in four areas related to Alzheimer's disease: (a) biomedical research; (b) research on services for Alzheimer's patients and their families; (c) home and community based service provision systems; (d) financing of health care and social services. The Panel is required to prepare annual reports (transmitted to Congress, the Secretary of HHS, the DHHS Council on Alzheimer's Disease, and the public) giving recommendations for administrative and legislative actions to improve services and provide for promising biomedical research.

The Panel issued its first annual report in 1989, and has met on three subsequent occasions in 1989, 1990 and 1991 to work on its yearly reports. Its second, 1990 report became available in published form in 1991. It included an update on topics covered in the first report, such as biomedical and services-oriented Alzheimer research, financing of care, and eligibility for services, addressed the specific topic of personnel and training issues in the care of Alzheimer victims. For its third report, the Panel will update topics discussed in previous reports, and will introduce a framework to consider the values and goals in the care of Alzheimer's patients in hopes of influencing better service delivery. In addition, a supplemental report dealing with ethnic minority and crosscultural issues in Alzheimer's disease is also being prepared.

The $100,000 per annum that was authorized for Panel activities by P.L. 99-660 came from a tap on appropriate DHHS agencies, including NIMH, in FY88 and FY89, and has been requested as part of the NIMH budget for FY90 and FY91. Two staff members from NIMH maintain key roles in the Panel and Council—one as Deputy Executive Secretary of the Council and one as Deputy Executive Secretary of the Panel, along with additional staff support provided by the Institute. NIMH has thus played a pivotal role in these high-priority, high-visibility activities of the Department.

NIH CONSENSUS DEVELOPMENT CONFERENCE ON DIAGNOSIS AND TREATMENT OF DEPRESSION IN LATE LIFE

The Consensus Development Conference on Diagnosis and Treatment of Depression in Late Life was held in Bethesda, from November 4 through November 6, 1991. Major findings included:

1. *Depressive illness is widespread among the elderly.*—Of the 31 million Americans age 65 and over, nearly 5 million suffer from serious and persistent symptoms of depression, and 1 million suffer from major depression (as defined by DSM-III-R). Prevalence is particularly high in nursing homes and other long term residential care settings.

2. *Depressive illness in late life is a serious public health concern.*—Depression is a serious illness in its own right. It is not an outcome of natural processes of aging and should not be considered normal. Depression is associated with significant functional disability in older patients. If untreated, depression increases the risk of premature death and represents the leading cause of death by suicide in the elderly.

3. *Medical comorbidity with depressive illness is particularly problematic in the older patient.*—Depression influences physiological function and alters the pattern of psychosocial risk factors for disease. Consequently, depression represents a major contributing factor for additional morbidity and mortality. Depression coexisting with medical illness is a major source of excess disability in geriatric patients, and it significantly alters the course and outcome of treatment for medical illness.

4. *Depression can be diagnosed in elderly patients and can be separated from normal aging.*—The diagnosis of depression is a clinical diagnosis according to DSM-III-R criteria; severity of symptoms may be assessed clinically and with use of standard clinician rating scales and instruments (e.g. Hamilton Depression Rating Scale). As in adult depressions, no biological, electrophysiological, or radiological test shows sufficient specificity and sensitivity to be used for diagnostic purpose.

5. *Acute treatment for depression has been shown to be safe and efficacious in elderly patients.*—The broad array of treatments for acute episodes of depression that have been shown to be efficacious in adult patients are appropriate for use with elderly patients. Considerable data exist for psychopharmacologic approaches and for

electroconvulsive therapy, and suggestive data exist for selected psychosocial interventions.

6. *Depression is a recurrent illness* and close attention must be paid to continuation and maintenance treatment so as to prolong the period of remission and recovery. Recommendations on the advisability of long-term treatment are largely based upon extrapolation from adult patients.

7. *Suggestions for future research* include attention to the very old patient (age 80+), expansion of clinical trials to newer treatments and combined treatment approaches, development of approaches to long term treatment and prevention of recurrence, and further attention to biological and psychosocial studies and to studies of comorbidity with physical illness.

The final report of the conference was published in the Journal of the American Medical Association (JAMA, 8/26/92); the proceedings have been edited and are scheduled for publication by the American Psychiatric Press in early 1993. The report and recommendations of the conference have been the subject of several presentations and symposia at National scientific and clinical meetings. Information from the conference has also been included in the NIMH National Depression Awareness, Recognition and Treatment Program (D/ART).

Research Highlights

BRAIN IMAGING

Imaging studies refer to research utilizing positron emission tomographic (PET), magnetic resonance imaging (MRI), and computer-analyzed electroencephalography (e.g., electrophysiological mapping procedures). This new technology is being used in the exploration of diagnostic markers of a number of late-life mental illnesses, including Alzheimer's disease, as well as tracking brain changes that may result from treatment. The association between age of onset and the presence of structural brain pathology is being investigated in both late onset schizophrenia (LOS) and late onset depression. Increasingly, researchers using imaging techniques are attempting to integrate clinical, neuroanatomic and neurobehavioral data.

Andrew Leuchter, University of California, Los Angeles (MH40705) has been evaluating the clinical value of EEG in the diagnosis of patients with possible AD. In a study of 350 normal control plus subjects with possible dementia, for those with an equivocal cognitive impairment (MMSE scores 24–30), there was a 49 percent prevalence of EEG abnormalities, which is four times the rate seen among normal controls.

Dr. Leuchter has also examined how the AD neuropathology of senile plaques and neurofibrillary tangles, most prominent in the brain regions, can be linked to EEG. Although this neuropathology has been linked to hypoperfusion and hypometabolism on PET and SPECT scanning, no one has identified which EEG parameters are most closely associated with posterior AD brain pathology. Using quantitative EEG (qEEG) parameters Dr. Leuchter and his associates demonstrated that ratios of EEG spectral power (so-called "spectral ratios") show a stronger topographic relationship with patterns of hypoperfusion, hypometabolism, and neuropathology than does absolute power alone. He has also developed a new type of ratio measure that appears useful in distinguishing subjects with multi-infarct dementia from those with AD.

Clinical and neuropathological evaluation of elderly demented patients has traditionally concentrated on the focal distribution of brain disease, ignoring changes in the complex connections that link brain areas and that are crucial for cognition. There is considerable evidence that much of the cognitive impairment seen among AD patients may be due to selective degeneration of long fibers joining different brain regions. Dr. Leuchter has used EEG coherence to study fiber tracts and have demonstrated that there is functional disassociation between parietal and prefrontal cortex among AD patients. EEG coherence appears to be the only brain imaging technique that is capable of measuring these changes in brain connectivity.

Andrew Leuchter and his associates at the Neuropsychiatric Institute, UCLA (MH40705), have also mapped brain electrical activity in AD patients undergoing cholinomimetic drug treatment. Patients were followed with serial brain mapping studies as well as neuropsychological testing. The patients who showed improvement in cognitive function showed parallel improvement in patterns of brain electrical activity that were similar across subjects; non-response was correlated with a different brain electrical activity pattern.

Mony de Leon and his colleagues, at New York University Medical Center (MH43965), have developed methods to link magnetic resonance images, which provide good pictures of brain anatomy, with Positron Emission Tomography (PET) scans, which reveal metabolic processes. This method is being used to the hypothesis

that hippocampal glucose metabolism occurs early in the natural history of AD. Preliminary results suggest that mildly, cognitively impaired older adults show evidence of metabolic hippocampal changes, as well as a significant inferior temporal lobe effect suggesting the disease may "spread" to the neocortex early in the disease as well.

Gary Small, at the UCLA Neuropsychiatric Institute (MH46424 FIRST award), is also following-up on the glucose hypothesis. He plans to examine relatives at risk for AD in hopes of identifying the disease early in the process and following. Through the use of PET scans, Dr. Small has found that atypical brain glucose metabolic patterns appear long before clinical symptoms appear.

Peter Rabins, of Johns Hopkins University (MH40843), is using MRI scans and neuropsychological evaluations to discern possible differences among elderly who have either a major depression, Alzheimer's disease, or are normal. Specifically, he is examining whether (1) depressives have more cortical as well as subcortical abnormalities compared to normals, but less than AD patients; (2) clinical variables in depressives (activities of daily living, neuropsychological performance, response to depression treatment) correlate with MRI changes; (3) MRI lesions are prognostic for depressed patients. It is expected that increased lesions will be associated with relapse and the development of AD and functional impairment. In addition, Dr. Rabins is characterizing the language disorder of the dementia syndrome, and is correlating it with basal ganglia lesions, left temporal lobe volume, and left superior temporal gyrus volume.

Ira Lesser, at the Harbor-UCLA Medical Center (MH43960) is using MRI and batteries of neuropsychological tests to examine the relationship between brain injury and late-onset depression (LOD). Subjects with late onset depression (first episode of depression after the age 50), but who are otherwise medically healthy and non-medicated are being compared to a group of currently depressed non-medicated patients over the age 50 who had their first depressive episode before the age of 35 (recurrent depression), and to psychiatrically and medially healthy, age matched control subjects. Dr. Lesser hypothesizes and late onset depressive patients will have more evidence of brain injury (primarily vascular disease) and a higher frequency of frontal and sub-frontal (periventricular) white matter lesions than either of the control groups. Preliminary MRI data comparing 8 LOD patients to 4 elderly recurrent depressives supports this hypothesis. Only one in four of the recurrent depressives had appreciable amounts of white matter disease in the periventricular area ($4.6cm^2$) compared to 50 percent of the LOD patients who had lesions greater than 3 cm (mean total white matter lesions 6.3 cm^2). Convergent preliminary data from the neuropsychological batteries suggests that the LOD patients demonstrate dysfunction in frontal lobe function on neuropsychological tests when compared to their late-onset counterparts.

At the Duke University Clinical Research Center (MH40159), Edward Coffey compared MRI structural brain measures (volume, cortical atrophy, T2 signal intensity in the pons, subcortical white matter, and deep grey nuclei), and computerized EEG parameters among normal elderly, and depressed elderly referred for electroconvulsive therapy (ECT). Dr. Coffey found pre-ECT depressed elderly to have more frequent and severe MRI brain abnormalities than normals (cortical atrophy, periventricular hyperintensities, basal ganglia/thalamic lesions), including EEG abnormalities that appear correlated with lesions of subcortical gray matter. He has also found that *late onset* depressives in particular, had more cortical atrophy. In terms of response to ECT, Dr. Coffey's preliminary analyses indicate that depressed patients with more brain abnormalities (MRI and EEG) are less responsive (maintain more depressive symptoms) to ECT. Although most elderly depressed patients respond to ECT, cortical atrophy that is related to delayed orientation post-ECT and lesions of the basal ganglia (such as caudate atrophy), may be related to the development of interictal delirium in ECT treatment. Diffuse cortical and or subcortical lesions in depression may disrupt neurotransmitter pathways and thus produce "neurochemical disconnection syndrome" with resultant affective and cognitive disturbances. Subcortical brain changes appear to be associated with less melancholia and more dementia symptoms in elderly depressed patients. Moreover, short REM latency in depression (see Reynolds, under Sleep) may be associated with lesions of the pons.

Dr. Walton Roth (MH40052, Stanford University), a leader in the field of event-related potential (ERP), is developing and refining an event-related potential paradigm which he hypothesizes can elicit cognitive components from patients who are unable or unwilling to perform simple tasks. This would provide researchers with electrophysiological measures of automatic and effortful cognitive operations for use with subjects unable to participate in other research paradigms.

The search for a cause of Alzheimer's disease has become increasingly critical. Genes today comprise the only etiologic factor successfully identified, and thus provide a critical clue to uncovering the mystery of the disease. Dr. George Zubenko (MH43261 and Research Scientist Development Award MH00540), at the University of Pittsburgh, continues to gather data on the specificity and stability of increased platelet membrane fluidity (PMF) as a biological marker for AD. Dr. Zubenko has established that the genetic locus for the PMF trait resides on the long-term of chromosome 21. His prior work on PMF indicated that this membrane abnormality identified a subgroup of patients with distinct clinical features that included earlier symptomatic onset, more rapid decline, and a family history of dementia. This group is also less likely to have coexisting cerebrovascular disease than typical patients who meet clinical consensus criteria for probable AD. Moreover, the PMF abnormality does not appear in patients with Parkinson's disease or affective disorders, supporting the relative specificity of increased PMF for AD. In a prospective, longitudinal study of 330 first-degree relatives of proband with AD who were cognitively intact at time of entry into the study, a number of incident cases of dementia have occurred. Although few in number, these cases have been found to have increased PMF, again suggesting that PMF is a risk factor for the development of dementia among first-degree relatives of patients with AD. Replications of these findings have been published by investigators as Case Western Reserve University and the Institute of Psychiatry in London.

Dr. Leonard Heston and his associates at the University of Washington (MH43240), have developed a consortium of researchers who are also studying families with probably genetic AD. Recently, Dr. Heston attempted to replicate Dr. Zubenko's work on the amyloid mutation linked to chromosome 21, but was unable to obtain similar findings. This suggests that while this mutation can be causal for some genetic groups, it may not be for others. Thus there may be more genetic heterogeneity in this disorder than previously thought. The effort to decipher genetic links to AD development is also compounded by environmental influences, such as the stresses described below, that can reduce or enhance the expressions of AD in certain genetic groups.

Dr. Richard Scheller, an NIMH MERIT grantee (MH38710) at Stanford University is working on understanding the molecular events that take place at the synapse, a key element of the nerve cell communication network. His work centers on characterizing genes that encode protein molecules which control synaptic transmission. He has recently characterized two genes which encode proteins called syntaxin and SV2, thought to play a role, respectively, in organizing the very rapid events needed to mediate chemical transmission, and in packaging the chemicals that are used to mediate synaptic transmission. Both of these genes are potential targets for genetic diseases which affect the brain, including and especially Alzheimer's disease.

Dr. Charles Nemeroff (MH40524), at Emory University, is specifying chemically defined neurotransmitter systems that are pathologically involved in AD. Neurons believed to be affected by AD include cholinergic neurons in the basal forebrain, GABA-containing neurons and two groups of neuropeptide-containing cells: somatostatin (SRIF) and corticotropin-releasing factor (CFR) containing cells in the cerebral cortex. Dr. Nemeroff and his colleagues are examining the dynamic state of cholinergic neurons using tissue obtained in the rapid autopsy procedure, which takes place 20–60 minutes after death, in both AD patients and normal controls. This unique procedure provides novel data on SRIF receptor subtypes, the relationship between the presence of the abnormal AD-associated protein, A68, the alternations in acetylcholine (ACh) and peptidergic neurons, and alterations in GABA-containing neurons in AD. By measuring markers of neuronal integrity, neuronal activity (high affinity choline uptake), the choline transporter itself, receptor number and affinity, and second messenger as well as third messenger responses (protein phosphorylation), the dynamic state of cholinergic neurotransmission will be assessed. These efforts will inform researchers of the pathogenesis of AD, as well as promising treatments.

Dr. John Morrison's (MH48603-01) work on the organization of cerebral cortex and the cellular pathology of Alzheimer's Disease (AD) is centered on the hypothesis that the nerve cells interconnecting functionally related areas of the cortex are preferentially vulnerable to damage in AD. The degeneration of these neurons leads to global disruption of the circuits that allow for cohesive, well-integrated thought processes in the human brain. The primary goal of his laboratory is to further our knowledge of the specialized structure and connections of these neurons as well as their unique biochemical "signature". Quantitative neuropathologic analyses are

used to characterize further the cortical neurons that degenerate in AD, as well as those that are resistant to pathology, and these results are correlated with quantitative data from experimental analyses of the corticocortical systems in non-human primates. The data are obtained on computer assisted microscopes with custom software specifically designed for the neuroanatomic and neuropathologic analyses of chemically-identified systems in cerebral cortex. The cross-species correlations have allowed Dr. Morrison to develop a more detailed profile of the corticocortically projecting neurons in human and non-human primate cortex and begin to pinpoint the aspects of their structure, connections, and biochemical phenotype that are crucially linked to their heightened vulnerability in AD.

Much of the present work is directed at the development and use of monoclonal antibodies and riboprobes to determine the neurotransmitter receptor profile of these neurons that interconnect cortical areas. These receptor studies are directed primarily at elucidating the dopamine and glutamate receptor profiles of the corticocortically projecting neurons that are particularly vulnerable in AD.

Dr. Paul Newhouse of the University of Vermont (MH46625), plans to extend the cholinergic hypothesis to include the role of central nervous system nicotinic cholinergic mechanisms. Preliminary work on younger adults indicates that by blocking nicotine with mecamylamine, learning tasks and choice reaction time were compromised. Dr. Newhouse will next examine whether there are age-related changes in nicotinic functioning in normal older adults, and whether the loss of functional nicotinic binding sites in AD and Parkinson's disease has a functional relationship to cognitive impairments. A trial of nicotinic stimulation, with the aims of ameliorating cognitive impairment in dementia, as well as assessing the possible side effects of this treatment, is also planned.

Dr. Carol Miller of the University of Southern California (MH39145) is examining tissue obtained for AD patients at autopsy in order to identify localized networks or subpopulations of neurons which show selective vulnerability to degeneration. She hypothesizes that the topography of the vulnerable neurons may be related to specific changes in perception, cognition, and behavior during the clinical course of AD. To date, within the auditory system, 8 of 8 AD patients showed neurofibrillary tangles (NFT) and senile plaques (SP) specifically in the ventral nucleus of the medial geniculate body and 7 of 8 in the central nucleus of the inferior colliculus. The cochlear nucleus was normal. In comparison, the normal controls and two neurologically diseased controls (ALS and Parkinson's disease) were free of these changes. Within the visual system, the central visual pathways (LGB and superior colliculus) were free of SP and NFT; however, the retina of AD patients showed fibrillar staining in neurons of the ganglion cell layer with Alz-50 and 3F12. One of her methods involves characterizing selected antigens recognized by monoclonal antibody (MAb) and recombinant DNA techniques in CNS tissue, with a focus on antigens 3F12 and 6A2. MAb 3F12 loses its neuronal immunoreactivity in brains of AD patients early in the course of the disease, and should be linked to the AD patients' clinical data and disease stage at the time of death. The primary amino acid and nucleotide sequences of each antigen will be characterized, and analysis of its expression initiated. These characterizations will be compared across AD, normal controls, and Pick's and Parkinson's disease subjects. These findings will also be compared to the presence of other AD-related proteins, such as β amyloid.

At the Johns Hopkins University, Dr. Joseph Coyle (currently at the Harvard University), an NIMH grantee (MH46529), and his collaborators from several institutions have examined the role that specific genes play in the risk for developing Alzheimer's disease. Part of this work carried our by Dr. Mary Lou Oster-Granite examined the expression of amyloid precursor protein (APP). This protein is associated with degenerating neurons and neurofibrillary tangles commonly seen in the brains from deceased Alzheimer's patients. There are several different types of APP called isoforms, and Dr. Oster-Granite has examined the expression of the different isoforms in developing and adult mice. It is known that APP is a normal constituent in neurons, but in Alzheimer's disease there is an apparent over-expression of the protein by some neurons. Research under this grant has revealed that only one specific isoform is involved in this aberrant process. The work now extends to analysis of genetically altered mice which have been produced to over-express portions of the APP molecule. Although it is too early to know for certain, these animals may become an exciting model for Human Alzheimer's disease. These types of experiments will allow investigators to home-in on exactly how APP or portions of it, cause disorders in the brain, and may help to yield information about how to correct these defects.

At the Albert Einstein College of Medicine, Dr. Peter Davies (MH38623, MERIT) has continued to define the immunopathology of dementia and normal aging. It ap-

pears that the presence of deposits of amyloid, and the deposits of ubiquitin-conjugated proteins are a very common feature of the aging human brain. Both deposits become more common with advanced age, but *neither* is necessarily associated with cognitive impairment. From over 60 autopsies that have been prospectively studied, Dr. Davies and his associates have defined three groups of patients: (1) In the normal aging group, there is an absence of dementia behavior, and there is minimal pathology in the brain. Specifically, there is less than 5 amyloid deposits per sq mm, and only isolated, occasional neurofibrillary tangles are found, even in the hippocampus. These patients also have no significant Alz-50 immunoreactivity in the cerebral cortex. (2) In the pathological aging group, patients may have a very limited degree of memory impairment. They have large numbers of amyloid plaques in the neocortex and hippocampus, but no neuritic plaques and few neurofibrillary tangles or Alz-50 immunoreactivity. (3) The AD group exhibit severe memory impairments and have similar numbers of amyloid deposits as group 2, but also have neuritic changes, best visualized with Alz-50 staining. Neuritic plaques, neuropil threads and neurofibrillary tangles are stained by this antibody, both in the neocortex and hippocampus.

With regard to Alz-50 as a possible screening tool, Dr. Davies reports that over 100 research groups are using the methods he developed which produce Alz-50 in cell culture. As more laboratories attempt to test for Alz-50 in possible AD cases, its sensitivity will be better understood.

Dr. Davies and his associates are also conducting investigations of two other groups of dementia patients, with implications for refining the diagnosis of AD. The first group includes patients with a severe dementia, but have insufficient pathology to qualify for a diagnosis of AD. Memory impairment is always present, but neuritic pathology is absent. The neuropathology in these cases is indicative of white matter or ischemic lesions. The patients in this group are always very elderly (age 80+). The second group are patients with Diffuse Lewy Body Disease (DLB). The typical DLB patient is male in his 70's, usually clinically diagnosed as having AD. The dementia can be severe, but does not usually involve prominent extrapyramidal signs. Gait disorders are frequently an early symptom, and psychiatric symptoms are also common. DLB can be present with or without the amyloid plaques common in aging, or the neuritic plaques and neurofibrillary tangles of AD. Dr. Davies and his associates believe that DLB is an entity separate from AD, since it does not necessarily involve AD pathology and the clinical presentation may be distinct.

At the University of Rochester Clinical Research Center (MH40381), Dr. David Felten and colleagues are among the first researchers to explore neural-immune interactions in aged rodent models, and to test preliminary hypotheses related to psychopathology in the elderly that may have an effect on immune responses. Among Dr. Felten's findings, aging associated decline in noradrenergic and peptidergic innervation has been found in secondary immune organs (e.g., spleen and lymph nodes), but not in any primary immune organs. Age related declines in the presence of striatal and dopamine neurons can be slowed appreciably by the use of the potent presynaptic D_2 receptor agonist pergolide.

At the Scripps Research Institute in La Jolla, California, Dr. George Siggins, an NIMH MERIT grantee (R37-MH44346) is studying the interactions between somatostatin and acetylcholine both at the level of the ion channel and the intracellular messengers that mediate their individual actions. Somatostatin is one of the most abundant neuropeptides in the brain, and along with acetylcholine, is profoundly diminished in certain brain disorders, especially Alzheimer's diseases. Dr. Siggins and colleagues have provided strong evidence that somatostatin is an inhibitory neurotransmitter, opposing the actions of acetylcholine in the hippocampus, an area of the brain thought to be involved in learning and memory. These two substances exert their opposite effects via their differential effects on a novel ion channel known as the M-channel, involved in long-term potentiation, the cellular model for learning and memory. Furthermore, the intracellular mediators for these transmitters' effects on the M-channel are composed of distinct sets of molecules known as second messengers. The results, combined with those from the clinic, strongly suggest that somatostatin as well as acetylcholine may be implicated in some way in several brain disorders, especially Alzheimer's disease and other dementias.

The NIMH initiated its cooperative agreement "Diagnostic Centers for Psychiatric Linkage Studies" in fiscal year 1989 to study the genetics of Alzheimer's Disease, schizophrenia, and bipolar disorder. For Alzheimer's Disease, after rigorous peer review, three centers were selected to coordinate the assessment of patients and family members. The primary goal of the currently funded component of the initiative is to establish a national resource of immortalized cell lines and clinical data from reliably diagnosed probands with Alzheimer's Disease and their key relatives.

This resource is being created to further the study of the linkage of such disorders to specific genetic markers. NIMH staff are collaborating with the three Diagnostic Centers in the Alzheimer's Disease part of the program in developing a common protocol detailing the diagnostic tools for both patients and relatives, determining the appropriate small-family configurations and pedigree rules for future linkage studies and evaluating the reliability of assessment instruments. Data collection and cell storage are already well under way, and it is anticipated that each of the three Alzheimer's Disease Diagnostic Centers will have collected data from 133 Alzheimer's Disease families, including probands with an affected sibling and other family members by August 1994. The NIMH Genebank Working Group has issued a letter of solicitation for applications to use the resources and experience of currently funded Alzheimer's Disease "Diagnostic Centers for Psychiatric Linkage Studies" to move to the second phase of study of the genetics of Alzheimer's Disease: genotyping and genetic analysis of material from subjects ascertained during phase one of the study. Combining expertise in the areas of genetic epidemiology, biostatistics, and molecular genetics should make it possible to identify rigorously those genetic factors which have a significant impact on the expression of Alzheimer's Disease.

SCHIZOPHRENIA

Late-onset schizophrenia (LOS) has received recent attention in several investigations supported by MDARB. Godfrey Pearlson at the Johns Hopkins University [MH43326] is examining the clinical, structural, and dopamine D2 receptor brain changes associated with LOS using MRI, CT and PET scanning. Clinically, he has found that LOS patients compared to same aged early-onset schizophrenics (EOS) have significant phenomenologic similarities (the presence of hallucinations and delusions) as well as differences. In a chart review of 54 LOS patients and 22 EOS patients he found that the LOS patients are more likely to have visual, tactile, and olfactory hallucinations; a greater number of different types of hallucinations; persecutory delusions; premorbid schizoid personality traits; more premorbid visual and sensory deficits; and less thought disorder and affective flattening. LOS were also less likely to have a family history of schizophrenia than were early onset patients (16.7% vs. 31.8%). LOS patients generally respond positively to neuroleptic medication—with 74% having either a complete remission or partial response. Structurally, using MRI, Pearlson and his colleagues at Hopkins found that patients with early-life onset schizophrenia have reduced volume of superior temporal gyrus. He has now extended this finding to LOS. In this seminal study, volumes of medial and lateral temporal lobe structures were assessed in 11 patients with LOS, 18 normal elderly controls, and 12 patients with moderate impairment due to Alzheimer's disease. While both patient groups had smaller volumes of medial temporal regions (hippocampus, amygdala, entorhinal cortex), schizophrenics had significantly smaller superior temporal gyri than both normal controls and AD patients. Superior temporal gyrus shrinkage could not have been accounted for by general brain atrophy.

Dilip Jeste, at the University of California, San Diego (MERIT award MH43693), is examining the neuropsychological, brain-imaging, and treatment response-characteristics of LOS and anticipates finding several subtypes. He predicted that one subset of patients will have significant neuropsychological deficits and structural abnormalities in MRI, and poor therapeutic response to neuroleptics with greater risk of tardive dyskinesia. Another smaller subgroup is expected to have a diagnosable dementing disorder that initially presents with schizophrenia-like clinical symptoms.

Those elderly who have suffered a chronic mental illness, such as *early* onset of schizophrenia, are also being studied. Neuroleptic-induced tardive dyskinesia (TD) can be a significant problem in chronically mentally ill older patients for several reasons; the risk of TD increases considerably with aging, the length of neuroleptic exposure necessary to produce TD tends to be much shorter in older adults and is more likely to be severe and persistent, with far likely more adverse impact with low remission rates. In order to determine the incidence of TD in older patients, and to determine the risk factors for occurrence and precipitation of TD (including malignant TD), Dr. Jeste (MH45131-02) is assessing elderly psychiatric patients over a 5-year period, many of whom have had less than 1 month of total lifetime neuroleptic exposure. After initial psychiatric and neurologic examinations, patients are being randomly assigned to one of two neuroleptic treatments where they receive the effective lowest dosage of either haloperidol or thioridazine and are followed-up with psychiatric and neurologic examinations. (see Jeste, under Treatment)

Michael Davidson (MH46436), at the Mount Sinai School of Medicine, is attempting to discern whether the dementia that appears in elderly schizophrenics shares a similar neurohistological substrate to that found in Alzheimer's or Multi-Infarct

Dementia. Although the neurohistology of Alzheimer's disease is well known, the neurohistology of schizophrenia remains to be documented. Dr. Davidson and his colleagues are conducting functional and cognitive assessments antemortem in elderly schizophrenic patients and following them until death, when their brains are neurohistologically assessed. Insight into the etiology and neuropathology of a schizophrenic "dementia" has practical and theoretical importance. If dementia in schizophrenia shares the same histopathological substrate with Alzheimer's disease, pharmacological interventions enhancing cholinergic activity could be applied to the demented schizophrenic population. On the other hand, a "dementia" unique to schizophrenia would promote investigations of the etiology of the cognitive decline in this illness, and could be an important clue to the underlying pathogenesis of schizophrenia. Emerging evidence, from over 40 autopsies, is that the dementia seen in elderly schizophrenic patients is *not* Alzheimer's disease, MID or Lewy body disease superimposed on schizophrenia. To investigate the biological substrate of dementia in elderly schizophrenic patients, biochemical abnormalities known to be associated with a clinical picture of dementia in schizophrenia are under investigation. To date, different from AD or other dementing disorders, AchE and ChAT appear not to be decreased in demented schizophrenics. However, based on preliminary studies, there is the possibility that, similar to other dementias, nicotinic receptors and tissue catecholamines are decreased in demented elderly schizophrenic patients.

In addition to research on the clinical course, neuropathology, and treatment of early and late onset schizophrenia, studies of the relationships among various psycho-social, environmental, and health factors that may influence service utilization, and the success of formal or informal care is being undertaken.

Dr. Carl Cohen, at the Health Science Center at Brooklyn, State University of New York (MH45780) is examining the mental health of older homeless women. This is the first time that this population, which comprises approximately one-fifth of all homeless women, has been studied. Using survey and ethnographic techniques, and in-depth interviews, 250 older homeless women living in shelters and on the streets of New York City are being examined to determine: demographic profiles; subsets of the population such as the mentally ill and substance abusers; pathways to homelessness; social networks and their relevance to survival; psychological/phenomenological aspects of the homeless condition; and the environmental/social context of homelessness. Findings from this study will be contrasted to previous research conducted by Dr. Cohen which examined similar factors among homeless older men (MH00523, MH37562).

Suzanne Meeks, at the University of Louisville (FIRST award MH44787), is following four age cohorts of middle-aged and elderly individuals with psychiatric diagnoses of schizophrenia, schizo-affective disorder, bipolar disorder, major depression, delusional disorder, or atypical psychosis over five years. Her study will attempt to determine how health and mental health services, social supports, family stressors and other factors affect adjustment (e.g., relapse) in these chronically mentally ill elderly. By identifying factors contributing to better outcome, interventions to improve the functional independence of the CMI elderly may be made.

Work by Jan Greenberg (MH46564) at the University of Wisconsin, explores the burdens experienced by elderly parents who care for adult children with a severe mental illness, many of whom are schizophrenic. Specifically, Dr. Greenberg is assessing the older parents' objective and subjective burdens, and is identifying potential factors associated with lower levels of burden (e.g., relatively fewer negative symptoms and unpredictable behaviors of adult schizophrenic children), and the extent to which formal services to the mentally ill adult child and the family serve as a buffer to the older parents.

CHRONOBIOLOGY, DEMENTIA, AND DEPRESSION

The circadian timing system, which strongly influences the occurrence and quality of sleep, is altered significantly with aging. Due in large part to these changes in the circadian systems of the elderly, sleep disturbance is common among people over 65 years of age. Approximately 50 percent of this population suffers from *chronic* sleep disturbance. Sleep disturbance in the elderly is associated with increased morbidity and mortality including compromised cognitive function, geriatric depression and increased use of hypnotic medications.

Dr. Scott Campbell at the Department of Psychiatry, Cornell Medical School (MH45067) comprehensively examined biological sleep parameters (e.g. polysomnographic sleep stages, sleep architecture measures, continuous recording of core body temperatures and measures of daytime sleepiness) to determine the efficacy of one week of bright light intervention (phototherapy) on patterns of sleep disturbance ex-

perienced by generally healthy elderly individuals. His data demonstrate that timed exposure to bright light is highly effective in alleviating sleep maintenance problems; not only does nighttime sleep improve dramatically, but daytime alertness is enhanced as well. These findings suggest that timed exposure to bright light is a viable alternative to traditional pharmacological interventions for sleep disturbance in the elderly. He is currently extending this line of research to examine the long-term (i.e., three months) effectiveness of bright light therapy in controlling sleep disturbance.

Dr. Campbell is currently applying the bright light intervention to depressed elderly. He hypothesizes that timed exposure to bright light will be effective in alleviating nocturnal sleep disturbance in geriatric depressives, by acting directly on the circadian timing system that mediates sleep and wakefulness. The consolidation of nocturnal sleep will result in reduced disruptive behavior at night, a reduction in daytime sleepiness, and in increases in cognitive functioning and mood, independent of the alleviation of other depressive symptoms.

Two chronobiology pilot studies are being undertaken as a core part of the Cornell Developing Clinical Research Center/Geriatric Affective Disorders Grant (MH49762). The first pilot study is an examination of the effects of aging and geriatric affective disorder on the circadian pattern of melatonin secretion since plasma melatonin is reduced as an effect of age and also of depression. Specifically, measures of melatonin, mean level of core body temperature, and mean plasma cortisol will be measured in depressed geriatric patients before and after acute antidepressant (nortriptyline) treatment. Treatment nonresponders will also be studied twice to distinguish state-related changes in melatonin from drug effects or other effects related to the treatment itself. In the second pilot study, Drs. Campbell, Alexopoulos and Wagner will examine the chronobiological characteristics of geriatric depression to determine the extent to which circadian variables in geriatric depression are altered relative to those associated with normal aging and they will investigate the role of the circadian timing system in the outcome of ECT in geriatric depressives.

Although electroencephalographic (EEG) abnormalities in demented patients were first reported over 40 years ago, gross slowing of the dominant frequency proved to be a nonspecific finding and only patients with advanced dementia could be differentiated from the normal elderly using such criteria. More recently, however, Dr. Patricia Prinz at the University of Washington (MH33688) has used sleep EEG activity as a biological marker to discriminate mild dementia from normal aging and from depression. Dr. Prinz has speculated that, since many of the earliest changes in AD involve presynaptic cholinergic nerve terminals originating in the basal forebrain, the EEG may provide a sensitive approach towards assessing these early neuronal changes. She has found that the degree of dominant occipital frequency, in conjunction with measures of percent wakefulness, correctly classified 85 percent of normal aged from mildly demented subjects. Because the accuracy of formulating a differential diagnosis in the earliest stages of disease has heretofore been so poor and has constituted a major obstacle to longitudinal studies of the course of illness, Dr. Prinz's finding represents a highly significant development in the ongoing search for reliable biological markers in AD.

In his ongoing studies of sleep in late life mental disorder, Charles F. Reynolds, III, of the University of Pittsburgh (Research Scientist Award, MH00295; and MH37869) has made a number of key observations concerning the prognostic significance of EEG sleep changes in late-life depression: (a) pretreatment REM latency was significantly lower in depressed geriatric patients who would suffer recurrence compared with those who remained well during maintenance drug therapy; (b) early REM sleep rebound and an antidepressant response to one night of total sleep deprivation correctly predicted in 88 percent of cases which patients would show a course consistent with depressive pseudodementia versus progressive dementia, with demented patients showing the lowest rate of REM activity generation; and (c) 2-year mortality in patients with mixed depression and cognitive impairment was correctly predicted in 77 percent of cases by lengthened REM latency and increased apnea-hypopnea

Based on his observation that a "lag" in sleep recovery in the elderly may indicate a risk for future depressions, Dr. Reynolds is now conducting several longitudinal studies where he is continuing to clarify the relation between persistent sleep abnormalities, pathogenesis, and illness course. One study is following unipolar depressive patients who are currently in maintenance therapy; a second of patients with spousal bereavement or bereavement-related depression, and a third consisting of healthy elderly (who are non-depressed, non-bereaved). Dr. Reynolds found that the depressed bereaved elderly subject had lower sleep efficiency, more early awakening, shorter REM latency, higher REM percent, and lower rates of delta wave

generation in the first NREM period. The sleep of the depressed bereaved subjects resembled that of an age-, sex-, and severity-matched group of elderly patients with recurrent unipolar depression. Seep in the nondepressed bereaved, by contrast was more like that of healthy control subjects (see Reynolds, under Treatment).

Up to 30 percent of the elderly population complains of sleep difficulties, with impaired quality of life as a frequent outcome. Charles Morin, Virginia Commonwealth University (MH47020 FIRST award), is exploring the relative effectiveness of cognitive behavior therapy, pharmacotherapy (temazepam), and the combination of cognitive behavior therapy and pharmacotherapy. Treatment outcome is being assessed in terms of sleep quality, mood, and neuropsychological functioning, and health service utilization. Preliminary data suggest that all treatment groups, compared to placebo, improved their sleep efficiency and decreased their time awake after sleep onset. These results are clinically meaningful because sleep maintenance insomnia is a widespread complaint in late life and it is often associated with concomitant psychological distress. Long term follow-up of the effectiveness of the different treatment modalities is ongoing.

Poor sleep may indeed account for the disproportionate prescription of sedative hyponotics in the elderly. Hypnotic use may lead to exacerbation of sleep apnea and daytime carryover effects such as sedation, falls, cognitive impairment, and anterograde amnesia. Thus, alternatives to pharmacotherapy approaches to sleep problems are also needed. Michael Vitiello at the University of Washington (MH45186) is examining the effects of increased aerobic fitness on sleep quality, assessed both subjectively and in terms of such objective outcomes as increased circadian temperature amplitude, increased nocturnal growth hormone and somatomedin-c levels and decreased nighttime norepinephrine levels. Preliminary findings suggest that increased aerobic fitness is associated with improvements in objectively assessed sleep quality, specifically a shortened sleep latency and decreased awakenings from sleep and shifts in the circadian core body temperature rhythm, in direction consistent with the rhythms observed in healthy young normal men. There is also preliminary evidence that there are shifts in circadian secretion of fibrinolytic regulatory factors in a direction consistent with deceased thrombogenesis, which have implications for understanding the role of fitness training in the prevention of cardiovascular and cerebrovascular morbidity and mortality.

Jerome Yesavage, Stanford University (MH45143), is also testing a nonpharmacological treatment for sleep problems: Sleep Restriction Therapy (SRT). The elderly often report higher frequency of naps compared to younger adults. However, daytime sleepiness that often co-occurs with naps may lead to decrements in cognitive functioning. SRT improves sleep quality by restricting excessive time in bed and allowing a modest accrual of sleep debt resulting in consolidated sleep. The efficacy of a modified SRT intervention, allowing one 30 minute daytime nap, is also being assessed. Whether these treatments have an effect on pretreatment levels of depressive symptoms will be tested as well.

With the hope of creating a more fertile environment for the next generation of neuroscientists, the NIMH is funding a unique national training program in basic sleep research. (Chase, MH18825, UCLA) Because the varied expertise and the scarce facilities in this area of basic science are scattered throughout the United States, the training program is of necessity multi-site, multi-departmental, and inter-disciplinary in nature. The program capitalizes on the strengths of six distinguished universities and eleven eminent basic sleep scientists. This combination of resources provides training to 16 pre- and post-doctoral students per year in molecular, cellular, systems and behavioral aspects of sleep research and addresses clinically relevant areas of interest as well. The program constitutes a national "University Without Walls," providing the specialized, yet multidisciplinary, training that is now a prerequisite for substantial progress in basic research on single clinical entities.

STUDIES OF SUICIDE LATE IN LIFE

It has been well documented that the elderly have the highest suicide rates of any age group. Cohort effects and demographic trends suggest that in the coming decades there will be vastly increasing numbers of late life suicides. These factors emphasize the need to better understand this phenomenon. Dr. Yeates Conwell (MH40381, MH00748, University of Rochester) has found that late life suicide is distinguished by a number of demographic, behavioral, and psychopathologic differences, from suicide in other age groups and that these differences have implications for understanding brain-behavior relationships. Dr. Conwell found that the high suicide rates in late life are accounted for by especially high risks for males, with male to female ratios of up to 12:1 in the 85 and over age group, compared to 4:1 for the

total population. In addition, with increasing age, suicide victims use more violent and lethal means to take their lives—the elderly have a much lower ratio of attempted to completed suicides. Psychological autopsy data show that the most common psychopathology of elderly suicides is an affective disorder of late onset; that it is less commonly associated with active substance abuse; and more often associated with physical illness or loss than in younger suicide victims. Fully 70 percent of the completed suicides in Dr. Conwell's study had seen their primary care physicians in the month prior to the death; in no case was the depression recognized nor was treatment initiated. This finding has been confirmed in other, independent studies and represents a major concern in the dissemination of clinical research findings. Dr. Conwell's continuing research is focusing on the development of a neurobiological model of late life suicide. Specifically, he is testing the hypothesis that late life suicide is a behavioral expression of neurobiological alterations in hypothalamic-pituitary-adrenal (HPA) axis dysfunction.

STRESS AND BURDEN: FAMILY CARE OF THE ELDERLY

Stress associated with family-based care of the elderly has significant social, emotional, and health consequences. Research on the primary caregiver, who is generally a spouse or daughter, has documented an array of psychological and emotional burdens. In studying the course of psychosocial needs of caregivers for AD patients, Dr. Dolores Gallagher-Thompson of the Palo Alto Veterans Administration Medical Center (MH43407) has reported high rates of depression and anger in caregivers.

Indeed, there is evidence that the stress of caregiving is associated with health consequences. NIMH is currently funding several research projects that focus on the chronic impact of caregiving on immune functioning and psychological distress. Dr. Janice Kiecolt-Glaser and her associates at Ohio State University (MH42096, MERIT) have continued to study the changes in cellular immunity and physical health status among spousal caregivers of AD patients. Following "established" caregivers (those in the role 5+ years) for more than a year, these investigators have found that relative to matched control older adults, caregivers reported more days of infectious illness, primarily upper respiratory tract infections, and these reports were corroborated by physician data. Caregivers' mental health also deteriorated, with 25 percent of the caregivers meeting syndromal criteria for depression at intake and 32 percent at follow-up. Caregivers who reported lower levels of social support at intake, and who were most distressed by dementia related behaviors showed the greatest and most uniformly negative changes in immune function at follow-up. Caregivers' whose spouse died during the study are also being followed. Bereaved spousal caregivers do not appear to differ significantly from continuous spousal caregivers on immune function or depression even two to three years after the death of the patient. These persistent immunological decrements are of considerable concern, because they compound age related diminished immune functioning and place the caregiver at significant risk for negative health consequences. Current research is examining whether chronic stress interferes with the ability of an elderly individual to respond to influenza vaccination.

Dr. Igor Grant and his associates, at the University of California, San Diego (MH42840), are also studying the adaptation and health outcomes of caregiving for AD patients, including potential mediators of stress and health outcomes. The particular physical outcomes being examined include physiologic measures of activation—altered hypothalamic-pituitary-adrenal (HPA) axis sensitivity, increased sympathoadrenal medullary (SAM) activity, and reduced natural killer (NK) cell activity. This group will also examine how over time, caregivers with greater stresses will fair on the physiologic measures. The stressors under study include patient characteristics (problem behaviors, ADL help required) and environmental (life events) factors. The mediators of the stressors include interpersonal (social support) and intrapersonal (self-concept, coping strategies). To date, the results suggest that highly stressed caregivers have elevated adrenocorticotrophic hormone (ACTH) and cortisol, and it is predicted that chronic stress will result in a blunted response of ACTH over time. In this preliminary work, highly stressed caregivers were identified to have a mismatch between the amount of time providing care, with the amount of respite, so that they were overloaded. When compared to caregivers who have more congruent levels of care provision and respite, the "congruent" caregivers had lower ACTH and cortisol, suggesting more successful physiological adaptation to caregiving.

Linking up with the findings reported by Dr. Gallagher-Thompson, of high levels of anger in caregivers, and the findings of impaired immune functioning reported by Dr. Kiecolt Glaser, one aspect of a recently funded study by Dr. Peter Vitaliano at

the University of Washington (MH43267) is an examination of caregiver expression of anger and psychosocial, immunologic and cardiovascular distress.

Critical events in the role of caregiving have differential impacts on individuals. In a large prospective study, Dr. Leonard Pearlin at the University of California, San Francisco (MH42122, MERIT), is striving to identify the range of stressors experienced by caregivers, and their access to and use of formal and informal supports. Dr. Karl Pillemer of Cornell University (MH42163), is examining how the social relations of AD caregivers change over time, and how these changes are related to perceived burden. A number of caregiver subgroups have been defined, and Dr. Pillemer has found important links between various aspects of support and burden for these groups. For example, caregivers who have social supports who are caregivers themselves, or status similar, report lower depression, compared to those with supports who were not similar. This relationship held even when controlling for the degree of support and interpersonal stress experienced from others. Similarly, for a caregiver subgroup of married daughters, their supports, including siblings, friends, and children, who had also cared for an elderly relative were perceived as most supportive. They were also likely to be less critical of the caregiver, or be seen as a source of interpersonal stress. For a third group of caregivers—those who are married, adult children providing care to parents—marital satisfaction is linked to spousal hinderance of caregiving efforts, as well as spousal emotional support.

Previous research, as noted earlier, has indicated that clinical levels of depression are very common in family caregivers, with several studies reporting rates between 30 and 50 percent. Dolores Gallagher-Thompson, Ph.D., and colleagues at the Palo Alto VA Medical Center are evaluating the comparative efficacy of two months of brief psychodynamic psychotherapies, two therapies known to be effective in treating depression in other groups. Both therapies were done according to standard protocols which contained some modifications for older adults. Results showed that 71 percent of the caregivers treated showed substantial improvement or remission of their depression, regardless of which of the two types of psychotherapies they received. In contrast to initial hypotheses, long-term caregivers (i.e., those who were in the caregiving role 5 years or more) did significantly better in the cognitive/behavioral modality than in the psychodynamic. Either treatment was effective for shorter-term caregivers.

Dr. Dolores Gallagher-Thompson and her colleagues have also been developing "anger management" classes for hispanic family caregivers. Previously developed materials for a series of psychoeducational classes to teach caregivers cognitive and behavioral skills for managing negative emotions, in particular frustration and anger, have been effectively used with Ango caregivers. These materials have been modified to make them more relevant to the cultural and educational experiences of Hispanic groups. So far pilot classes have been held with Mexican-American caregivers and with caregivers from El Salvador and other countries in Central America. The intervention has been positively received by participants, and class materials are undergoing continued revision on the basis of these initial experiences, to meet the needs of these diverse groups of caregivers.

Dr. Mary Mittleman and her colleagues at New York University (MH42216) have developed an intensive family-based treatment for spousal caregivers of AD patients with the intention of increasing the support for spousal caregivers so that institutional placement can be delayed. The study has had an unusually low dropout rate, probably due to the consultations that are provided in-home as needed. Among the first 200 caregivers studied, those in treatment condition have reported greater satisfaction with their social networks, and have had half as many nursing home admissions compared to the control group after 1 year. When asked about reasons for institutionalizing the AD patient, control group caregivers were more likely to report higher levels of exhaustion and poorer emotional health, compared with treated caregivers.

Because midlife women are the major caregivers of both the preceding and the next generations, their subjective well-being has consequences for many others besides themselves. Two longitudinal research projects are currently examining personality development and the prediction of midlife well-being in white and black college-educated women. Ravenna Helson (University of California, Berkeley; MH43948) has followed a group of women from their college graduation at 21 years of age and most recently has explored women's personality changes during middle age (early 40's to 50's). She has demonstrated that, in this decade, women show greater emotional stability, interpersonal smoothness, and commitment to values. Because menopausal status and children's departure from home show no influence on this pattern of personality change, she attributes this change to multifactor period effects and long-term trends rather than to particular life events.

Similarly, Sandra Tangri (Howard University; MH47408) has begun studies of white and black female graduates of the University of Michigan and Howard University. Dr. Tangri is using the concept of a Social Clock, the timing and sequence of major life events, to examine middle-aged women's personal life courses and senses of well-being in a socio-historical context.

TREATMENT ASSESSMENT

Research in the treatment of late life mental disorders has experienced substantial growth. Four areas of treatment research are pursued in the program: (1) basic psychopharmacology including age-related alterations in pharmacokinetics and drug metabolism; (2) clinical trials including acute, continuation, and maintenance treatments using pharmacologic, psychotherapeutic, and combined strategies; (3) analysis of side effects such as tardive dyskinesia, and cognitive and behavioral toxicity; and (4) modeling including the use of pharmacologic probes in order to characterize the underlying pathophysiology of disease. Examples of these areas are provided below.

Several investigators are studying a significant clinical issue that cuts across the treatment of several mental disorders of the aged—the high rate with which older patients develop tardive dyskinesia (TD, or spontaneous movement disorders) as a side effect of treatment with neuroleptic medications. In a large prospective study by Dr. Dilip Jeste at the University of San Diego (MH45131), psychiatric patients over age 45 have shown a 30 percent incidence rate for newly developing TD (11 percent definite, 19 percent borderline) within 6 months of randomization to low-dose treatment with either haloperidol or thioridazine. Preliminary data from another prospective study by Dr. John Kane at Hillside Hospital/Long Island Jewish Medical Center (MH40015) reveal a comparable 31 percent TD incidence rate in patients age 55 and older studied naturalistically over 43 weeks of treatment with a broader array of neuroleptic medications. Both investigators are continuing further analyses of these surprisingly high rates in an attempt to disentangle the contributions of age, gender, diagnosis (e.g., dementia versus mood disorders or functional psychosis), medication dosage, and other variables, which tend to be highly confounded variables in the populations studied. Preliminary indications from the two projects have been inconsistent on the effects of diagnosis, but suggest that more specific factors such as instrumentally detected instability in motoric function or the early development of Parkinsonian signs may offer improved prediction of TD risk in elderly patients.

Depression in the elderly has been shown to be a chronic relapsing problem. The long term prognosis for depression in late life is generally thought to be poor, with only one quarter to one third of patients showing a good outcome at one-to-three year follow-up. Risk of recurrence increases with older age at first onset of illness, with a greater number of prior episodes, with a longer index episode, and with a shorter symptom-free interval. The Institute supports several ongoing treatment studies of the efficacy of long-term continuation and maintenance therapies for depression in the elderly. Researchers are also continuing to pursue more effective acute treatment for patients who are non- or partial-responders to treatment.

Dr. Charles F. Reynolds of the University of Pittsburgh (MH43832, MERIT) is examining the efficacy of three active maintenance treatment conditions (full-dose nortriptyline, full-dose nortriptyline plus interpersonal pshychotherapy, and placebo plus interpersonal psychotherapy) for elderly with recurrent unipolar depression, compared to maintenance placebo. During the initial phase of this study, patients receive acute and open continuation therapy and double-blind transition to maintenance. Preliminary data indicate low attrition (16 percent) and appear to establish the ability of elderly patients to tolerate nortriptyline well at therapeutic levels. Treatment success rate (65.7–78.7 percent for intent-to-treat and protocol completers) during open combination treatment with nortriptyline and interpersonal psychotherapy is encouraging since the study sample consists of elderly patients with highly recurrent major depression and moderate to severe functional impairment. Furthermore, 67 percent of treatment completers had little residual depressive symptomatology, a problem frequently noted in clinical trials of late-life depression. These findings also suggest that lower expectations for the quality of response in the elderly may not be justified. In a second study, Dr. Reynolds is examining the efficacy of full-dose versus half dose nortriptyline in preventing recurrence and controlling symptoms of major depression in 60–80-year-olds with recurrent depression.

Dr. Alan Stoudemire's (Emory University, MH47597) research is directed toward elucidating three significant clinical issues in the long-term psychopharmacological treatment of depression in the elderly. Namely, he is: (1) examining which pharmacotherapeutic strategies may be most effective in minimizing the high recurrence rates in geriatric depression; (2) assessing the effectiveness and comparative associ-

ated medical and neuropsychological side effects of the long-term use of either tricyclic antidepressants or lithium and; (3) is conducting a detailed exploration of what other classes of concurrently used medications, or types of co-existing medical illnesses common in this population, might contribute to depression and diminish the effectiveness of antidepressant therapies. Because pilot data revealed that elderly depressives with concomitant cognitive impairment appear to show the same response to psychopharmacologic treatment of depression, as well as the same risk for rate of relapse, as cognitively intact elderly depressives, this population has been included for study.

Over the past seven years Dr. Charles Reynolds has conducted ground-breaking research in demonstrating the effects of pathological aging on brain function as expressed in sleep-wake organization. One of his major contributions has been to demonstrate that acute depression in late life is associated with profound and specific changes in the physiological organization and intensity of sleep, particularly in the first NREM–REM sleep cycle. He has hypothesized that these EEG sleep measures may be psychobiologic indicators of risk to recurrence in the depressed elderly undergoing long-term treatment. This hypothesis is currently being tested by Dr. Reynolds (Western Psychiatric Institute Clinic, University of Pittsburgh, MH37869, MH43832) within the frame-work of a large scale controlled study of maintenance pharmacotherapy (nortriptyline) and psychotherapy with respect to their prophylactic value in recurrent unipolar depression among 60–80 year olds. He recently reported a strong relationship between increase in REM latency and decrease in Hamilton depression ratings four weeks into continuation therapy. This is the first report of tricyclic antidepressant effects on EEG sleep in elderly depressed patients. Its theoretical importance pertains to the establishment of a relationship between sleep changes and antidepressant efficacy. Dr. Reynolds is continuing this research and will be contrasting patients who relapse during continuation therapy with those who remain well during continuation therapy. Dr. Reynolds hypothesizes that he will find greater residual abnormality in the sleep of patients who relapse, as compared to those who remain well.

It has been reported that up to 30 percent of geriatric patients treated with a tricyclic antidepressant, develop confusion or delirium, yet there have been no well controlled studies assessing the effects of therapeutic blood levels of a tricyclic antidepressant to performance in the elderly. To examine this critical clinical issue, Dr. Nunzio Pomara (Nathan S. Kline Institute, MH44194), is currently examining the effects of nortriptyline on psychomotor and cognitive functioning in the elderly. Nortriptyline (NT) is a tricyclic antidepressant with a well established therapeutic window and an absence of marked age-related differences in pharmacokinetics and a more favorable side effects profile.

Using a placebo controlled, double blind, parallel group design, this study is comparing the performance of young and elderly depressed patients, in response to a single dose of NT, as well as chronic NT treatment at comparable therapeutic plasma levels.

Because of their widespread use, the acute and chronic effects of benzodiazepine on human performance are of considerable practical significance. Their effects on the elderly (aged 60 to 78 years) are of particular concern, since they may be more sensitive to some of the adverse central effects of the benzodiazepine. Moreover, normal age-related decline in cognitive functions may accentuate the significance of drug-induced deficits. Both animal model and clinical studies are addressing this critical concern.

The use of psychotropic drugs in the elderly, such as the benzodiazepine, is associated with substantial morbidity (due to falls and cognitive impairment), attributed to drug toxicity and interactions. Toxicity may occur, in part, to enhanced sensitivity to drugs in the elderly. Although for several drugs sensitivity appears to be due to pharmacokinetic factors, for other drug classes, age-related kinetic changes are limited. Dr. Lawrence Miller (Tufts University MH47598), has hypothesized that since most psychotropic agents interact with neurotransmitter receptors, it is likely that enhanced sensitivity to psychotropic drugs, such as the benzodiazepine, is, at least in part, related to receptor interaction or post-receptor events. To elucidate receptor contribution to enhanced drug sensitivity, Dr. Miller is examining the benzodiazepine/GABA system in aged mice. His initial data, while indicating no significant age-related alterations in binding or function at the GABA receptor complex in a mouse model, did reveal two potentially important neurochemical alterations in aged animals which may contribute to enhanced benzodiazepine sensitivity: (1) decreased benzodiazepine receptor synthetic rate in aged mice and (2) decreases in GABA receptor gene expression in aged mice. Based on these findings Dr. Miller is now examining, across a broad range of animal lifespan, the benzodiazepine recep-

tor synthetic rate and GABA receptor gene expression in major brain regions. He is also examining the effects of chronic benzodiazepine administration on GABA receptor binding and function, and benzodiazepine receptor rate.

Clinical research on the acute and chronic effects of benzodiazepine on the performance of the elderly is also being supported. Dr. Nunzio Pomara, in his initial research on the cognitive and behavioral side effects of the benzodiazepine, selected diazepam, which has a long elimination half-life, for study. He found that diazepam has remarkable cognitive toxicity after acute administration and prolonged effects after chronic bedtime administration. While it is often assumed that chronic treatment with benzodiazepine having shorter elimination half-lives (which results in less drug accumulation) will, in general, be associated with a smaller number of adverse effects on performance, there are few systematic studies of the effects of these drugs on performance in the elderly. In fact, there are even fewer studies which include the very elderly, who are the fastest growing segment of the aging population, and who may be particularly vulnerable to the adverse effects of benzodiazepine. Dr. Pomara (Nathan S. Kline Institute, MH42499), using the same general protocols as he did in his diazepam study, is now examining the cognitive and behavioral side effects of two short half-life compounds, alprazolam and lorazepam. In addition, he will analyze the data within the elderly group to determine whether increasing age is associated with increased adverse effects on cognitive tasks.

Additional research being conducted by Dr. Richard Shader at Tufts University (MH34223, MERIT Award), is investigating the mechanisms and determinants of altered benzodiazepine sensitivity in the aging organism. Using both experimental and clinical models he and his colleagues are evaluating the aging-related consequences of chronic benzodiazepine exposure and chronic ethanol exposure, including assessment of the mechanisms of tolerance and rebound/withdrawal. These studies involve both normal volunteer human subjects and experimental animals. In humans, a range of outcomes is being assessed, including subjective measures (e.g., sedation, mood state), psychomotoric performance and information processing measures, and neurophysiologic measures (quantitative electroencephalography and topographic brain mapping). In the animal studies, outcome measures include both behavioral (computerized infrared monitoring) and neurochemical (e.g., receptor binding, number, affinity, function) analyses.

The neuropeptide somatostatin (SRIF) exerts diverse physiological actions in the central nervous system. Alterations in brain SRIF neurotransmission occur in Alzheimer's disease and SRIF receptors in limbic regions have been proposed to mediate the cognitive effects seen in this disorder. Dr. Terry Reisine (MH48518) at the University of Pennsylvania, is studying somatostatin receptor subtypes and their functional roles in the brain. Critical experiments are being performed by Dr. Reisine to definitively answer fundamental questions about this neuropeptide. The results will predict the usefulness of somatostatin-based treatments for Alzheimer's disease.

Another peptide transmitter in the brain that is involved in Alzheimer's is neurotensin (NT). Dr. Elliott Richelson (MH27692) of the Mayo Clinic in Jacksonville, Florida, has been doing research in the pharmacology of NT and the NT receptor (NTR). His research team has synthesized several NT analogs and identified a novel NT fragment with full agonist activity. The goal of this group is to develop synthetic NT agonists that can reach brain receptors, as potential drugs for the treatment of Alzheimer's type dementia.

Recent work in Dr. Richard Wurtman's laboratory at MIT (MH28783) has focused on mechanisms which regulate the processing and secretion of the amyloid precursor protein in Alzheimer's Disease. Abnormal processing of this protein results in the formation of a peptide, called the β-A4 peptide, which is the principal component of the amyloid which is deposited in the brains of patients with Alzheimer's Disease. Dr. Wurtman's recent work suggests that certain brain receptors regulate amyloid precursor protein processing by activation of protein kinase C. Deficits in the function of neurotransmitter systems linked to this protein processing might contribute to the formation of the abnormal brain amyloid formations in Alzheimer's Disease.

An understanding of the normal life and death processes of brain neurons is critical for unraveling the pathologic mechanisms of disease processes such as Alzheimer's Disease. Neurobiologist Dr. Solomon Snyder and colleagues at Johns Hopkins University School of Medicine in Baltimore (MH18501), have shown that a newly discovered transmitter (nitrous oxide, NO) is present in larger quantities in brain (neurons) than anywhere else. The physiologic and pathologic role(s) of NO in the brain remains one of the chief areas of interest at Snyder's laboratory. They believe that excessive production of NO is intimately involved in the neuronal cell death

associated with stroke and neurodegenerative diseases such as Huntington's and Alzheimer's. Dr. Snyder's group has also examined a new area of research involving the localization of immunophilins in the brain. They have shown that immunophilins are far more highly concentrated in the brain than in immune and other peripheral tissues where their presence has already been reported. Drugs which penetrate the blood brain barrier, could influence brain protein phosphorylation. Dr. Snyder's work regarding these new findings in brain chemistry is one of the most exciting areas in neuroscience today.

The majority of effective psychotherapeutic medications have been discovered by serendipity. For example, the accidental finding of the antipsychotic effects of chlorpromazine, originally developed as an antihistamine, lead to the knowledge that these drugs block dopamine receptors in brain. This in turn leads to the development of the dopamine hypothesis of schizophrenia. The lack of any effective drugs for preventing or reversing the cognitive effects of Alzheimer's disease has severely impeded research in this area. The majority of the world's population relies on "traditional" medical practices that have evolved over many centuries for the majority of their ills. By taking advantage of this ethnopharmacologic information, the NIMH Psychotherapeutic Drug Discovery and Development Program is testing certain plant extracts in modern receptor binding assays. These plants are widely used in India for memory disorders and dates back many centuries in the "Ayurveda" or traditional Indian medicine. These extracts have shown preliminary activity at several brain receptors sites which are thought to play a role in memory and cognition such as GABA, CCK, NMDA, substance K and substance P receptors. Future studies will further characterize the pharmacology of these natural product memory enhancers. From a historical point of view, the discovery of effective medications will be a powerful tool for leading to a better understanding of the disease processes themselves.

Aging refers to a process that is associated with chronological age but not identical to it. One of the most important questions in the study of aging concerns the origin of individual differences that distinguish successful from unsuccessful aging, i.e., maintenance of functional capacity to the end of a long life versus premature decline or incapacity. Michela Gallagher, Ph.D. at the University of North Carolina at Chapel Hill (MH39180) is studying the behavioral and neurochemical effects of aging on learning and memory in both male and female rats. This group has shown that there is considerable variability between individual rats regarding the effects of aging on memory tasks and on memory verses other systems such as sensorimotor and circadian rhythms.

Another major hypothesis of this group is that brain aging in hippocampal/cortical circuitry is most pronounced in old rats that are cognitively impaired relative to both young rats and unimpaired aged rats. Here, the goal is to localize age-related neurochemical changes in cholinergic, glutamatergic and peptidergic systems of the hippocampus of cognitively impaired aged compared to unimpaired aged and young rates. These investigations will provide novel information regarding individual differences in young adult rats that may serve as predictors of cognitive function and brain aging in late life.

MEMORY AS AFFECTED BY DISEASE, INJURY AND AGING

Research at the Veterans' Affairs Medical Center and the University of California-San Diego (Squire, MH24600) is directed toward understanding the organization and neurological foundations of human memory. The work especially focuses on the analysis of memory dysfunction in carefully selected patients with neurological injury or disease which may also relate to changes that occur in normal aging and Alzheimer's disease. The 12 projects include studies to resolve whether or not amnesia disproportionately impairs spatial memory; studies to resolve whether or not amnesia disproportionately impairs recall compared to recognition memory; studies of source amnesia; studies of the ability of amnesic patients and frontal patients to learn about temporal order; studies of skill learning, central tendency effects, immediate memory, biasing effects in perception, and word priming; studies of retrograde amnesia; and a PET scan study of memory. These studies address fundamental questions about how memory is organized in the brain and the changes due to disease, injury, and aging.

Memory failures and inefficiencies are a source of anxiety as people approach senior year and in many cases the memory deficiencies are deleterious to general mental functioning. The problem of memory acuity is both widespread and progressive. While the concept of cognitive aging has been established by the negative relationship between age and cognition, not much progress has been made in *explaining* cognitive aging phenomena. Recent cognitive research (McEvoy, MH45207) at the

University of South Florida has made an important advance in explaining problems of memory retrieval among elderly persons. One recent finding suggests that retrieval of information is inefficient because both the *size* and *interconnectedness* of the memory network decrease as people age. Using a measure of connectivity to indicate shared association and shared meaning among words and concepts, McEvoy has found that even when elderly people possess proper associations of meaning for words and concepts, there is not a collateral interrelatedness or connectivity among the concepts. Normally, for highly interconnected concepts, activation can accrue to the memory target and its associates both directly and indirectly, whereas for a concept with low connectivity activation is primarily direct and through a single pathway. These effects are most pronounced when contrasting explicit and implicit memory. Elderly people show reduced network size especially with respect to implicit memory representations. The issue, then, is not that elderly people do not have a lot of memories, but that retrieval of information they possess is inefficient because the activation spread during the process of memory access is reduced.

SOCIAL REGULATION OF AGING

Group social interactions may alter physiological processes and ultimately affect such things as the aging process, as reflected by how long the female is capable of reproduction. Martha McClintock's continuing research at the University of Chicago (MH41788) investigates the effects of the social group upon estrus synchrony and the consequences of such synchrony or asynchrony. McClintock has found that females living in groups, as compared to isolated females, were capable of reproduction signficantly longer. This research has identified a biomarker for vulnerability to the social isolation and to premature reproductive aging. The result speaks to the influences of the group upon physiological functioning and the vulnerabilities of certain members of the group, namely the females.

STUDYING SOCIAL RELATIONS AND MENTAL HEALTH OVER THE LIFE COURSE

Mental health outcomes are greatly influenced by the quality, structure, and function of social relationships across the life-span. Toni Antonucci, at the Institute for Social Research, University of Michigan (MH46549), recently began a three year study of 5- to 75-year-olds that explores the contributions of social relationships, personal characteristics, and stress to mental and physical well-being. This research will also provide detailed information on the nature of social relationships and stressful events for differing ages in the life cycle.

PROGRAM DEVELOPMENT INITIATIVES FOR FISCAL YEAR 1993

A number of specific initiatives are planned for FY 93. These include:

Follow-up to the NIH Consensus Development Conference on Diagnosis and Treatment of Depression in Late Life including special workshops on psychotic depression and suicide.

Development of the NIMH-Academic-Industry collaborative workgroup on geriatric psychopharmacology

A workshop on chronic sleep disturbance in the elderly

A workshop in psychotropic pharmacokinetics in geriatric patients

ITEM 7. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

JANUARY 8, 1993.

DEAR MR. CHAIRMAN: I am pleased to send you HUD's accomplishments in providing activities and initiatives to assist older Americans and their families during Fiscal Year 1992 for inclusion in "Developments in Aging."

I am quite proud of the variety of approaches available in HUD's programs so that older Americans may maintain their independence, remain a part of the community, and live their lives with dignity and grace. HUD's commitment to providing the elderly with decent affordable housing, appropriate to their needs, may best be exemplified by the HOPE for Elderly Independence initiative. HOPE for Elderly Independence is designed to test the effectiveness of combining rental voucher and supportive service assistance to enable frail elderly individuals to continue to live independently. With the elderly population the fastest growing group in the United States, the programs that HUD develops and administers today are important for the future comfort of this expanding population.

If you have any questions regarding the enclosed information, please call me at 202-708-0005.

Very sincerely yours,

RUSSELL K. PAUL,
Assistant Secretary.

Enclosure.

U.S. HOUSING FOR THE ELDERLY—FISCAL YEAR 1992

The Department of Housing and Urban Development is committed to providing America's elderly with decent affordable housing appropriate to their needs. The elderly, who are the fastest growing segment of our nation's population, are often frail and in need of supportive services to help them stay in their homes. The Department's goal is to provide a variety of approaches so that older Americans may be able to maintain their independence, remain as part of the community, have access to supportive services, and live their lives with dignity and grace. To meet this goal, HUD has sought to expand its ability to link housing and appropriate services for the elderly.

The Administration proposed and Congress adopted as part of the National Affordable Housing Act of 1990, the HOPE for Elderly Independence initiative, which is designed to test the effectiveness of combining housing voucher and supportive services assistance to enable frail elderly individuals to continue to live independently. For many of these individuals, who are faced with increasing infirmity, or recovering from an illness or injury, the only choice is to enter a nursing home to receive supportive services. Such supportive services are very costly in a nursing home situation and may be much more intensive than needed. However, there are few other alternatives.

Until 1990, HUD's only program providing both housing and supportive services assistance was the project-based Congregate Housing Services Programs (CHSP). That program provided funding for supportive services in elderly public housing and Section 202 projects. The services provided were only available to those individuals who lived in the few projects approved to participate in CHSP. This program was modified substantially in 1990.

HOPE for Elderly Independence will allow frail elderly individuals more choice in determining where they want to live, since supportive services will not be limited to specific projects or units. They will even be able to remain in their present units, as long as their units meet the Section 8 Housing Quality Standards. The public housing agency (PHA) (or Indian Housing Authority (IHA)) would be authorized, however, to require individuals to live in a specific geographic area, if that is necessary, to make the provision of supportive services feasible.

Unlike the original CHSP, which provided "gap" funding of supportive services, this demonstration will only require HUD to provide 40 percent of the supportive services funding. This reduction in the percentage of HUD's funding responsibilities is designed to correct an apparent problem found in CHSP—payments for unnecessary services.

Funding for supportive services is available from many state and local sources, but coordination of these resources and the targeting of them to very low-income frail elderly individuals has been difficult. By requiring applicants to secure at least 50 percent of the services funding needed from other sources, HUD will be using its funding to leverage these other funding sources. HUD hopes to minimize the use of unnecessary services by requiring that at least 10 percent of the funding be from the elderly participants themselves.

This demonstration will provide housing assistance and supportive services for a five-year period. It will require that frail elderly individuals receive both housing assistance and services, rather than simply making supplementary supportive services available on an optional basis to those individuals currently receiving housing assistance. Services which can be funded include assistance with bathing, dressing, toileting, and mobility, case management, counseling, supervision, and other services essential to achieving and maintaining independent living. The demonstration will require that the program be targeted to those frail elderly individuals with deficiencies in at least three activities of daily living who need this assistance in order to live independently and that the services provided be tailored to each individual's needs.

Awarding of funds for supportive services and housing vouchers under the demonstration is made through a national competition. In FY 1992, 16 public housing agencies were awarded $29,555,795 in Section 8 budget authority and $9,874,923 in supportive service grant funds under the demonstration.

An evaluation of the effectiveness of the demonstration in enabling frail elderly individuals to live independently will be an integral part of the demonstration. The Office of Policy Development and Research will award (in FY 1993) a 5-year contract to evaluate the HOPE for Elderly Independence Program. The overall objectives of this evaluation are: (1) to provide a comprehensive picture of the program; and (2) to assess the effectiveness of providing tenant-based assistance in conjunction with a range of supportive services.

The evaluation results will provide data to HUD policy officials for making future decisions by: determining if HOPE for Elderly Independence makes any difference; providing information on how to deliver services more efficiently to scattered locations; and, determining the extent to which the program is more or less efficient than other approaches in preventing or delaying premature institutionalization or relocation to a more restrictive environment.

In addition to the HOPE for Elderly Independence initiative, the Department administers a variety of other programs described in this report, which provide useful and helpful opportunities for low and very low income elderly people.

I. HOUSING

A. Section 202 Capital Advances for Housing for the Elderly and Section 811 Housing for the Disabled

The Section 202 Direct Loan Program has been the Department's primary program for providing housing for the elderly. It provided direct Federal loans to private, nonprofit corporations to finance the construction or substantial rehabilitation of residential projects and related facilities to serve the elderly or disabled.

The Section 202 program was authorized in the Housing Act of 1959. Originally, the program was intended to serve persons whose incomes were above public housing eligibility levels, but still insufficient to obtain adequate housing on the private market. The Housing and Community Development Act of 1974 amended Section 202 to permit the use of section 8 housing assistance payments for eligible lower-income persons who live in projects financed under the program. These payments made up the difference between the rent established for the unit and the tenant contribution, i.e., 30 percent of adjusted gross income.

Section 162 of the Housing and Community Development Act of 1987 further amended section 202 to ensure that the program met the special housing and related needs of nonelderly disabled families and individuals. Beginning in Fiscal Year 1989, projects for people with disabilities were assisted by project assistance payments. Rents were not to be determined on the basis of Fair Market Rents, but were determined by the reasonable and necessary costs of operating a project for people with disabilities. Rental assistance for Section 202 projects for the elderly was not changed.

The National Affordable Housing Act of 1990 authorized a restructured Section 202 program while separating out and creating the new Section 811 program for Housing for Persons with Disabilities. Funding for both programs is provided by a combination of interest-free capital advances and project rental assistance. Project rental assistance replaces Section 8 rent subsidies. The annual project rental assistance contract amount is based on the cost of operating the project. The 30-percent maximum tenant contribution remains unchanged.

The capital advance replaced the direct loan program, and is nonrepayable provided the project serves very low income individuals for a period of not less than 40 years. The capital advance amount is determined by development cost limits adjusted by local high cost factors. Under the Section 202 direct loan program, this amount would have been determined by fair market rents.

During Fiscal Year 1992, the Department committed $366 million to finance 6,023 rental housing units for the low-income elderly and $91.5 million for 1,699 rental units for low-income persons with disabilities.

From reactivation of the Section 202 program in Fiscal Year 1974 through Fiscal Year 1992, approximately $11.2 billion has been reserved, representing 5,461 projects and 242,781 units.

B. Section 231—Mortgage Insurance for Housing for the Elderly

Section 231 of the National Housing Act authorized HUD to insure lenders against losses on mortgages used for construction or rehabilitation of rental accommodations for persons aged 62 years or older, married or single. Nonprofit as well as profit-motivated sponsors are eligible under this program.

The program requires that elderly persons or elderly families occupy no less than 50% of the units within a project. However, if the project was originally built and approved with a greater percentage, owners must restrict the approved amount for use by elderly persons or elderly families. Within individual projects, some of the units must be handicapped accessible.

Section 231 was originally designed for unsubsidized rental housing for the elderly; however, over the years some of those projects have been receiving assistance under the housing assistance payment program (Section 8).

This program has been little used in the past several years. Almost all project mortgages for elderly non-subsidized projects, either new construction or substantial rehabilitation, have been insured under Section 221(d)(3) or 221(d)(4). In FY 1992, one new project was insured containing 80 units. There are a total of 503 projects, providing 66,767 units for elderly families, insured under the program. Total insurance written was $1,175,409,135.

C. Section 202(d) (3) and (4)—Mortgage Insurance Program for Multifamily Housing

Sections 221(d) (3) and (4) authorized the Department to provide insurance to finance the construction or rehabilitation of rental or cooperative structures. The programs are available to nonprofit and profit-motivated mortgagors as alternatives to the Section 231 program. While most of these projects have been developed for families, projects insured under Section 221 can be designed for occupancy wholly or partially for the elderly, and the mobility impaired of any age.

From the beginning of the 221(d) (3) and (4) programs through Fiscal Year 1992, 11,239 projects containing 1,156,175 units were insured, for a total of $31,940.8 million.

D. Section 232—Mortgage Insurance for Nursing Homes, Intermediate Care Facilities, and Board and Care Homes

The primary object of the Section 232 program is to assist and promote the construction and rehabilitation of nursing homes and intermediate care facilities. The vast majority of the residents of such facilities are elderly. Since the beginning of the program in 1959 through September 1992, the Department has insured 1,883 facilities, providing 215,177 beds, for a total of $4,360.8 million.

The Housing and Urban-Rural Recovery Act (HURRA) of 1983 established a Board and Care Home program for the elderly and others as part of Section 232. The program permits units with shared bedrooms and bath facilities and central kitchens. These facilities provide continuous protective oversight of the residents. There is no medical component and no federal requirement for a certificate of need. Board and Care Homes must meet state and local licensing and occupancy requirements.

E. Section 236—Mortgage Interest Reduction Payments

Section 236 of the National Housing Act has assisted private owners to build and operate rental housing wholly or partially for the elderly with usually 10 percent of the units designated for persons with mobility impairments. The program provides mortgage interest reduction payments to owners, thereby reducing tenant rents. No new mortgages can be insured under this program. Section 236 projects may include self-contained apartments, congregate facilities or a combination of the two. Projects may contain cafeterias or dining halls, community room, workshop, health care services and other essential services. Eligible lower-income tenants in many Section 236 projects receive other forms of rental assistance, including Section 8 housing assistance payments.

F. Service Coordinators in Section 202 Projects

The National Affordable Housing Act established service coordinators as an eligible expense under the Section 202 program. Service coordinators are a critical component of the management team whose function is to assist the frail residents of a project access supportive services that they need from the general community.

In Fiscal Year 1992, HUD approved $13,150,663 in new Section 8 funds and $499,555 in residual receipts to fund 100 service coordinators serving 128 projects. HUD plans to make additional Section 8 funds and excess residual receipts available for service coordinators in FY 1993.

G. The Congregate Housing Services Program

The Congregate Housing Services Program (CHSP) was designed to demonstrate the cost-effectiveness of providing supportive services for the elderly and people with disabilities under HUD auspices to prevent or delay unnecessary institutionalization. Under this program HUD made multiyear grants to eligible public housing agencies and nonprofit Section 202 owners for meals and other supportive services needed by frail elderly and nonelderly disabled persons. The CHSP was converted to an ongoing program in 1987.

In Fiscal Year 1992, 56 grantees are operating, serving approximately 1,800 residents on a regular basis. Additionally, about 150 residents were served last year on a short-term, temporary basis, usually after incapacitation or hospitalization. Six million dollars in leftover prior year funds were used to extend the 56 grantees for 14 additional months. Renewals are processed over the year consistent with the expiration date of the grantees.

The existing 56 grantees are completing the second year of a 6 year transition to the new CHSP (see below). Interim program regulations necessary to implement the new statute were published in the Federal Register on December 8, 1992. These cover the existing grantees, except for the match requirement which will be implemented in 1997.

The National Affordable Housing Act established a revised CHSP, which parallels the HOPE for Elderly Independence program. In the revised CHSP, the major changes are as follows:

1. Eligible applicants have been expanded from public housing and nonprofit sponsors under Section 202 to include Sections 221(d), 236, Section 8 Project-based, and Sections 514, 515, and 516 under the Farmers Home Administration. States, Indian tribes, and units of general local government can also apply on behalf of eligible owners regardless of whether the project ownership is nonprofit or for-profit.
2. CHSP has been converted from a HUD-funded effort to one in which HUD pays only 40 percent of the cost of the services, the grantees or third parties pay 50 percent and the participants pay 10 percent. Thus HUD funds become leverage for gaining needed dollars from other sources.
3. A service coordinator is now mandated to work together with the professional assessment committee.
4. Eligible services have been expanded to include monitoring of medication consistent with State law, home safety assessments and purchase of personal emergency response systems.
5. Retrofit and renovation are now eligible expenses under the CHSP.

Congress appropriated $17.7 million in FY 1992. A NOFA for these funds was issued early in FY 1993 which will also include an additional $15.5 million from the FY 1993 appropriation. HUD expects to fund 110–150 new projects.

H. Flexible Subsidy and Loan Management Set Aside (LMSA) Funding

The Flexible Subsidy Program provides funding to correct the financial and physical health of HUD subsidized properties, including those which house the elderly. Flexible Subsidy provides funds for projects insured under Section 221(d)(3), Section 236, and funded under the 202 program (once they have reached 15 years old). Owners may apply for funds for major capital improvements, as well as, correction of short term operating deficits and reserve account deficits. In its entirety, this program is designed to restore the long-term health of properties which receive these funds and provide a better quality of living for the residents. In 1992, nine elderly projects were funded under this program resulting in $10,628,124 of assistance.

The Loan Management Set Aside (LMSA) Program provides Project-based Section 8 funding to HUD-Insured and HUD-Held projects and projects funded under the 202 Program, which need additional financial assistance to preserve the long term fiscal health of the project. This program assists not only in improving the financial condition of the projects which receive it, but it provides additional subsidy for housing expenses to low income elderly who meet income requirements. In 1992, 26 elderly projects were funded, encompassing 1,459 units, for a total of $29,965,800 in new subsidy.

I. Manufactured Home Parks

The Housing and Urban-Rural Recovery Act (HURRA) of 1983 amended Section 207 of the National Housing Act to permit mortgage insurance for manufactured

home parks exclusively for the elderly. The program has been operational since the March 1984 publication of a final rule implementing the legislation.

J. Home Equity Conversion Mortgage Insurance Demonstration

The Department has implemented a pilot program to insure Home Equity Conversion Mortgage (HECM's), also known as "reverse mortgages." The program is designed for persons aged 62 years or older. Under the Housing and Community Development Act of 1987, the Department was authorized to insure 2,500 reverse mortgages. Reservations of insurance authority were allocated among the 10 HUD Regions in proportion to each Region's share of the Nation's elderly homeowners. In late 1990 the Omnibus Budget Reconciliation Act (OBRA) of 1990 increased the statutory authority to 25,000 mortgages and extended the termination date of the demonstration to September 30, 1995. Accordingly, the allocation procedure was terminated and any FHA-approved lender may not participate in this program without restrictions.

Reverse mortgages allow borrowers to convert the equity in their homes into a monthly stream of income or a line of credit. A borrower may choose from among five basic payment options: (1) tenure—provides a borrower fixed monthly payments for as long as the borrower continues to live in his or her home as the principal residence; (2) term—provides fixed monthly payments for a period of months selected by the borrower; (3) line of credit—permits the borrower to make draws up to a maximum amount at times and in amounts of his or her choosing; (4) tenure payments combined with a line of credit; and (5) term payments combined with a line of credit. A borrower is never required to pay back the loan as long as he or she is living in the property as his or her principal residence. If the borrower moves or dies and the property is sold, HUD will insure lenders against losses that could occur if the proceeds from the sale of the property are not sufficient to pay off the mortgage balance.

To date, almost 3,000 cases are either in progress or have been endorsed. The heaviest concentration of use has been in the Northeast, the mid-Atlantic and California. An interim report on the program was sent to Congress on October 1, 1990. A second report to Congress containing a preliminary evaluation of the demonstration is currently being prepared, and should be transmitted to Congress in December 1992.

II. PUBLIC AND INDIAN HOUSING

The Low-Income Public Housing program may be the largest single resource for housing for the elderly in the United States today. According to tenant characteristics data as of November 1992, public housing agencies (PHAs) and Indian housing authorities (IHAs) were managing slightly over 1.3 million housing units of which approximately 32 percent were occupied by families in which the head or spouse or sole member was 62 years of age or older.

(The statutory definition of elderly includes families in which the head or spouse or sole member is handicapped or disabled, regardless of age. Using this definition, an additional 13 percent of the public housing households are elderly.)

Public housing developments are owned by a PHA or an IHA, which are local governmental entities established under State or tribal legislation. Some PHAs and IHAs participate in other subsidized housing programs to lease or operate privately owned rental or home ownership developments. Most PHAs and many IHAs operate Section 8 Rental Certificate, Rental Voucher or Moderate Rehabilitation programs. The public housing program was established under the U.S. Housing Act of 1937. It is essentially a local program, based on a partnership between local communities and the national Government. Through their public housing agencies (PHAs), communities take primary responsibility for providing housing and housing assistance to lower income people, with financial assistance from the national Government. Public housing communities are developed, maintained, and operated by approximately 3,100 PHAs nationwide, from the major cities of the Northeast and Midwest, to suburbs, small towns, and rural areas across the country. There are 180 Indian Housing Authorities that operate housing programs on Indian reservations, and in Alaskan Native Villages and areas of traditional tribal jurisdiction in Oklahoma.

In the Public Housing program, the Federal Government—through the local PHA—pays for development costs and provides operating subsidies to ensure that low rents and adequate services are available. Modernization funds are also available to PHAs to enable them to rehabilitate older projects.

As a condition for this assistance, the PHA agrees to use and maintain the property as decent, safe, and sanitary housing for eligible lower income people, consistent with the requirements of Federal law and regulations. Rents, including utilities, have been set by Congress at 30 percent of adjusted tenant income. In calculating adjusted income, some special deductions are made in the case of the elderly.

In many public housing projects, special facilities and services are provided to meet the needs of the elderly, such as safety and security features, meals and transportation services, and recreational programs. These special services are usually provided by other agencies that rely on funding from Federal, State, and private sources, with the PHA supplying the facilities and acting as the local coordinator.

As a result of statutory amendments in 1983 and 1984, this Department and the PHAs are directed to give priority to applications for new developments for families requiring three-bedroom and larger rental units. Because new public housing development is not the most cost effective means of increasing the availability of affordable housing, production of new public housing is no longer the principal vehicle for development of additional housing resources for lower-income elderly and handicapped people under Federal housing programs. In 1992, the Department reserved funding for 7,585 new units of which 813 (generally efficiencies or one-bedrooms) were identified as being for families whose head, spouse or sole member is 62 or older, disabled or handicapped. The primary emphasis in public housing for the elderly has become preservation of existing stock, maintenance and restoration of existing facilities, and expansion of non-housing services for an aging population.

Other programs, such as the Section 202 direct loan program for development and the Section 8 certificate and voucher programs for rental assistance in privately owned buildings, account for the bulk of new units added to the inventory of housing for the elderly in recent years.

Over the past few years, an increasing number of younger persons with physical or mental disabilities have moved into complexes traditionally populated by senior citizens. Some PHAs have experienced difficulties in handing the resulting changes.

The Department has recognized the special management challenges faced by PHAs because of this change in the project population. Over the last few years, it has made a number of efforts to assist PHAs in dealing with this phenomena. It has sponsored conferences, commissioned several guidebooks and a case study book, and provided guidance on policies and procedures for improving applicant screening and lease enforcement.

HUD has joined with the Department of Health and Human Services in the development of a model cooperative agreement for public housing agencies and mental health agencies. The Departments' objective has been to encourage the local agencies to establish a cooperative relationship for the benefit of their common clients.

On November 28, 1992, the President signed the Housing and Community Development Act of 1992, Title VI focuses on housing for elderly persons and persons with disabilities, including those who live in public housing developments for the elderly. As it implements Title VI, HUD will continue with its efforts to assist PHAs to meet the challenge of providing for the needs of their elderly and disabled residents.

A. Section 8—Rental Certificates and Rental Vouchers

Section 8 of the U.S. Housing Act of 1937 authorizes housing assistance payments to aid low-income families in renting decent, safe, and sanitary housing that is available in the existing housing market. Under the Section 8 existing housing program, rental assistance is provided for families in a variety of existing housing through the use of rental certificates and vouchers. Under these programs, assisted families generally pay 30 percent of adjusted income toward rent and public housing agencies (PHAs) funded by HUD pay the difference between the tenant contribution and the owner-defined market rent for an adequate unit, up to HUD-established Fair Market Rents.

The rental certificate program has proved particularly helpful to "elderly families," because many such residents have been able to qualify for housing assistance while remaining in place, that is, without having to move into an assisted project. Units leased "in place" this way are required to meet HUD's Housing Quality Standards (HQS). As of September 30, 1992, there were approximately 1.1 million units reserved under the Certificate program.

The rental voucher program, which also enables families to receive assistance without moving, are believed to be even more beneficial to elderly persons because of the additional flexibility offered by the absence of rent ceilings. Cumulatively through Fiscal Year 1992, approximately 350,000 vouchers had been reserved.

As of September 30, 1992, approximately 30 percent of all Section 8 existing housing units were occupied by elderly or handicapped individuals, or by families in which at least one of the principal householders is elderly or handicapped.

Authorization is also provided for shared housing arrangements under Section 8 programs. One shared housing concept of particular interest to the elderly permits homeowners to rent space in their homes to tenants who receive rental assistance. Such arrangements can facilitate companionship and security for the elderly as well as reducing housing costs.

Single Room Occupancy (SRO) housing is another option that some localities find especially beneficial for certain segments of the elderly population. SROs are eligible for assistance under both the rental certificate and the rental voucher programs.

III. COMMUNITY PLANNING AND DEVELOPMENT

A. Community Development Block Grant Entitlement Program

The Community Development Block Grant (CDBG) Entitlement program is HUD's major source of funding to large cities and urban counties for a wide range of community development activities. These activities help low- and moderate-income households, eliminate slums and blight, or meet other urgent community development needs. The CDBG program made approximately $3.2 billion available to States and communities in 1991, the most recent year for which complete data is available. Approximately $2 billion of this sum went to 757 metropolitan cities and 125 urban counties by entitlement, with individual amounts determined by formula.

Entitlement communities undertake a wide range of eligible activities in which elderly residents may benefit either directly or indirectly. The CDBG program is decentralized, and local communities are not required to report program beneficiaries by age. For this reason, it is difficult to determine the exact amount of CDBG funds that directly address the needs of the elderly. However, available data indicates that Entitlement communities budgeted $25.6 million in Fiscal Year 1991 to assist senior citizen centers. Metropolitan cities planned to use $2.4 million for this purpose, and urban counties, $13.2 million.

Housing-related activities—primarily rehabilitation—constitute the primary use of Entitlement funding. These activities accounted for approximately $1,097 million or 41.5 percent of all CDBG Entitlement expenditures in 1991. Housing rehabilitation activities include major renovations, minor home repairs, and weatherization services to owner and tenant occupied properties. Many local communities target some of these activities to benefit elderly homeowners and tenants.

Significant amounts of CDBG Entitlement spending for neighborhood improvements, public services, and other public works, directly or indirectly benefit the elderly, CDBG Entitlement grantees allocated about $28.3 million for improvements to and operation of neighborhood facilities, $20 million for the removal of architectural barriers, and $9.7 million for centers for the disabled. Such activities provide significant benefits to the elderly.

B. CDBG State and Small Cities Program

The State Community Development Block Grant and HUD-Administered Small Cities programs are HUD's principal vehicles for assisting communities under 50,000 population that are not central cities. States and small cities use the CDBG funds to undertake a broad range of activities and structure their programs to give priority to eligible activities that they wish to emphasize.

As in the CDBG Entitlement program, States are not required to report to HUD the ages of individuals who benefit from their recipients' activities. Consequently, the level of benefits to the elderly cannot be estimated with certainty. The States and the Commonwealth of Puerto Rico allocated approximately $835 million of State CDBG funds to local governments during Fiscal Year 1990, the latest year for which data on program use are available. Approximately $225 million or 26 percent of that portion of funds which were obligated supported housing-related activities such as the rehabilitation of private properties and weatherization services. Some local governments target some of these activities to benefit elderly homeowners and tenants. Approximately $41 million or 5 percent of State Small Cities CDBG obligated funds assisted community centers and public services. Many local governments use these programs to assist senior citizens.

C. Rental Rehabilitation Program

The Rental Rehabilitation program was authorized by Section 17 of the Housing Act of 1937, as amended by the Housing and Urban Rural Recovery Act of 1983, and provided grants to States, cities with populations of 50,000 or more, urban counties, and approved consortia of units of general local government. In Fiscal Year 1991, Congress made $70 million available for Rental Rehabilitation program grants. These grants finance the rehabilitation of privately owned rental housing in order to help ensure that an adequate supply of standard housing is affordable to lower income tenants. In addition, rental assistance is provided to low-income families and displaced persons to help them afford the increased rent of rehabilitated units or to move to other housing. This assistance is made available through Section 8 Existing Certificates and Housing Vouchers administered locally by Public Housing Agencies.

Under the program 22,818 units were completed in Fiscal Year 1991. As of September 31, 1991 commitments had been issued for 45,693 projects containing 207,624 units, and all rehabilitation construction work had been completed in 45,693 projects containing 161,796 units. Elderly tenants account for approximately 16,000, or 11 percent of the occupied units in these buildings. This program was terminated in FY 1991.

D. Section 312 Rehabilitation Program

Through the Section 312 Housing Rehabilitation Loan Program, HUD made loans for the rehabilitation of single-family and multifamily, residential, mixed use, and nonresidential properties. To be eligible for assistance, properties had to be located in urban areas designated as eligible for the Community Development Block Grant program or the proposed rehabilitation had to be necessary or appropriate for the execution of an approved Urban Homesteading program. Communities also had to give priority for loans to low- and moderate-income owner occupants whose incomes are at or below 95 percent of the median income for that metropolitan area.

In Fiscal Year 1991, 1,130 Section 312 loans totaling $63.95 million were made in 146 communities. Of these, 1,048 loans were used to rehabilitate single family (one-to four-unit) properties and 82 loans were made for multifamily and commercial properties. Although comprehensive data on the ages of borrowers are not currently collected, available information suggests that over 20 percent of Section 312 single-family loan recipients were elderly. The program was terminated in FY 1991.

E. Home Investment Partnership

A new program, created by the National Affordable Housing Act of 1990 provides assistance by formula to States and localities to rehabilitate, build, and provide other assistance for housing low- and moderate-income persons. Elderly who meet income requirements of the Act may receive assistance under the program. For rental assistance, at least 90 percent of the funds must be used for families with incomes no higher than 60 percent of the area median and the rest for families with incomes no higher than 80 percent. The Congress appropriated $1.5 billion for this program in FY 1992, the first year of its operations.

In FY 1992, $1.460 billion was awarded to 436 HOME participating jurisdictions. Fiscal Year 1992 was a start-up period for the HOME Program with less than 1 percent of HOME funds used. An additional $1 billion has been appropriated for the HOME Program for FY 1993. During FY 1993, a substantial number of housing projects will be undertaken to benefit lower income older Americans and their families.

As a condition for receiving assistance under this program, a Comprehensive Housing Affordability Strategy (CHAS) must be prepared. Included in the CHAS narrative shall be a description of the characteristics, services and special housing needs of persons requiring special services, including the frail and elderly.

Under HOME a number of model programs are being developed to guide communities in developing local programs. Among them is a model program to provide home repair services for older homeowners and disabled homeowners. Activities previously conducted under the Rental Rehabilitation and Section 312 programs are eligible activities under HOME.

F. Emergency Shelter Grants Program

The Emergency Shelter Grants Program provides funds to States, metropolitan cities, urban counties, Indian Tribes, and territories to improve the quality of emergency shelters, make available additional shelters, meet the cost of operating shel-

ters, provide essential social services to homeless individuals, and help prevent homelessness.

In FY 1992, Congress made $72 million in Emergency Shelter program grants available to States, cities, urban counties and territories. HUD allocated approximately $41 million to 317 Entitlement communities, with individual amounts determined by formula. States distributed approximately $31 million to cities, counties, and nonprofits within their jurisdictions.

As in the CDBG Entitlement Program, States and communities are not required to report to HUD the ages of individuals who benefit from their recipients' activities. Consequently, the level of benefits to the elderly cannot be estimated with certainty. However, according to a HUD survey of shelter managers, it is estimated that over a period of time, between 2 and 6 percent of the homeless persons who are occupants of shelters on a typical night are 65 years of age or over.

G. Supportive Housing Demonstration Program

The Supportive Housing Demonstration Program (SHDP) has two components, Transitional Housing and Permanent Housing for the Handicapped Homeless. The Transitional Housing Program is designed to provide short-term housing and support services that facilitate the transition of homeless persons to independent living. The Permanent Housing for the Handicapped Homeless Program assists States in developing community-based, long-term housing and supportive services for handicapped persons who are homeless. The program aids the acquisition, rehabilitation, or new construction of such housing facilities and the payment of operating costs and supportive services for 5 years.

In fiscal year 1992, the Transitional Housing Program awarded private nonprofit and government sponsors $98.1 million to develop 103 projects. In fiscal year 1992, the Permanent Housing Program awarded $43.6 million to States for 50 projects that are developed in partnership with private nonprofit organizations. Another $41 million was awarded to grantees whose initial SHDP grants expired. The renewal grants were for operating and supportive services costs for the balance of 10 years.

OTHER ACTIVITIES

A. Fair Housing and Equal Opportunity (FHEO)

Section 807(b) of the Fair Housing Act (the Act), effective March 12, 1989, provides an exemption from the requirement of nondiscrimination against persons with familial status in circumstances where a housing provider offers "housing for older persons." The Act defines such housing as: (1) housing for the elderly provided under any State or Federal program designed and operated for such purpose; (2) housing intended for, and solely occupied by persons 62 years of age or older; and (3) housing intended and operated for occupancy by at least one person aged 55 or older per unit.

Under the Act, a housing provider must satisfy three criteria in order to qualify for the "55-and-over" exemption. First, such housing must offer significant services and facilities specifically designed to meet the physical or social needs of older persons, or, the housing provider must show that the provision of such facilities and services is impracticable, and that such housing is necessary to provide important housing opportunities for older persons. Second, at least 80 percent of the units in such housing must be occupied by at least one person 55 years of age or older per unit. Finally, housing providers must demonstrate their publication of, and adherence to, policies and procedures that demonstrate an intent to provide housing for persons 55 years of age or older.

From March 12, 1989, through September 30, 1992, familial status was alleged as a basis of discrimination in 7,613 complaints filed with the Department pursuant to the Act. This represents 23.6 percent of all complaints filed during that period. Many of these complaints were filed against housing providers who claimed the "housing for older persons" exemption. All such complaints are investigated and resolved in accordance with the procedures set forth in the Act and the implementing regulations.

During calendar year 1992, the Department received five complaints alleging age discrimination in federally assisted programs. Two of the five complaints were forwarded to the Federal Mediation and Conciliation Service (FMCS) for mediation. The FMCS was unsuccessful in mediating these two complaints, and they were returned to the appropriate HUD Regional Office of FHEO for investigation. The three remaining complaints are also being investigated by HUD Regional Offices.

Finally, in furtherance of the Department's goal of developing policies and procedures on substantive issues identified as requiring further guidance for the public, the FHEO Office of Investigations proposes to draft and issue regulations defining and clarifying the term "significant facilities and services," as referenced in Section 807(b) of the Act, during calendar year 1993.

B. American Housing Survey

The 1989 National American Housing Survey, released December 1989, and subsequent biennial national surveys, contain special tabulations on the housing situations of elderly households in the United States. The tabulations are in the same format as those produced in previous years for Blacks and Hispanics, for households in the four census regions, and for central cities, suburbs, and nonmetropolitan areas. An elderly household is defined as one where the householder, who may live alone or be the head of a larger household, is aged 65 years or more. The tabulations include information on housing and neighborhood characteristics of the previous housing of recent movers, both owners and renters. Special information is provided on households in physically inadequate housing or with excessive cost burdens, and on households in poverty. Separate data are provided for elderly Black and Hispanic households.

ITEM 8. DEPARTMENT OF THE INTERIOR

January 19, 1993.

Dear Mr. Chairman: The Department of the Interior is pleased to provide you with the enclosed report in response to your letter of October 27, 1992, wherein you asked this Department to describe its activities in 1992 on behalf of older Americans.

The enclosed report includes information relating to the Bureau of Indian Affairs, the Bureau of Land Management, the Bureau of Mines, the Bureau of Reclamation, the Departmental Office for Equal Opportunity, the Departmental Office of Personnel, the Minerals Management Service, the National Park Service, the Office of Inspector General, the Office of Surface Mining Reclamation and Enforcement, the U.S. Fish and Wildlife Service, and the U.S. Geological Survey.

Interior is committed to ensuring that older Americans are beneficiaries of its programs and an effective and viable part of its work force. The enclosed report not only demonstrates, in part, the many outstanding accomplishments of Interior's bureaus and offices toward serving older Americans but it shows as well how older citizens and employees have been an invaluable resource throughout all aspects of Interior's operations.

Again, we thank you for allowing Interior the opportunity to make this report to your Special Committee on Aging.

Sincerely,

John E. Schrote,
Assistant Secretary, Policy, Management and Budget.

Enclosure.

BUREAU OF INDIAN AFFAIRS

The Bureau of Indian Affairs (BIA) provides services directly, or through contract, to 949,000 Indians, Eskimos, and Aleuts who reside in 31 States. According to the Bureau's January 1991 Indian Service Population and Labor Force Estimates, approximately 6 percent of the Indian population residing on and adjacent to Reservations is age 65 and over. In FY 1992, BIA received funding for the delivery of services (including education, employment assistance, social services, law enforcement, judicial services, and tribal government services) which both directly and indirectly benefit older Native Americans.

In addition, the Bureau participated in an Interagency Task Force on Older Indians. Members of this permanent task force include representatives of Departments and Agencies of the Federal Government with an interest in older Indians and their welfare. The task force is chaired by an Associate Commissioner of the Administration on Aging within the United States Department of Health and Human Services. It is required to submit to the Commissioner on Aging, for inclusion in an annual report to Congress, findings and recommendations with respect to facilitating the coordination of services and the improvement of services to older Indians.

BIA is commmitted to programs for all individuals that are free from discrimination based on age, sex, National origin, race, color, and handicapping condition and to promote equal opportunity through its policies and practices affecting employees

and applicants. Of the 14,908 employees in the BIA work force, as of September 30, 1992, 9,241 are over 40 years of age (62 percent), and 141 are over 65 years of age. The average age of workers is 43 years.

Older workers are well represented in a variety of occupations within the Bureau, including accountants, auditors, computer specialists, engineers, and physicial scientists. The needs of older workers are addressed through the Bureau's employee development program. Retirement planning seminars are regularly attended by eligible Bureau employees. In addition, Bureau managers and supervisors continue to receive training which addresses how to avoid age discrimination. The result of such training is reflected in the great success the Bureau has had this year in informally resolving allegations of discrimination (almost 90 percent).

BUREAU OF LAND MANAGEMENT

The Bureau of Land Management (BLM) is committed to administering a natural resource program for all individulas that is free from discrimination based on age, sex, National origin, race, color, religion or handicap and to promoting equal opportunity through our policies and practices affecting employees, applicants, and users of the public lands.

Of the 11,474 employees in the BLM work force, some 6,047 are 40 years of age or older (53 percent) and 71 are over 65 years of age. A dozen active employees have been recognized for serving their Government for more than 40 years. In addition, approximately 22,000 volunteers contributed their skills and services to the BLM in support of continuing and special functions, including 1,102 who are over 65 years of age. During 1992, several of the senior volunteers received the BLM's Exemplary Volunteers for the Public Lands Award for their extraordinary service as volunteers.

The BLM carefully monitors operating conditions to ensure that employees and members of the public have access to BLM employment installations, facilities, and programs in accordance with Federal laws and regulations.

BUREAU OF MINES

As a scientific organization, the Bureau of Mines values the technical expertise that is representative of a person who has long and extensive experience in research, analysis, development and assessment activities. The expertise of senior individuals for our highly specialized technical and scientific positions is reflected by the following:

1. The Bureau currently employs 182 employees age 60 and over. This equates to 8.2 percent of the Bureau's work force.
2. Forty-five percent of Bureau employees age 60 and over are in professional positions.
3. Bureau employees age 60 and over represent 2.8 percent of the Bureau's minorities and women.
4. Four employees age 60 and over were hired during this reporting period.

Forty-eight Bureau employees age 60 and over retired during this reporting period. The servicing personnel offices provided individual retirement counseling and issued periodic information and reminder notices regarding pre-retirement seminars to Bureau employees who were either undecided about retirement or would be eligible for retirement within a specific number of years. The Bureau will continue to utilize hiring authorities to employ reemployed annuitants, members of the Secretary's Advisory Committee, and college/university faculty. During 1992, the Bureau awarded 111 awards to employees age 60 and over. Of this number, two employees received Meritorious Awards. A review of internal and external employment policies indicates that the Bureau of Mines has and continues to support the interest and needs of the aging through its diversified programs and services. The Bureau continues to stress equal treatment for all applicants and employees.

BUREAU OF RECLAMATION

The Bureau of Reclamation (Reclamation) conducts many activities throughout the year that affect and benefit aged individuals. Reclamation's personnel offices maintain contact and provide services to many retirees who need advice or have questions concerning their retirement and health benefits. In addition, retirees and their spouses attend health insurance fairs where representatives from different insurance carriers are available to discuss the provisions or changes to their respective medical plans. Several of Reclamation's regional offices mail a monthly newsletter to all retirees. The newsletters contain information on Reclamation, current

employees, past employees, and are highly regarded by retirees as a way to keep in touch. Additionally, pre-retirement briefings and seminars are held for all interested employees who are within five years of retirement eligibility.

Employment Opportunities

Reemployed annuitants are hired to perform special projects or provide assistance in specialized technical areas of work. Annuitants are able to offer invaluable experience and expertise to these assignments. Reclamation continues to stress employment of older Americans in occupations where their years of experience and expertise in specialized work areas are invaluable to the mission of Reclamation (such as Civil, Electrical and Mechanical Engineers, Construction Inspectors, and Hydroelectric Mechanics).

Reclamation's Weber Basin Job Corps Civilian Conservation Center in Ogden, Utah, continues to have an established Human Resources Agreement with the United States Department of Agriculture, Forest Service, consistent with Title V of the Older American Community Service Employment Act of 1973. The purpose of this agreement is to foster and promote useful part-time work opportunities in community service activities for unemployed low-income persons who are 55 years of age or older. During FY 1992, Weber Basin increased the number of older individuals employed under this agreement from two to five. One individual is employed as a maintenance helper; one works as a driver; one works as a student tutor; and two are employed in clerical positions.

An established Host Agency Agreement between Green Thumb, Inc., and Reclamation's Collbran Job Corps Civilian Conservation Center, Collbran, Colorado, continues to be utilized to employ older Americans at the Center. Green Thumb, Inc., administers a Senior Community Service Employment Program by virtue of a grant with the United States Department of Labor. Two individuals continued their employment as clerical workers during FY 1992 at the Collbran Job Corps Center under this Agreement.

Handicapped Access

Under Section 504 of the Rehabilitation Act of 1973 (P.L. 93-112), as amended in 1978, progress continued to be made in 1992 towards making those programs and activities available to the public also accessible to disabled persons.

During previous fiscal years, self-evaluations and transition plans were completed for those Upper Colorado Region activities that are available to the public. In 1992, the region located in Salt Lake City, Utah, continued implementation of Section 504 activities which include retrofitting of restrooms, buildings, displays, tour routes, and campgrounds under the auspices of the Flaming Gorge and Curecanti Field Divisions of the Colorado River Storage Project and the Grand Junction Project Office. These modifications will continue to make the Upper Colorado Region facilities more accessible for older Americans who experience some degree of disability.

Visitors to public facilities of Reclamation's Pacific Northwest Region, Boise, Idaho, consist of seniors that are assessed as persons with some form of disability; typically having visual, hearing, and a variety of mobility impairments. Because of their disabilities, they benefit directly from the 504 program activities. In FY 1992, Reclamation's Pacific Northwest Region had 504 accomplishments. They included: (1) modification of facilities, such as restrooms, added access ramps, handrails, the alteration of walkways, gradients for visitors in wheel chairs or those using walkers, crutches, canes, etc.; (2) interpretive data (brochures) printed in large point print or on audio-visual aids (captioned videos and films) that were developed allowing elderly persons with limited vision to access information about Reclamation programs, facilities, and activities; and (3) extensive use of graphics for persons with memory loss or slowness in thought to be able to grasp basic information such as locating restrooms and retrieving information from a brochure of display.

Recreation

At Reclamation's Yuma Projects Office, Yuma, Arizona, there are special tours of the Yuma Desalting Plants conducted frequently for "winter visitors" who are mostly retirees/tourists.

The Arizona Project Office (APO) has close association with residents of Sun City, Arizona, which is a retirement community near Lake Pleasant and the new Waddell Dam. Several groups of Sun City residents have visited the Waddell Overlook during much of the construction. Representatives of Sun City were invited to the "Topping Out" ceremony for the completion of the New Waddell Dam. Reclama-

tion's Public Affairs Officer is frequently interviewed by the Daily News, Sun, the Sun City newspaper. In addition, APO regularly conducts tours of the Central Arizona Project (CAP) facilities for residents of Sun City, to increase their understanding of the CAP. There are a number of senior citizens who serve as members of the APO committee to develop a future CAP Bike Trail along the CAP canal.

There is significant involvement with senior citizen groups for the increased recreational development that will result from the modification of Roosevelt Dam, Arizona. A large number of senior citizens attended the Joint Agency Public Forums at Punkin Center, Arizona, concerning the development of recreation facilities at Lake Roosevelt.

VOLUNTEERS

The Mid-Pacific (MP) Region is making use of the Senior Community Service Employment Program (SCSEP). The program provides temporary work experience for people aged 55 and older with limited financial resources. Sponsored by the American Association of Retired Persons (AARP), SCSEP gives clients the opportunity to sharpen and develop skills while searching for a permanent job. Employees work 20 hours per week and receive on-the-job training while filling the needs of the organization. The salary is paid through AARP. While the client gains skills and experience, the employer benefits from the client's dependability, maturity, and life experience.

The MP Region has also begun utilizing retirees by inviting them to be guest speakers at Regional newcomers' orientations. The retiree's knowledge and experience gives new employees valuable insight and a better understanding of Reclamation's mission. Providing the opportunity to return to the agency and speak instills pride in the retiree.

AWARDS/RECOGNITION

All Reclamation's regions reported that they granted Superior Service Awards to senior employees as well as many performance awards during FY 1992.

Reclamation's special event that coincided with its 90th Birthday Celebration was the Waddell "Topping Out" ceremony at the APO. All retirees in the area were invited to the ceremony and special accommodations were extended to a retiree with a physical handicap who was unable to travel alone. Arrangements were made to provide air fare for him and his spouse to attend the ceremony.

DEPARTMENTAL OFFICE FOR EQUAL OPPORTUNITY

The Departmental Office for Equal Opportunity (OEO) serves as the focal point for all federally conducted and federally assisted civil rights program functions in the Department of the Interior. This program includes managing and coordinating both employee and consumer activities relative to the prohibition of age discrimination. To this effect, Departmental Federal equal employment counselors were provided with training and technical assistance in counseling complainants through three general sessions, including telephone conferences with regional counselors unable to travel to Washington. Training and educational materials were developed for these sessions, which included among others, the subject of age discrimination. Quarterly and annual reports relative to the scope and type of complaints were prepared for the Department, the Equal Employment Opportunity Commission, and the Department of Health and Human Services. These reports included information concerning complaints of age discrimination filed with Interior.

In fiscal year 1992, OEO managed a Departmentwide program for resolving equal employment complaints relative to Interior's employment practices. OEO provided leadership and direction for processing 386 complaints of alleged Federal employment discrimination of which approximately 30 percent were alleged age discrimination.

With regard to Interior's Federal financial assistance programs, OEO effected, through agreements with bureaus, approximately 6,100 civil rights compliance reviews of Interior's federally assisted programs and activities to determine, among other concerns, State and local compliance with requirements prohibiting age discrimination. State and local recreation programs were evaluated as well as State fish and wildlife licensing activities for inappropriate age distinctions prohibited by the Age Discrimination Act of 1975. OEO also provided continual assistance to Departmental bureaus and offices and State and local governments regarding the application of Interior's Federal assistance age discrimination policies. Additionally, OEO processed numerous inquiries from Federal, State and local government agen-

cies, private organizations, and citizens regarding the Department's policies against age discrimination.

In FY 1992, OEO processed eight civil rights complaints from the general public that alleged discrimination on the basis of age in programs and activities to which Interior provided Federal financial assistance.

DEPARTMENTAL OFFICE OF PERSONNEL

The Departmental Office of Personnel reports that as of September 30, 1992, Departmental statistical profiles indicated that there were 338 individuals who were age 70 or older. This represents an increase of 58 persons from the figure for 1991. Of the 338 employees, 24 individuals were 80 years or older. A listing by occupation and work schedules of Interior employees 80 years and older, as of September 30, 1992, is provided as a part of this report (See Attachment A). Also, a statistical profile of the total number of employees 70 years and older has been made a part of this report (See Attachment B).

MINERALS MANAGEMENT SERVICE

The Minerals Management Service (MMS) continues to work to support programs for older Americans. Its work force statistics follow:

1. The MMS work force, age 40 and over, continued to increase during the past year; from 65 percent in 1991 to 67 percent in 1992 (1,379 of 2,045 employees). Of the total number of employees age 40 and over, 117 are over the age of 60. This number remained the same from 1991.

2. Older employees are well represented in a variety of occupations within MMS, including accountants, auditors, computer specialists, engineers and physical scientists.

3. The needs of MMS older workers are addressed through its employee development program. Retirement planning workshops are regularly attended by eligible MMS employees. For example, in 1992, 158 employees (8.0 percent of the total work force) attended the retirement planning workshops. Of this number, 14 persons actually retired. In addition, MMS managers and supervisors continue to receive equal employment opportunity training which includes how to avoid age discrimination. The result of this training is reflected in the number of discrimination complaints filed on the basis of age with the MMS during the year. In 1991, a total of 9 older employees filed discrimination complaints based on their age as compared to 8 in 1992.

4. The MMS continues to implement effective personnel management policies to ensure that equal opportunity is provided to all employees and applicants, including the aged.

5. The MMS also continues to perform its mission-related functions with diligence and with appreciation of the importance of its actions. A major mission responsibility affecting large numbers of citizens is the approval of mineral royalty payments to various landholders, including numerous older Americans who often depend heavily on these payments to meet their basic human needs and rely on the ability of MMS to effectively discharge these financial responsibilities. MMS continues to improve the delivery systems by which these payments are made.

6. The MMS offshore mission has the ultimate objective of increasing domestic mineral (oil and gas) production through offshore resources, thereby decreasing United States dependence on foreign imports. Such activities have a significant effect on the economic well-being of all Americans, especially older Americans.

7. Employees of the MMS Gulf of Mexico OCS Region also volunteer with relatives and friends (many of whom are over the age of 50) in the "Adopt a Beach Program." Twice a year, these individuals go out and clean up beach areas located 12 miles south of Gulf Port, Mississippi. The "Adopt a Beach Program" is sponsored by the Mississippi Marine Debris Task Force and is a part of the "Take Pride in America" initiative.

8. Annually, MMS employees in the Royalty Management Program, Denver, Colorado, participate with individuals from local government, private industry and community groups in projects assisting senior citizens by painting their houses and making home repairs.

In summary, the MMS has a strong commitment to all of its employees, including older workers, MMS older workers are a source of valuable knowledge and experience and a significant factor in the success of the MMS mission.

NATIONAL PARK SERVICE

The National Park Service (NPS), over the past few years, has made significant efforts to insure that the full range of the visiting public, including senior citizens, can get into its parks and once there, can participate in and receive the benefits of the programs and services provided.

One step taken by NPS to improve accessibility was to create a special unit in its Washington Office to monitor and coordinate the entire Systemwide effort. NPS management determined that the Service should approach the issue in a comprehensive, organized way rather than on a project-by-project basis. Accordingly, in 1979, the Special Programs and Populations Branch was established and staffed with individuals who have special background and experience in recreation and park programming with special populations. The primary goal of the Branch is to develop and coordinate a Systemwide comprehensive approach to achieve the highest level of accessibility that is feasible while, at the same time, assuring consistency with other legal mandates of preservation and protection of the resources to be managed.

Since its creation, the Branch has been working with resource persons in each of the regional offices and other NPS units to assess the current level of accessibility of various parks, identify the barriers to accessibility, develop policies and guidelines regarding appropriate methods and techniques for improving access, and providing technical assistance and in-Service training on cost-effective approaches and program implementation. Through these coordinated efforts, NPS has been recognized as a leader in opening opportunities for disabled persons and senior citizens as well.

At the present time, continuing efforts are being made to increase the number of older citizens in the Service's Volunteer-in-the-Parks (VIP) Program and NPS is currently working with AARP to accomplish that. Since 1983, the number has increased from 4 percent to 15 percent.

Another major effort of NPS, as it relates to senior citizens, is providing Golden Age Passports. This passport is a free, lifetime entrance permit to those recreation areas administered by the Federal Government that charge entrance fees, and is issued to citizens or permanent residents of the United States who are 62 years of age or older. The passport holder also gets a 50 percent discount on Federal use fees charged for facilities and services, such as camping, boat launching, and parking. Since 1975, when this program was changed from a 1-year permit to a lifetime permit, the Service has issued approximately 3 million passports.

The NPS is increasingly becoming more accessible for all citizens including the elderly and other special populations. This is due to NPS continuing efforts to remove barriers that inhibit special population groups from experiencing and enjoying the national parks. Many senior citizens, who are experiencing the loss of hearing, problems with visual acuity and mobility impairments, benefit from these programs and facility modifications. Large type materials, captioned audiovisual programs, audio messages for the blind, and adaptions for wheelchair users are all modifications from which senior citizens can benefit.

The NPS continues to provide financial assistance to State and local governments for recreation land acquisition and development under the Land and Water Conservation Fund (LWCF) Program and the Urban Park and Recreation Recovery (UPARR) Program. Under this and other financial assistance programs, NPS encourages and monitors grant recipients to ensure that adequate provisions are in place to ensure access to assisted recreation facilities and services for elderly citizens, in accordance with the Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, as amended. Monitoring activities include regular site inspections of some 37,000 assisted areas and program reviews to detect any access problems and remind grantees of their responsibilities under the law.

The NPS provides financial and technical assistance to States for Statewide Comprehensive Outdoor Recreation Plans under the LWCF. One of the major objectives of such planning is to identify and address the recreation needs of special populations, including the elderly and people with disabilities. Statewide Comprehensive Outdoor Recreation Plans are critical in that they are the major policy document for implementation of outdoor recreation at the Statewide level. In addition, a number of urban communities also continues with special planning and recreation programming efforts for senior citizens initiated in earlier years with grants from the Urban Park and Recreation Recovery Program.

The NPS continues to monitor and identify the number of employees who are 60 years of age and over. In 1988, a survey indicated a decrease in the number of employees in this age group. However, in 1989 and 1990, surveys indicated that em-

ployees 60 years of age and over were at all GS levels and showed a slight increase in the total number employed. In 1991, 1,478 employees were 60 years of age and over. These employees were equally divided between permanent and temporary employment. About 5 percent of the permanent workforce was 60 years of age and over. Although the overall total was a 6 percent decrease from the preceding year (1,566), a trend is not readily apparent.

The NPS continues to monitor and identify the number of employees who are 60 years of age and over. As of October 1, 1992, there were 1,089 employees in the NPS who were 60 years of age or older. The total number of employees over 60 years of age has decreased over the past 5 years. However, about 59 percent of the 1,089 employees (up from about 50 percent) are permanent employees. The data for permanent employees only is as follows: 499 age 60 to 65; 108 age 66 to 70; 27 age 71 to 75; 7 greater than age 75. Data for 1992 continues to indicate that employees 60 years of age and over were at all GS levels. The NPS will continue to monitor this situation and will continue efforts to improve services to this age group.

OFFICE OF INSPECTOR GENERAL

In Interior's Office of Inspector General (OIG), during FY 1992 there were 35 individuals promoted or hired as a result of job vacancy announcements. Thirteen persons were selected or promoted with ages ranging from 42 to 54 years at grades GS-6 to GM-15. Of the other selections, 11 persons were under 30 years of age and 11 persons ranged from 30 to 38 years of age. Fifty-four percent of OIG employees are over 40 years of age; 58% of the employees in "Audits" are over 40; 51% of employees in "Administration" and the immediate office of the Inspector General are over 40; and 38% of employees in "Investigations" are over 40. The maximum age for a new hire of a criminal investigator which comprises the majority of the "Investigative staff," is 37 years. Employees over 40 contribute substantially to the success of the Office of Inspector General. Fifty-four employees over 40 years of age were given awards in FY 1992 ranging from $500 to $5,000, or quality step increases. This represents 49% of the total of 109 awards given during FY 1992 to all OIG employees.

OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

The Office of Surface Mining Reclamation (OSM) has a total of 1,086 employees of which 711 employees were 40 years of age or older. OSM hired 21 individuals age 40 or older during FY 1992, and there were 15 retirees age 40 or older. There were 9 discrimination complaints filed on the basis of age during FY 1992.

The Equal Employment Opportunity (EEO) policy statement issued to all OSM employees on April 17, 1992, addressed nondiscrimination of older employees and is still in effect. In an effort to increase awareness of the growing population of aging in the workplace, the Human Resources Management Staff continues to support activities on behalf of older Americans. The EEO Office conducted EEO training for managers and supervisors in the field and at Headquarters. As part of this training, emphasis was focused on awareness of the opportunities and contributions of the aging work force.

U.S. FISH AND WILDLIFE SERVICE

The U.S. Fish and Wildlife Service (Service) provides opportunities to all individuals throughout its system and ensures that older individuals are utilized through special programs, volunteerism, and employment opportunities. The Service currently employs a total of 9,537 individuals. There are 4,438 (47%) Service employees over the age of 40, which is a decrease of 163 employees from the previous year. Of the Service employees over the age of 40, there are 325 (7%) over the age of 60, an increase of 75 employees from the previous year.

The majority of the Services' mission related occupations, which include biologists, are in Professional positions. Of the 4,438 Service employees over the age of 40, there are 1,632 (37%) in Professional positions, 79 (5%) of whom are over the age of 60. Other demographic information regarding the 4,438 Service employees over the age of 40 includes the following: 449 (10%) are in Administrative positions with 42 (9%) of them over the age of 60; 1084 (24%) are in Technical positions with 67 (6%) of them over the age of 60; 642 (15%) are in Clerical positions with 50 (8%) of them over the age of 60; and 434 (10%) are in Wage Grade positions with 86 (20%) of them over the age of 60.

During FY 1992, there were 29 employment related discrimination complaints filed Servicewide. Of these, 4 were filed alleging discrimination on the basis of age (40 and above). Additionally, the Service had 52 federally assisted/conducted pro-

gram related complaints filed during FY 1992. Of these, 3 were filed alleging discrimination on the basis of age (40 and above).

The completion of the video entitled "Access for Everyone" during FY 1992 exemplifies the Services' strong commitment to providing opportunities to all individuals. This video accurately portrays accessibility as an issue not only for people with disabilities but for everyone, including older individuals. This production received the Golden Eagle Award from the Council on International Non-theatrical Events for the best video produced by a Government agency.

One of the many special programs in which the Service actively participates is the National Elderhostel program. The Service, through its facilities such as the Kenai National Wildlife Refuge in Alaska, provides tours and information to older individuals in conjunction with the area university system as a part of this program. Also, the Service is an active participant in the Golden Age Passport program which provides for free entrance or lower entrance fees to facilities for individuals over the age of 62 and people with disabilities.

The Service utilizes numerous individuals in its volunteer program, many of whom are older individuals. During FY 1992, there were a total of 18,024 volunteers Servicewide, of which 1,326 (7%) were over the age of 61. Volunteers participating in this program contributed more than 960,000 hours of their time and provided valuable assistance to the Services' management of our Nation's fish and wildlife resources.

The Service has a working agreement with the American Association of Retired Persons (AARP) to utilize its Volunteer Talent Bank which is a computerized referral system. This AARP referral system has been extensively utilized by the Service since 1987. It is a very effective means through which older individuals interested in sharing skills appropriate to the needs of the Service are matched with opportunities to participate in its volunteer programs and activities.

The Service also utilizes an employment program for older individuals based in the Greater Boston, Massachusetts area, called Operation A.B.L.E. (Ability Based on Long Experience). Operation A.B.L.E. is a non-profit organization which promotes the employment of individuals over 45 years of age. This program has been utilized by the Service since 1987 and has proven to be an effective means of obtaining experienced individuals for temporary and permanent employment at its facilities located in the Greater Boston, Massachusetts area.

The Service recognizes the numerous contributions of older individuals through various awards programs. There were 3 Service employees over the age of 40 who were recognized for their outstanding volunteerism and awarded the Department of the Interior's Point of Light Award during FY 1992. The Take Pride in America (TPIA) Outstanding Contribution Awards program annually recognizes Service employees, programs and other individuals for outstanding contributions to the promotion of stewardship of natural resources. A large number of the TPIA Outstanding Contribution Award recipients have been volunteers participating in the Services' volunteer programs as well as Service employees, many of whom are over 40 years of age.

The Service also values the expertise of its retired employees and is in the process of developing a pilot program entitled Retirees for Youth Recruitment. This pilot program will utilize Service retirees to educate and inform youth about natural resource programs and careers. A brochure and survey was sent to approximately 100 Service retirees to assess interest levels and determine any modifications and/or improvements needed for the program prior to implementation.

U.S. GEOLOGICAL SURVEY

The U.S. Geological Survey (USGS) is committed to the full utilization of the knowledge and scientific expertise of its older employees and volunteers.

Employment Policy

The USGS employment policy stresses equality of opportunity for all Americans, particularly for older persons. Qualification requirements are based on the knowledge, skills, and abilities required for each position being filled in the Bureau. This is beneficial to older employees, many of whom possess extensive experience in water resource, geologic, or mapping programs. Physical performance standards of vacancies are kept at appropriate levels needed for safe and effective performance, but also at levels that will otherwise successfully accommodate older employees. The USGS presently employs 54 persons who are age 70 or older, and 5,541 persons age 41 to 69 years old, out of a total work force of 11,059. Also, currently, the Bureau retains the services of 143 people as reemployed annuitants who are 55 years of age

or older. These valued employees serve in a wide spectrum of grade levels and professional, technical, and clerical support positions.

Changing Work Force Demographics

American society is undergoing important and dramatic changes, particularly with regard to its work force demographics. Not too many years ago it was considered significant that many citizens were living beyond age 75. At the present time, however, more than 3 million Americans are older than 85, and those persons 85 and over are now the fastest growing segment of the American population. According to the 1990 census, the 85-and-older population has increased 38 percent since the last census. Since 1960, the percent of Americans who achieve age 85 and over has grown by 232 percent, while the general population only grew by 39 percent.

As the general population ages, business, industry, and government must come to understand that hiring older workers is good business. The Department of Labor has projected that the American work force will grow more slowly and employ increasing numbers of minorities, women, and older workers by the year 2000. It also projected that people between the ages of 55 and 64 will constitute the fastest flowing segment of the labor force from 1995 to the year 2000. Future employers, particularly government agencies at every level, will need to recognize the unique and valuable contributions that older workers can bring to the work site.

Retirement Seminars

During the past year, in recognition of the number of older employees on the staff of the Bureau, three retirement planning seminars were held. These seminars, each of which lasted for 3 full days, applied planning skills in a systematic way to help employees prepare for their retirement years. In addition, each seminar class provided a wealth of information on a wide variety of different topics that participants needed in order to assure the highest quality for their planning efforts. Large and enthusiastic groups of employees attended each seminar.

Older Worker Employment Initiatives

The USGS works continually to expand its programs and initiatives on behalf of older employees. In the past year, for example, contact was made with the Senior Employment Resources of Fairfax County in an effort to share USGS vacancy announcements to attract older applicants for vacant positions. In a second and more recent initiative, contact was made with the "Golden Gazette," a newspaper for older citizens sponsored and published by the Fairfax County Area Agency on Aging, because the USGS National Center in Reston, Virginia, is located in Fairfax County. Efforts are now underway to use the "Golden Gazette" as a possible additional resource from which to recruit older applicants for employment consideration.

Profiles in Service

Several examples of current contributions of typical older employees include the following:

In June 1992, Cornelia C. Cameron, age 81, received a special achievement award for her research activities, including wetlands studies in the midwestern States, and for her continuing outstanding management of program funds in support of project activities on peat and peat resources throughout the eastern portion of the United States. Ms. Cameron has written several general interest publications and contributed chapters in Bureau circulars on peat bogs and wetlands. In addition to her research writings, she has participated in several national and international symposia and workshops. Her recent work on herbicide control in peatlands in the midwestern States has set the standard for such studies and has resulted in expanded research studies in Iowa and Minnesota. Ms. Cameron continues to be a highly productive research scientist of international standing and is regularly sought out for advice and guidance by other scientists, State and local governments, and other Federal agencies, and is generally recognized as the international authority on peat resources. In June 1992, she was honored with a 40 year Federal service award.

The employment information receptionist in the Bureau's Headquarters Office of personnel in Reston is Mrs. Clara C. Wilson, age 66. Mrs. Wilson, who has completed 30 years of Federal service, regularly performs her employment information assignments for both the general public and USGS employees in an outstanding manner. She provides the highest possible quality service to current employees and the public seeking general and specific information regarding employment opportu-

nities with the Bureau and other Federal agencies. Her pleasant, informative, courteous, and sensitive approach to a wide variety of individuals seeking employment has been recognized, both verbally and in writing, by a multitude of grateful job seekers, managers and employees. Mrs. Wilson is the important initial point of contact for most job seekers who visit the USGS National Center in Reston. Clearly demonstrating her exemplary performance on a regular basis, Mrs. Wilson has set an extremely high standard of caring, concern and effectiveness, while successfully carrying out her daily assignments.

In Denver, Colorado, Harry A. Tourtelot, age 74, serves as a senior research geologist and provides advice and guidance to a large number of persons and a wide range of organizations in the USGS and outside. With 50 years of Federal service, Dr. Tourtelot shares his extensive knowledge of science and management in many different ways to facilitate the activities of the Geologic Division and the USGS. He works continuously with the Chief Geologist's Ethnic Minority Advisory Committee, mentoring and giving considerable individual counsel and advice. He also participates in public affairs meetings; works closely with a group concerned about employee child care needs; participates as an individual research scientist in program planning activities; serves as a representative to the Hispanic Employment Program, the Federal Women's Program and the Geologic Division Employee Safety Program; supports and assists the Central Region Women's Core Group and the national Women's Advisory Committee; and has most recently worked to acquire closed caption equipment for USGS television monitors on behalf of the hearing impaired. As a widely respected research scientist, Dr. Tourtelot frequently coordinates visits by international scientists to USGS activities in Denver, including recent tours by scientists from Korea, Pakistan, and Argentina. In every way, he exemplifies the mature, constructive contributions being made daily to the programs and projects of the USGS by a large number of older employees.

Facility Accessibility

In recent years, the USGS has given considerable attention to the accessibility of its facilities to meet the needs of handicapped employees. In addition, the Bureau regularly conducts surveys of all office and laboratory space and other facilities, nationwide, to determine if there are any physical barriers which might prevent easy access by handicapped or older employees, or the general public. Facilities are designed and modified, when necessary, to meet all the needs of handicapped or older employees, as well as the public.

Awards and Recognition

During the past year, the USGS has made a special effort to recognize the important career contributions of many of its older employees by presenting a large number of service awards. Two employees received 50-year length of service awards, 30 people received 40-year length of service awards, and 242 employees were given 30-year service awards. This large group of awards is indicative of the fact that the USGS encourages and provides its older employees with opportunities to fulfill their vocational needs and career choices. The expertise, experience, and scientific and technical knowledge represented by these older employees has been invaluable to the activities of the Bureau.

A large number of USGS employees over the age of 40 also received performance awards for their direct contributions to Bureau programs and projects. A total of 79 people received Sustained Superior Achievement Awards, 35 people received Meritorious Service Awards, and 14 people received Distinguished Service Awards. In addition, 5 individuals were granted the Public Service Recognition Award for Volunteerism. The USGS is always proud to recognize the continuing productivity of all its older employees.

Volunteer Program Activities

Since June 1986, the USGS has conducted a very active, growing, and mutually beneficial volunteer program in which science-oriented individuals donate their time and talent in support of the Bureau's mission. A critical element in this "Volunteer for Science Program" has been the full utilization of the knowledge, skills, and abilities of older persons, particularly USGS retirees. Under this program, volunteers of all kinds provide valuable assistance and services to the USGS to supplement regular staff and programs wherever there are Bureau activities or projects in the United States. During the past year, 118 USGS retirees and 74 USGS Scientists Emeriti performed volunteer work under this program. In addition, 25 USGS retir-

ees have provided personal support and assistance as docents in the USGS Visitor's Center located in the Bureau's National Center, leading tours and providing information about the USGS. An additional 25 retirees served as Senior Associates Volunteers for Education to assist with and enrich local public school programs.

Some of the more significant volunteer activities have included: one retired employee volunteers 1 day a week in the National Mapping Division's Earth Science Information Office to sort and file maps and brochures and assist visitors; one retired astrogeologist volunteers to lead monthly studies of asteroids at Mr. Palomar Observatory; numerous senior citizens and retirees volunteer nationwide for the Water Resources Division to collect and analyze water quality data; one retiree assists the Volunteer for Science Program by answering requests for program information, entering data, and performing many different clerical and administrative duties; two retirees volunteered for a special project in Alaska, under very rugged conditions, to investigate the movement and impact of the Bering Glacier; one retiree volunteer works in the Director's Office of the USGS as an administrative assistant and helps to field research with a Bureau geologist during the summer months; and a large number of retirees and senior citizens, with backgrounds in mathematics and computer science, volunteer to teach software applications, enter data, and evaluate software and hardware upgrades with the Information Systems Division.

In addition to the inside programs that USGS volunteers work on regularly, a number of retirees, older employees, and senior citizens serve as mentors, coaches, and classroom lecturers at a local elementary school in Reston. Large numbers of older persons also volunteer for charity walkathons and help collect, sort, and distribute books, clothes, and food for needy families on a regular basis, including special holidays. Because of the Bureau's past success with volunteers and because of the many direct benefits to the USGS, as well as to the general public, the USGS will continue to encourage participation in and support of volunteer activities by USGS retirees and other older citizens.

Summary

All USGS programs and human resource activities clearly demonstrate that the Bureau is strongly committed to being continually aware of the need to insure that its older employees are provided sufficient opportunities to fulfill their personal career goals. USGS will strive to take maximum advantage of the knowledge, skills, and abilities of its older employees. USGS is proud to be able to contribute to such a goal, and will continue to strive to remove barriers in employment which prevent full participation by its older employees.

ATTACHMENT A

Occupations and Work Schedules of Department of the Interior Employees 80 Years and Older as of September 30, 1992

Bureau of Indian Affairs:
- Full-Time Boiler Plant Operator—Age 82

Bureau of Land Management:
- Intermittent Laborer—Age 83
- Full-time Supervisory Paralegal Specialist—Age 80

Bureau of Mines:
- Full-time Physical Scientist—Age 83
- Intermittent Physical Scientist—Age 82
- Full-time Secretary—Age 80

Minerals Management Service:
- Full-time Fiscal Data Analyst—Age 81
- Full-time Writer-Editor—Age 80

National Park Service:
- Intermittent Back Country Specialist—Age 87
- Part-time Landscape Architect—Age 85
- Part-time Park Ranger—Age 85
- Full-time Park Ranger—Age 83
- Full-time Laborer—Age 83
- Part-time Small Craft Operator—Age 81
- Full-time Park Ranger—Age 81
- Full-time Labor Leader—Age 81
- Full-time Motor Vehicle Operator/ND Road Crew—Age 80
- Full-time Park Ranger—Age 80

U.S. Fish and Wildlife Service:

Part-time Refuge Aid—Age 82
U.S. Geological Survey:
Intermittent Geologist—Age 85
Full-time Geologist—Age 81
Intermittent Research Geologist—Age 81
Intermittent Geologist—Age 80
Intermittent Cartographer—Age 80

ATTACHMENT B

U.S. Department of the Interior Employees 70 Years and Older as of September 30, 1992

Age:	*Total No. of employees*
70	69
71	50
72	63
73	38
74	30
75	26
76	14
77	6
78	13
79	5
80	7
81	7
82	3
83	4
84	0
85	2
86	0
87	1
Total	338

As of September 30, 1992.

ITEM 9. DEPARTMENT OF JUSTICE

DECEMBER 28, 1992.

DEAR MR. CHAIRMAN: I am pleased to transmit to you and the Members of the Special Committee on Aging the submission of the Department of Justice for Volume II of Developments in Aging.

Within the Department, the Bureaus of the Office of Justice Programs (OJP) support a number of initiatives relating to older Americans. For example, the Bureau of Justice Statistics collects, analyzes, and disseminates statistical data about the numbers and characteristics of crimes committed against elderly citizens; the Office for Victims of Crime sponsors programs to improve the treatment of elderly and other victims of crime; and the Bureau of Justice Assistance supports efforts to help protect senior citizens and their neighborhoods from crime and violence through crime and drug abuse prevention and control programs. In addition, the National Institute of Justice supports research relating to crimes against elderly persons.

Through initiatives such as these, the Department of Justice is working to ensure the safety and well-being of our Nation's senior citizens. I appreciate having the opportunity to report to the Committee regarding these initiatives on behalf of older Americans. Please do not hesitate to contact me if I may be of further assistance.

Sincerely,

W. LEE RAWLS,
Assistant Attorney General.

Enclosure.

OFFICE OF JUSTICE PROGRAMS

The Bureaus within the U.S. Department of Justice's Office of Justice Programs (OJP) sponsor a number of initiatives that affect older Americans. The Office of Justice Programs was created in 1984 to provide the Federal leadership and coordination necessary to make the Nation's criminal justice system more efficient and effective. OJP works to form partnerships among Federal, State, and local government

officials to collect and analyze statistical justice-related data, improve the administration of justice in America, identify emerging criminal justice issues, develop and test promising approaches to address these issues, evaluate program results, and disseminate these findings and other information to the Nation.

OJP is comprised of five major program Bureaus: the Bureau of Justice Assistance (BJA); the Bureau of Justice Statistics (BJS); the National Institute of Justice (NIJ); the Office of Juvenile Justice and Delinquency Prevention (OJJDP); and the Office for Victims of Crime (OVC).

Bureau of Justice Assistance

The Bureau of Justice Assistance administers the Edward Byrne Memorial State and Local Law Enforcement Assistance Program authorized by the Anti-Drug Abuse Act of 1988. This program provides financial and technical assistance to States and units of local government to control crime and drug abuse and to improve the criminal justice system at the State and local levels. States may use these Federal funds to support a variety of criminal justice programs that affect elderly citizens, including projects to protect senior citizens from physical and mental abuse, prevent consumer fraud directed at them, promote community awareness and crime prevention among the elderly, and provide assistance for elderly victims of crime.

In addition, BJA's national discretionary grant program tests new techniques and provides training and technical assistance in program implementation. One major initiative is the National Citizens' Crime Prevention Campaign, which provides crime prevention and personal safety information to elderly citizens throughout the Nation. The Campaign features "McGruff, the Crime Dog," who asks Americans to help "Take A Bite Out of Crime" by taking simple precautions, by reporting suspicious activity to the police, and by working with their neighbors, community leaders, law enforcement officials, and others to keep their communities safe from crime and drugs.

The Campaign is administered through a partnership among OJP/BJA, the National Crime Prevention Council, the Crime Prevention Coalition, and the Advertising Council, Inc. Information packets developed by the Campaign and distributed across the country include special crime prevention tips for senior citizens and focus on the special needs, concerns, and vulnerabilities of elderly citizens with regard to crime and victimization. The Campaign also works to enlist senior citizens in the fight against crime and drugs, recognizing them as a valuable resource for community crime prevention programs. Its informational materials and public service advertising encourage older Americans to participate in crime prevention activities in their communities.

Bureau of Justice Statistics

The Bureau of Justice Statistics collects, analyzes, publishes, and disseminates statistical information on crime, criminal offenders, victims of crime, and the operations of criminal justice systems at all levels of government. Each year, BJS publishes *Criminal Victimization in the United States,* an analysis of data collected through its National Crime Victimization Survey. Data concerning crime victims age 65 and older are presented by race, gender, percentage of crimes committed by strangers against the elderly, perceived age of offenders victimizing the elderly, use of self-protective measures by those 65 and older, extent of injury, medical and hospitalization involving the elderly, and the extent to which the elderly report their victimization to police.

In addition, in October 1992, BJS released a report, entitled "Elderly Victims", by Ronet Bachman, Ph.D. The report, which utilized data from BJS's National Crime Victimization Survey (NCVS) and the Comparative Homicide File (CHF), found that although elderly persons were less likely than younger individuals to experience a criminal victimization, they were more likely to suffer harmful consequences such as sustaining serious injuries that required medical care from their victimizations.

The report also found that elderly victims of violent crime were proportionately more likely than younger victims to report that their assailants were strangers. Consistent with this, the report found that among victims of homicide, the elderly were just as likely to be killed by a stranger during the commission of a felony as they were to be killed by someone known to them; younger homicide victims were more likely to be killed by someone known to them in a conflict situation such as an argument or fight.

The report documents further trends and patterns of criminal victimization against the elderly, such as elderly rates of victimization by demographic characteristics, police reporting, and self-protective behavior. The report also provides addi-

tional analysis of the differences between victims aged 65 to 74 and those who are 75 or older.

National Institute of Justice

The National Institute of Justice sponsors research and other programs to control crime and drug use and to improve the effectiveness of the criminal justice system. During 1992, NIJ and the American Association of Retired Persons (AARP) cosponsored a national workshop of fraud investigators and prosecutors to discuss fraud perpetrated upon older Americans. As a result of the workshop discussion, NIJ and AARP are conducting a national survey of fraud victimization. Preliminary results show that the rate of fraud victimization of the elderly is often over-estimated, although the harm caused by such victimizations may still be significant.

NIJ, in cooperation with AARP and national police and sheriffs' organizations also is sponsoring TRIAD, a program which focuses on increasing cooperation among the police, sheriffs, and AARP in addressing the needs of the elderly and their role as a resource in dealing with matters relating to community safety and security.

In addition, NIJ and the Office for Victims of Crime cosponsored a conference on victimization of the elderly which brought together researchers, victim service providers, police, and prosecutors from across the Nation.

Office of Juvenile Justice and Delinquency Prevention

As directed by Congress, in March 1992 the Missing Children Program of the Office of Juvenile Justice and Delinquency Prevention awarded a $500,000 grant to the Alzheimer's Disease and Related Disorders Association, Inc., to fund the "Safe Return" project. Safe Return provides for a national registry of memory-impaired persons, a toll-free telephone service, a FAX Alert System, and identification tags and bracelets with unique numbers to aid in locating and returning missing persons affected by Alzheimer's disease or other memory loss.

OJJDP also is sponsoring a "Train the Trainers" program for law enforcement and emergency service personnel, developing short video programs for police roll-call training and other informational and educational materials, and conducting a national public awareness campaign regarding missing adults with memory loss.

Office for Victims of Crime

The Office for Victims of Crime serves as the Federal focal point for addressing the needs and improving the treatment of crime victims. This includes administering the two programs—victim compensation and assistance—mandated by the Victims of Crime Act (VOCA) of 1984, and funded by the Crime Victims Fund in the U.S. Treasury. The Fund is comprised of fines and penalties assessed on convicted Federal offenders.

A 1988 amendment to VOCA requires States to set aside 10 percent of the funds awarded by OVC for victim assistance programs for previously underserved victims of violent crime. A number of States identified elder abuse victims as a previously underserved group for which they provided additional programs and services. Other States and territories award subgrants from VOCA victim assistance funds to local victim services agencies that aid elderly victims of abuse and crime.

Under the VOCA victim compensation grant program, elderly victims and survivors of elderly victims of violent crime are eligible to receive reimbursement for expenses related to their victimization. These include medical expenses, including mental health counseling and care, funeral expenses, lost wages, and other costs associated with the crime.

A small but growing share of the Crime Victims Fund is used by OVC for awarding grants to eligible crime victim assistance programs for training and technical assistance services. OVC's national-scope training and technical assistance programs have focused on providing training for criminal justice personnel, volunteers, professionals, clergy and other service providers who play a critical role in responding to victims of crime.

During 1992, the Office for Victims of Crime sponsored the following activities to assist the elderly:

OVC awarded $59,983 to the Metropolitan Assistance Agency Corporation (Victim Services Agency) of New York City to enhance responsiveness to victims of elder abuse. The project provided training for victim service providers in identifying, assessing, and treating elder victims of physical, emotional, and financial abuse by adult children or other family members.

The culminating event of this grant was a 2-day train-the-trainers workshop for victim service providers to test the curriculum and trainer's manual that had been developed. The multidisciplinary curriculum concentrated on the unique aspects of detecting, assessing, and treating elderly victims of abuse. The trainers manual will be made available throughout the United States.

OVC awarded a grant to the Police Executive Research Forum, Washington, D.C., on October 1, 1992, to develop a curriculum on elder abuse for law enforcement agencies. The primary purpose of this grant is to develop a training curriculum for law enforcement policymakers and officers on the most effective procedures and policies for responding to incidents of family violence involving elderly people, and to assure that the curriculum developed under this grant can be easily integrated with other police academy curricula materials.

On October 14 and 15, 1992, OVC and the National Institute of Justice cosponsored a National Conference on Victimization of the Elderly. This was a free, 2-day conference highlighting research, evaluation, and programs that involve crime and abuse against the elderly.

The panel presentations and workshops were designed to offer decisionmakers the most up-to-date information available on crime and abuse against the elderly. The participants learned a variety of approaches that have been implemented, as well as research and evaluation under way to study the problems in more detail.

Approximately 280 people attended the conference. All participants will receive a comprehensive manual with selected readings, studies, and programs on crime and abuse against the elderly.

Copies of research and statistical reports and other information published by the Office of Justice Programs is available by calling the National Criminal Justice Reference Service toll-free on 1-800-851-3420. From metropolitan Washington, D.C., and Maryland, call 301-251-5500.

Additional information about the Office of Justice Programs and its Bureaus is available from the:

Office of Congressional and Public Affairs
Office of Justice Programs
633 Indiana Avenue, N.W.
Washington, D.C. 20531
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ITEM 10. DEPARTMENT OF LABOR

JANUARY 5, 1993.

DEAR CHAIRMAN PRYOR: Enclosed is a summary of the programs and activities of the Department of Labor for fiscal year 1992 related to aging.

Described in the report are programs administered by the Employment and Training Administration, the Pension and Welfare Benefits Administration, and the Bureau of Labor Statistics.

If I can be of further assistance, please do not hesitate to contact me.

Sincerely,

LYNN MARTIN.

Enclosure.

EMPLOYMENT AND TRAINING ADMINISTRATION

INTRODUCTION

The Department of Labor's (DOL's) Employment and Training Administration (ETA) provided a variety of training, employment and related services for the Nation's older individuals during Program Year 1990 (July 1, 1990-June 30, 1991) through the following programs and activities: the Senior Community Service Employment Program (SCSEP); programs authorized under the Job Training Partnership Act (JTPA); and the Federal-State Employment Service system.

SENIOR COMMUNITY SERVICE EMPLOYMENT PROGRAM

The Senior Community Service Employment Program (SCSEP), authorized by Title V of the Older Americans Act, employs low-income persons age 55 or older in a wide variety of part-time community service activities such as health care, nutrition, home repair and weatherization programs, and in beautification, child care, conservation, and restoration efforts. Program participants work an average of 20 hours per week in schools, hospitals, parks, community centers, and in other government and private, nonprofit facilities. Participants also receive personal and job-re-

lated counseling, annual physical examinations, job training, and in many cases referral to regular jobs in the competitive labor market.

Almost 83 percent of the participants are age 60 or older, and about 58 percent are age 65 or older. Almost three-fourths are female, slightly less than half have not completed high school. All participants are economically disadvantaged.

Table 1 below shows SCSEP enrollment and participant characteristics for the program year July 1, 1991 to June 30, 1992.

Table 1.—Senior Community Service Employment Program (SCSEP): Enrollment, and participant characteristics—Program year July 1, 1991 to June 30, 1992

Enrollment:	
Authorized positions established	64,423
Unsubsidized placements	14,260
Characteristics (percent):	
Sex:	
Male	29
Female	71
Educational status:	
8th grade and less	24
9th grade through 11th grade	21
High school graduate or equivalent	36
1-3 years of college	14
4 years of college or more	6
Veterans	13
Ethnic groups:	
White	61
Black	24
Hispanic	9
American Indian/Alaskan Native	2
Asian/Pacific Island	4
Economically disadvantaged	100
Poverty level or less	79
Age groups:	
55-59	17
60-64	25
65-69	26
70-74	19
75 and over	13

Source: U.S. Department of Labor, Employment and Training Administration (Quarterly Status Reports).

Job Training Partnership Act (JTPA) Programs

The Job Training Partnership Act (JTPA) provides job training and related assistance to economically disadvantaged individuals, dislocated workers, and others who face significant employment barriers. The ultimate goal of JTPA is to move program participants into permanent, self-sustaining employment. Under JTPA, Governors have approval authority over locally developed plans and are responsible for monitoring local program compliance with the Act. JTPA functions through a public/private partnership which plans, designs, and delivers training and other services. Private Industry Councils (PICs), in partnership with local governments in each Service Delivery Area (SDA), are responsible for providing guidance for and oversight of job training activities in the area.

JTPA focuses on increasing the post-program employment and earnings of economically disadvantaged and displaced workers. Currently, 70 percent of the funds available to SDAs are required to be spent on training. Not more than 15 percent may be spent for the costs of administration, and not more than 30 percent may be spent for the combined costs of administration and supportive services.

Amendments to JTPA were enacted in September 1992, and become effective July 1, 1993. These amendments will create separate programs for adults and youths, target the programs on those with serious skill deficiencies; individualize and intensify the quality of services provided; and institute new, rigorous fiscal and procurement controls. Five percent of the funds appropriated for the new adult program (Title II-A) must be used by States in partnership with SDAs for older workers. Up to 10 percent of participants under the new adult program need not be economically disadvantaged if they face serious barriers to employment and meet the eligibility requirements of the Older Americans Act. The amendments also require Governors

to ensure that services under the adult program are provided to older workers on an equitable basis.

BASIC JTPA GRANTS

Title II-A of JTPA authorizes a wide range of training activities to prepare economically disadvantaged youth and adults for employment. Training services available to eligible older individuals through the basic Title II-A grant program include vocational counseling, job skills training (either in classrooms or on-the-job), literacy and basic skills training, job search assistance, and job development and placement. Table 2 shows the number of persons 55 years of age and over who terminated from the Title II-A program during the period July 1, 1991 through June 30, 1992. (The data do not include the 3-percent set-aside for older individuals, which is discussed separately.)

TABLE 2.—JTPA TITLE II-A ENROLLMENT—JULY 1, 1991-JUNE 30, 1992

Item	Number served	Percent
Total Terminees	556,009	100
55 years and over	8,423	1.5

Source: U.S. Department of Labor, Employment and Training Administration (November 1992 Preliminary Data).

SECTION 124 SET-ASIDE

Section 124 of JTPA calls for 3 percent of the Title II-A allotment of each State to be made available for the training and placement of older individuals in private sector jobs. Only economically disadvantaged individuals who are 55 years of age or older are eligible for services under this set-aside.

Governors have wide discretion regarding use of the JTPA 3-percent set-aside, and two basic patterns have evolved: (1) adding set-aside resources to Title II-A to ensure that a specific portion of older persons participate in the basic Title II-A program, and (2) using the resources to establish specific projects targeted to older persons which operate independently of the basic program. Some States distribute all or part of the 3 percent set-aside by formula to local SDAs; others retain the resources for State administration and/or model programs. For Program Year 1991 (July 1, 1991 through June 30, 1992), preliminary data indicate that the 3-percent set-aside program for economically disadvantaged individuals 55 years of age enrolled over 31,000 participants.

PROGRAMS FOR DISLOCATED WORKERS

Title III of JTPA authorizes a State and locally administered dislocated worker program which provides training and related employment assistance to workers who have been, or have received notice that they are about to be, laid off due to a permanent closing of a plant or facility; laid-off workers who are unlikely to be able to return to their previous industry or occupation; and the long-term unemployed with little prospect for local employment or reemployment. Those older workers eligible for the program may receive such services as occupational skill training, literacy and basic skill training, job search assistance, pre-layoff assistance, supportive services, and relocation assistance. During the period July 1, 1991 through June 30, 1992 approximately 15,000 individuals 55 years of age and over participated in the program (7.8 percent of all Title III terminations).

PROGRAMS FOR VETERANS

Title IV-C of JTPA authorizes State administered programs dealing specifically with hard to serve veterans of the Vietnam era, special disabled veterans, and recently separated veterans. This program provides the necessary training and assistance to enable the veteran to find and hold an unsubsidized employment position. While the average age of this group is between 45 and 50 years, approximately 10 percent of those eligible are above age 55. In program year 1992, approximately 4,000 veterans participated in this program, of which more than 400 would likely be over 55 years of age.

The Federal-State Employment Service System

The public Employment Service (ES) network of local offices offer employment-related assistance to all jobseekers, including middle-aged and older persons. A full range of basic labor exchange services are available, including: career counseling, testing, labor market information, referral to relevant training and employment programs, job search assistance, and job development and placement.

During recent years, in response to paperwork reduction initiatives, Federal reporting requirements for State employment security agencies (SESAs) did not include data on the characteristics of applicants. Revised reporting requirements effective July 1, 1992, now include selected applicant characteristic data such as data on the age of ES applicants and those placed in jobs. In 1993, information will be available at the national level on the number of SESA applicants aged 55 and older and the number of individuals aged 55 and older who are placed in jobs.

PENSION AND WELFARE BENEFITS ADMINISTRATION

Introduction

The Pension and Welfare Benefits Administration (PWBA) is responsible for enforcing the Employee Retirement Income Security Act (ERISA). PWBA's primary responsibilities are for the reporting, disclosure, and fiduciary provisions of the law.

Employee benefit plans maintained by employers and/or unions generally must meet certain standards, set forth in ERISA, designed to ensure that employees actually receive promised benefits. Employee benefit plans exempt from ERISA include church and government plans.

The requirements of ERISA differ depending on whether the benefit plan is a pension plan or a welfare plan. Pension plans provide retirement benefits, and welfare plans provide a variety of benefits, such as employment-based health insurance, disability and death benefits. Both types of plans must comply with provisions governing reporting and disclosure to the Government and to participants (Title I, Part 1) and fiduciary responsibility (Title I, Part 4). Pension plans must comply with additional ERISA standards (contained in both Title I, Parts 2 and 3, and Title II) which govern membership in a plan (participation), nonforfeitability of a participant's right to a benefit (vesting), and financing of benefits offered under the plan (funding). Welfare plans providing medical care must comply with ERISA continuation of coverage requirements (Title I, Part 6).

The Departments of Labor and the Treasury have responsibility for administering the provisions of Title I and Title II, respectively, or ERISA. The Pension Benefit Guaranty Corporation (PBGC) is responsible for administering Title IV, which established an insurance program for certain benefits provided by specified ERISA pension plans. PWBA meets and coordinates closely with the Internal Revenue Service (IRS) and PBGC on matters concerning pension issues on a regular basis.

In fiscal year 1992, the Department worked to advance its legislative initiatives to provide greater retirement security for workers, expand coverage of American workers under employer-sponsored retirement plans, improved portability of benefits, and simplify complex pension laws. These initiatives, which were announced by Secretary of Labor Martin and adopted as part of the President's domestic program, are known as the Pension Opportunities for Workers' Expanded Retirement (POWER) proposal.

The President signed into law one component of the POWER proposal, which expands the types of pension distributions eligible for tax-free rollovers and allows employees who change jobs to directly transfer their retirement savings to an individual retirement account or another employer's pension plan that accepts such transfers (P.L. No. 102-318). Remaining elements of the POWER proposal that would extend pension coverage to some 42 million additional workers, make it easier for small businesses to sponsor plans, increase the availability of 401(k) plans, and simplify pension plan regulation were passed twice by the 102d Congress as part of the Revenue Act of 1992 and the Tax Fairness and Economic Growth Acceleration Act of 1992. These acts were vetoed by President Bush for other reasons.

PWBA transmitted two other legislative initiatives that were introduced in Congress in 1992. The first would improve the regulation and clarify the enforcement of ERISA standards for multiple employer welfare arrangements (MEWAs) in order to provide greater security and more access to affordable health care for small businesses. The second legislative initiative would improve the auditing of ERISA-covered plans.

PWBA also assisted in developing several components of the legislation to implement the President's proposal for comprehensive reform of America's health care

system in FY 1992. Components of the Administration's legislative initiatives would increase the availability, portability and affordability of employment-based health insurance, especially for small employers, their employees, and dependents. Other components would provide a full, permanent deduction for health insurance costs of self-employed individuals, improve access to medical and health insurance information, control the rising costs of health care and improve the quality of medical care.

PWBA also assisted in the development of legislation to help fund coal miners' retiree health benefits, which was enacted as part of the Energy Policy Act of 1992, and legislation to improve and clarify the rights of reemployed veterans to pension benefits.

Reporting and Disclosure Standards

ERISA requires that plans disclose to participants and report to the Federal Government information about plan provisions and financial status. Each employee benefits plan (unless exempted) must submit an annual report in the form of a financial statement; plans with more than 100 participants must also submit a public accountant's opinion. The annual report generally includes a statement of plan assets and liabilities, a statement of transactions involving conflict of interest situations, and other information regarding the administration of the plan. Annual report forms are simplified for small plans, and a number of paperwork reductions have been instituted since ERISA's enactment in 1974.

The annual report is submitted to the IRS and shared by the ERISA agencies. To assure the filing of complete and accurate annual reports they are subject to an automated review. Under the system the IRS subjects the annual reports to automated edit tests to determine whether all the required information has been supplied. This system gives the Department the capability to systematically identify deficient filings. The information supplied in these reports is used for enforcement and research, and the reports are kept on file for public disclosure. The Pension Protection Act of 1987 amended ERISA to authorize the Labor Department to assess civil penalties of up to $1,000 per day against plan administrators who fail or refuse to file annual reports. The ability to assess a civil penalty for such failures provides the Department with a necessary tool to effectively enforce ERISA's reporting requirements.

ERISA also requires the plan administrator to provide participants, beneficiaries and the Department with a summary plan description (SPD) written in plain English. The SPD contains a description of benefits, the requirements for eligibility and procedures for presenting claims for benefits. In addition, participants may request, and in some cases must be automatically provided with, a statement of their individual benefits.

Minimum Standards for Participation and Vesting

The IRS, for the most part, enforces the ERISA minimum standards for participation and vesting. ERISA restricts the age and service requirements which plans may impose as conditions of eligibility to participate in an employer's pension plan. The basic rule is that an employee cannot be denied membership in the plan merely on account of age or service, if he or she is at least 21 years old and has worked for the employer for 1 year.

Other ERISA provisions govern when a plan participant must vest, i.e., gain a nonforfeitable right to the portion of the retirement benefit provided by the employer's contributions to the plan. (Amounts attributable to the participant's own contributions are always nonforfeitable.) In this regard, the plan must provide that an employee must vest at a rate which is not less generous than one of the schedules set forth in ERISA. The Tax Reform Act of 1986 established new schedules which, for most plans, provide a nonforfeitable right to retirement benefits sooner than under prior law.

ERISA also contains rules on the rate at which participants must be allowed to "accrue" a benefit, i.e., the rate at which they are considered to have earned a portion of their ultimate retirement benefit. These standards apply to pension plans which promise to provide participants a defined periodic payment upon retirement.

Minimum Funding Standards

ERISA sets forth rules for financing pension benefits. For plans which promise participants a defined periodic payment upon retirement, the employer's contribution is determined actuarially. Certain assumptions with respect to mortality, interest, and turnover rates are used to calculate how much should be contributed to pro-

vide the benefits promised by the plan. ERISA provides rules governing what types of funding methods are appropriate and establishes penalties for failures to comply with these standards. These funding rules are enforced by the IRS.

The Department of Labor, however, has jurisdiction over two new disclosure requirements related to the maximum funding standards under the Pension Protection Act of 1987, which is part of the Omnibus Budget Reconciliation Act of 1987, Public Law 100-203. Under these new requirements, severely underfunded pension plans must annually report the plan's funding ratio to the Department, and employers who miss a required pension plan funding contribution must promptly notify pension plan participants and the Department's Pension Benefit Guaranty Corporation.

Fiduciary Standards

ERISA sets forth certain standards regarding the investment and utilization of plan assets with which fiduciaries of employee benefit plans must comply. These standards include the requirement that plan assets be invested "solely in the interest" of participants and beneficiaries, and that plans be maintained for the exclusive benefit of participants and beneficiaries. ERISA provides that fiduciaries must adhere to standards, in investing plan assets and in administering the plan, which would be followed by a prudent investor. These standards include a standard relating to diversification of plan assets. ERISA also sets forth certain activities that (unless specifically exempted) may not be carried out by certain individuals and groups (including fiduciaries) who, because of the potential for conflict with the interests of the plan, might cause the plan to operate in their own interest. These activities are known as "prohibited transactions," and persons who violate the rules may be subject to an excise tax imposed by the IRS, or a civil penalty assessed by the Department of Labor.

Civil actions may be brought by the Secretary of Labor or by plan participants and beneficiaries for violations of Title I of ERISA. The Department of Labor places great emphasis on enforcing the fiduciary provisions of the Act. In fiscal year 1992, it recovered over $227 million for employee benefit plans through a combination of litigation and voluntary compliance. Under voluntary compliance, breaches of fiduciary duty are corrected through voluntary settlement agreements with plan officials. PWBA also investigates potential criminal violations involving employee benefit plans. Recently there has been an increased emphasis on specialized training in criminal investigative techniques to increase PWBA's capabilities in detecting potential criminal violations. Where investigations uncover criminal violations, referrals are made to the Department of Justice for prosecution. The Omnibus Budget Reconciliation Act of 1989 created new mandatory civil penalties that apply to recoveries for violations of ERISA by plan fiduciaries.

Plan Termination Insurance

Title IV of ERISA established within the Department a benefit insurance program administered by the Pension Benefit Guaranty Corporation (PBGC), a corporation within the Department of Labor with a Board of Directors consisting of the Secretaries of Labor, Commerce, and the Treasury. This insurance program is applicable only to certain pension plans which promise a defined benefit upon a participant's retirement. Employers who maintain these plans are required to pay an annual per-participant premium to the PBGC to finance this coverage.

The guarantee program differs according to the number of employers maintaining the plan. In the case of a single-employer plan, the PBGC will guarantee, up to prescribed levels, the payment of a participant's nonforfeitable benefit if the plan terminates with insufficient assets to pay these benefits. In the case of a multiemployer plan, the PBGC guarantees benefits up to a prescribed level which is lower than the level guaranteed to single-employer plans. In this case, it is the inability of the plan to pay participants their guaranteed amounts, not plan termination, that triggers financial assistance.

Research and Development

PWBA conducts a coordinated program of research through contracts and in-house studies. The research program develops data on employee benefit plans, which can be used as the basis for program modifications or policy decisions. It also analyzes economic issues related to retirement decisions and income and to the performance and effect of private pension plans in financial markets.

In FY 1992 PWBA continued to undertake a program of research directed toward improving the understanding of the employment-based health benefits system, through which two-thirds of non-elderly Americans now obtain their health insurance. This research program also includes analysis of the anticipated costs and consequences of major health care reform proposals.

A major part of the program was the analysis of so-called "pay-or-play" proposals by the Urban Institute under contract with PWBA. The study, which was released by Secretary Martin in January, indicated that enactment of such a proposal would likely result in the enrollment of more than one-half of the non-elderly population in a publicly sponsored plan. That study and fourteen others addressing topics ranging from the characteristics of the uninsured, retiree health, the effects of continuation health coverage requirements, and the costs of mandating employer-provided benefits, were published in a volume entitled "Health Benefits and the Workforce" in FY 1992.

PWBA also continued its series of publications providing comprehensive statistics and analysis of major developments related to employee benefits. An updated version of "Trends in Pensions" was published in FY 1992.

INQUIRIES

PWBA publishes literature and audio-visual materials which explain in some depth provisions of ERISA, procedures for plans to ensure compliance with the Act, and the rights and protections afforded participants and beneficiaries under the law. In addition, PWBA maintains a public information and assistance program which responds to many inquiries from older workers and retirees seeking assistance in collecting benefits and obtaining information about ERISA. In fiscal year 1992, the national office staff and PWBA field offices responded to over 180,000 plan participants, beneficiaries, and other persons interested in the administration of plans and recovered over $4 million for plan participants and beneficiaries. Among the publications disseminated, the following are designed exclusively to assist the public in understanding the law and how their pension and health plans operate:

—Health Benefits Under the Consolidated Omnibus Budget Reconciliation Act (COBRA).
—What You Should Know About the Pension and Welfare Law.
—Know Your Pension Plan.
—How To File a Claim for Benefits.
—Often Asked Questions About ERISA.
—How To Obtain Employee Benefit Documents From the Labor Department.
—Simplified Employee Pensions: What Small Business Needs To Know.

BUREAU OF LABOR STATISTICS

The Department of Labor's Bureau of Labor Statistics (BLS) regularly issues a wide variety of statistics on the employment situation by age. Monthly data are available on employment and unemployment for older persons, and annual data are available on consumer expenditures for this group.

ITEM 11. DEPARTMENT OF STATE

NOTE: Information was not submitted prior to publication.

ITEM 12. DEPARTMENT OF TRANSPORTATION

DECEMBER 22, 1992.

DEAR MR. CHAIRMAN: I am pleased to forward to you the enclosed report, which summarizes significant actions taken by the Department of Transportation during 1992 to improve transportation facilities and services for older Americans. The report is being sent in response to your letter to Secretary Card, requesting information for Volume II of the Committee's annual report, Developments in Aging.

I hope you will find our submission helpful. Any questions about it can be directed to Dr. Ira Laster of my staff (202-366-4859).

Sincerely,

JEFFREY N. SHANE,
Assistant Secretary for Policy and International Affairs.

Enclosure.

INTRODUCTION

The following is a summary of significant actions taken by the U.S. Department of Transportation during calendar year 1992 to improve transportation for elderly persons.[1]

POLICIES

Federal Railroad Administration (FRA)

The National Railroad Passenger Corporation (Amtrak)[2] continued throughout calendar year 1992 its systemwide policy of offering to persons with disabilities and elderly persons a 25 percent discount on one-way ticket purchases. Senior citizens and passengers with disabilities are not permitted to combine their 25 percent discount with any other discounts.

With appropriate prior notification to its reservation office, Amtrak continued to provide special food service, facilities for handling reservations for hearing impaired persons, special equipment handling, and provision of wheelchairs and assistance in boarding and deboarding passengers needing such assistance. Amtrak operates a Special Services Desk 7 days a week that assists special needs passengers with tickets and transportation. Persons may request special services by contacting the Special Service Desk at 1-800-USA-RAIL. They may also inform the travel agent or the station agent of their need at the time they book their travel reservations or call the railroad station in advance of their travel.

More than 150,000 mobility-impaired and other persons having disabilities sought assistance from the Special Services Desk last year, and tens of thousands of other disabled and elderly persons traveled on Amtrak unassisted. Over the past several years, 28 percent of long-distance passengers were 65 and older. Amtrak works each year with a number of organizations on large special groups of passengers needing assistance.

Amtrak has modified its older coaches and sleeping cars and has incorporated accessibility features in restrooms and in other areas. Virtually every car can accommodate one electric wheelchair, and Amtrak offers sleeping accommodations for persons with disabilities on all overnight trains. The corporation has replaced battery-operated lifts with mechanical lifts, which are easier to operate and present fewer maintenance problems. It is continuing to incorporate accessibility features in its more than 500 stations as they are upgraded.

Amtrak has improved training of its employees so that they are familiar with the appropriate ways to respond to passengers with special needs.

Federal Transit Administration (FTA)

The Federal Transit Administration (FTA) is the lead agency in an interdepartmental working relationship between the Department of Transportation (DOT) and the Department of Health and Human Services (DHHS). Under the terms of the interagency agreement, a staff working group has been established, and a formal executive level DOT/DHHS Transportation Coordination Council has been formed. The Council, which meets biannually, has directed that regional initiatives be undertaken in each federal region. Federal regional staff from both Departments have worked with state program administrators to identify barriers to coordination in federally supported programs and to encourage State and local efforts to coordinate funding for specialized transportation services. The liaison between these two Departments will increase the mobility of elderly Americans by improving the coordination and effective use of transportation resources of both Departments.

A roundtable meeting was conducted in August 1992 to focus on the status of State transportation coordination efforts across the country. Participants included representatives from State transportation departments, State human services programs, and national human services associations. They identified key issues associated with the development and provision of coordinated transportation services and developed recommendations of specific actions the Coordinating Council should undertake to further encourage and facilitate coordinated transportation.

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[1] Many of the activities highlighted in this report are directed toward the needs of handicapped persons. However, one-third of the elderly are handicapped and thus will be major beneficiaries of these activities.

[2] Amtrak operates as an independent entity. However, the Department influences management of the Corporation by its representation on the board and the significant financial support provided through FRA. We have, therefore, incorporated Amtrak's services which benefit senior citizens in the Department's report to the Committee.

In a continuing project of the Council, the Administration on Aging (AOA) and the FTA are developing a Volunteer Van Transportation Program for Native Americans who do not live on reservations. This joint program will provide vans, insurance, and maintenance for a period of 4 years to develop a community-based transportation program where no public transportation exists.

The FTA and DHHS have also continued to work with the Federal Region IV Transportation Consortium. The consortium is an eight State cooperative effort in Region IV designed to achieve improvements in human service transportation delivery. Project components include development of a coordinated technical assistance mechanism among the member States; research; and identification and removal of programmatic and institutional barriers to coordinated human service transportation funded by the two Departments. Particular attention is given to transportation and human service programs administered at the State level.

Capital and Operating Assistance

Federal Transit Administration

Under Section 16 of the Federal Transit Act, as amended, the FTA provides assistance to private nonprofit organizations and certain public bodies for the provision of transportation services for elderly persons and persons with disabilities. Public bodies may now apply for Section 16 funds if they are approved by the State to coordinate services to elderly persons and persons with disabilities, or if they certify to the Governor that there are no private nonprofit organizations that are readily available in an area to provide the service. In 1992, over $53.7 million was used to assist in the purchase of 1,834 vehicles for the provision of transportation services for elderly persons and individuals with disabilities. Besides providing transportation service to elderly and disabled individuals, vehicles purchased with Section 16 funds may also be used for meal delivery to homebound persons, as long as this activity does not interfere with the transportation service function.

Under Section 18 of the Federal Transit Act, as amended, the FTA obligated $118.1 million to States in 1992. These funds were used for capital, operating and administrative expenditures by State and local agencies, nonprofit organizations and operators of transportation systems to provide public transportation services in rural and small urban areas under 50,000 population. Section 18 funds are also used for intercity bus service to link these areas to larger urban areas and other modes of transportation. There is a high proportion of elderly persons in these areas.

Under Section 9 of the Federal Transit Act, as amended, FTA obligated $1,928.7 million in 1992. These funds were used for capital and operating expenditures by transit agencies to provide public transportation services in urbanized areas. While these services must be open to the general public, a significant number of passengers served are elderly persons.

Research and Technical Assistance

Federal Transit Administration

In 1992, under the University Research and Training Program, the FTA approved a research project to be undertaken by the University of Kentucky which will examine the travel behavior and transportation needs of the elderly in rural areas. The major objective of the project is to evaluate existing systems of transport and to suggest how these systems may be managed, modified, reorganized and/or enhanced to improve mobility and provide better service to elderly persons. The product of the project will be a final report that will include recommendations for transit operators and managers that provide service to the nonurban elderly population.

The Rural Transit Assistance Program (RTAP), in its sixth year, was authorized to expend $5 million in FY 1992. The program provides funding for training, technical assistance and research, and related support activities in rural areas. States receive 85 percent of the funding, while the remaining 15 percent is allocated to the RTAP National Program. The RTAP National Program supports, among other initiatives, a National RTAP Resource Center, an Electronic Bulletin Board, regional outreach initiatives, and a nine-member Review Board, which provides oversight of the training modules. The RTAP National Program produces a wide range of initiatives for services to elderly persons and individuals with disabilities living in rural areas.

The National Easter Seal Society Project Action (Accessible Community Transportation in our Nation) is a $3 million research and demonstration grant program. National and local organizations representing public transit operators, the transit industry, and persons with disabilities are involved with this grant program, which is

now in the final implementation phase. A major objective of the program is the development and demonstration of workable approaches to promote access to public transportation services for people with disabilities. A large number of elderly among persons with disabilities will benefit from this project.

Project Action, through a Request for Proposal process, has completed 25 projects in the following six priority areas.

1. Clarify disability programs in the community;
2. Outreach and marketing strategies for people with disabilities;
3. Training programs for transit providers;
4. Training programs for persons with disabilities;
5. Technology to solve critical barriers to transportation and accessibility; and
6. Development of a Resource Center on Transit Access Activity.

Project Action will also assist in the implementation of the Americans with Disabilities Act by investigating what training is necessary to sensitize transit drivers to the needs of people with various disabilities. Tie-down and securement difficulties, especially for the three-wheeled motorized wheelchairs, have been identified for research. Project Action has also targeted other model projects to be refined and replicated throughout the country. Congress mandated an additional $2 million per year to continue this program for the next 5 years.

Federal Highway Administration (FHWA)

The FHWA is supporting the following studies:

Traffic Maneuver Problems of Drivers with Diminished Capacity employs simulator and field methods in an empiric investigation of maneuvers that appear to cause difficulties for older drivers. The study will recommend changes in highway design to mitigate the difficulties.

Relative Visibility of Increased Legend Size vs. Brighter Materials is studying the effects of highly retroreflective sheeting on current stroke-width standards; comparing older driver responses to these brighter signs as compared with their responses to larger signs; evaluating other legend characteristics (font, spacing, and capitalization). Recommendations will be made on standards for text signs.

Older Driver Perception-Reaction Time for Intersection Sight Distance and Object Detection is evaluating the perception-reaction time of older drivers in a variety of intersection, stopping, and design sight-distance situations. The report will recommend changes to the perception-reaction time values used in highway design equations and identify alternate models for these equations.

Pavement Markings and Delineation for Older Drivers uses simulator and field techniques to investigate the use of improved pavement marking and delineation systems to enhance their value for older drivers.

Symbol Signing Design for Older Drivers is investigating the use of symbol signs for older drivers, making recommendations on changes to current signs, and developing guidelines for design of future symbol signs.

Traffic Operations Control for Older Drivers is investigating all aspects of intersections (geometrics, signing, signals, and operations) in light of older driver and pedestrian capabilities.

Design Characteristics of Older Adult Pedestrians uses analytical and empirical methods to determine the capabilities and limitations of older pedestrians, and to recommend changes in design to accommodate the population.

The Effect of Saccadic Suppression on Functional Peripheral Vision in Older Drivers involves using a part-task driving simulator to investigate the effects of central task load on the ability of older drivers to detect vehicles in adjacent lanes.

Intersection Geometric Design for Older Drivers and Pedestrians is investigating geometric needs of older road users at intersections, an area where older drivers experience a large number of accidents.

Investigation of Older Driver Freeway Needs and Capabilities is a preliminary investigation to assess the extent of older driver usage of, and difficulties with, freeways and freeway traffic.

Older Pedestrian Characteristics for Use in Highway Design is developing guidelines, for use by traffic planners and engineers in the design of pedestrian facilities for older persons. A review of information on the capabilities of older persons is being undertaken; information gaps are being identified, and studies are being designed and conducted to fill the gaps; and recommended changes are being made in appropriate design standards and operational procedures to accommodate older pedestrians within the highway system.

Traffic Control Device Design and Redundancy to Aid the Older Driver is a study being conducted under the auspices of the National Cooperative Highway Research

Program that is investigating, in predominantly field settings, issues related to the design and placement of signs to aid older drivers in terms of detection, comprehension, recognition, and response time.

A study being considered for funding during fiscal year 1993 is entitled *Synthesis of Research Findings and Older Drivers.* The study will involve reviewing and synthesizing all the research findings in the High Priority National Program Area for older driver research, as well as other relevant research, in a format compatible for later inclusion in a driver handbook. Implementation plans will be developed and future research needs identified.

National Highway Traffic Safety Administration (NHTSA)

During 1992, the agency continued to implement its long-term research and development program, initiated in 1989, to improve the safety of older persons on our Nation's streets and highways. This work includes coordinated research with the private and public sector on older drivers, vehicle occupants, and pedestrians. NHTSA has also prepared a report to Congress on issues dealing with older driver research. This report will serve as the basis for updating the NHTSA older driver plan.

OLDER DRIVER SAFETY

NHTSA is continuing its cooperative research with the National Institute on Aging (NIA) to improve the safety and mobility of older drivers. Recent analyses show that older people are more dependent than ever on driving for their mobility and, as a group, have fewer crashes than other age groups. Drivers over 75 are three times more likely to die in a crash than a 20 year old.

Research is underway to determine the role of medical conditions and functional ability on driving patterns and crash involvement. Earlier findings indicated that those with medical conditions and functional disability modify their driving and pedestrian practices in urban and rural areas, with a concurrent reduction in their ability to meet their transportation needs. More detailed data collection and additional analyses are underway.

The Transportation Research Board's Task Force on the Safety and Mobility of Older Persons, which NHTSA is chairing, is continuing to provide coordination of research and development activities across the private and public sector. It serves a multidisciplinary constituency, directing research attention to currently under-researched areas, helping to avoid unnecessary duplication of effort, and disseminating information about the latest findings in the field. The Task Force has developed and published an updated research priorities list and a directory of those interested in the older person transportation issues. It recently co-sponsored the "13th National Conference on Accessible Transportation and Mobility". Its chair also serves as an advisor on the Administration on Aging's Eldercare Institute on Transportation.

OCCUPANT PROTECTION

As people age, their vulnerability to injuries and fatality increases dramatically. The NHTSA has begun two major activities to better understand and increase the survivability of older vehicle occupants. The NHTSA awarded a grant to the Jackson Memorial Hospital in Miami, Florida to develop an Automobile Trauma Care and Research Facility. The grant establishes an information system that will advance both the delivery of emergency trauma care and the detailed data for research on automobile injuries, treatments, outcomes, and costs. The availability of an older population of automobile injury victims in the Miami area should provide early insights into the prevention of restrained occupant injuries that will be of increasing national importance as the population ages and the use of occupant restraints (air bags and automatic and manual belts) grows.

The NHTSA is also conducting research with the DOT Transportation Systems Center using computer simulation and experimental work to improve belt/bag systems for vehicles occupants. Particular attention will be paid to possible approaches to improve alternate restraint designs or requirements for elderly vehicle occupants.

In addition, the NHTSA's new side impact standard provides a higher level of protection to older occupants in vehicles meeting the standard. The new standard is based on a dynamic crash test which incorporated age effects for the first time and, thus, will provide better protection to older vehicle occupants. Manufacturers are required to incrementally apply the standard to 10 percent of cars manufactured after Sept. 1, 1993, 25 percent after Sept. 1, 1994, 40 percent after Sept. 1, 1995, and 100 percent after Sept. 1, 1996.

VEHICLE DESIGN PRACTICES TO ENHANCE OLDER DRIVER CRASH AVOIDANCE

The NHTSA's crash avoidance research program on the older driver will emphasize the evaluation of vehicle design practices—e.g., instrument panel features, forward lighting, collision warning systems—that influence driving safety. The NHTSA will analyze the traffic crash experience of older drivers, assess their capabilities and limitations as drivers, and identify vehicle design features that will ensure safety while accommodating mobility needs.

Such design features may be conventional vehicle components, such as lights and mirrors, which can be modified to enhance older driver performance. Or, they can be advanced technology countermeasure systems such as those under study as part of the NHTSA's Intelligent Vehicle Highway System (IVHS) research program. Indeed, a major goal in the NHTSA's IVHS program is to determine the safety improvements (and, hence, mobility-enhancements) that IVHS technologies can provide to the older driver.

It is recognized that IVHS may be a "doubled-edged sword" for the older driver. Selected IVHS technologies clearly provide opportunities for safety improvements. However, other IVHS applications have the potential to further degrade older driver safety by confusing or distracting the older driver with an overload of information or decisionmaking workload. The types and amounts of information and the methods of presenting it must be carefully studied to ensure that older driver safety and mobility are enhanced rather than degraded.

Whether the focus is on conventional or high-technology solutions, the NHTSA addresses the older driver issue in two fundamental, mutually-reinforcing ways. First, the NHTSA considers the older driver in the context of all ongoing research on specific driver-vehicle interaction issues (e.g., crash types, proposed counter-measures, safety concerns regarding mobility-enhancing systems). Here, the older driver is treated as part of the overall distribution of driver traits and behaviors. For example, one the NHTSA program is establishing a database to document the behavior and performance of the full range of the driving population to provide better information on driver capabilities and limitations to be accommodated in the design of driver interfaces for existing and new vehicle subsystems.

Second, crash avoidance and the older driver will be addressed as a dedicated research program that identifies vehicle design practices likely to enhance (or degrade) the driving safety performance of older drivers. A 1993 start will pursue the following major objectives:

1. Assess research needs and targets of opportunity relating to older driver traffic safety, with emphasis on vehicle design practices and potential countermeasures.
2. Develop new research methodologies and perform research on the effect of vehicle design practices, including new high-technology countermeasures, on older driver crash involvement.
3. Specify recommended vehicle design practices, including crash avoidance countermeasures, for the older driver.

PEDESTRIAN SAFETY

The highest pedestrian death rate of any age group belongs to elderly pedestrians ages 65 and older. The NHTSA/FHWA initiated a 3-year joint pedestrian safety program in January 1990 to reduce traffic fatalities including the elderly pedestrian. The major components of this program are community traffic safety program (CTSP) grants, research and development projects, technology transfer activities, and public information initiatives. The CTSP projects are an important element of the program. They serve as seed moneys to assist communities in including pedestrian safety initiatives in their programs. Seven grants were awarded in 1991 and continued through 1992 as part of the NHTSA/FHWA pedestrian safety program. Most of the grants have an elderly pedestrian component. Engineering, enforcement, and education disciplines are prerequisites to finding solutions for elderly pedestrian safety problems in these projects. Each of the community grant programs have created programs that meet the specific needs of individual communities. An engineering module, for example, may focus on the timing of traffic signals; an education module may develop informational programs for delivery at senior centers; and an enforcement module may focus on cross walk violations by motorists.

In the research area, the NHTSA developed several initiatives from a previously completed project entitled, "Development of Safety Information Materials and Media Plans for Elderly Pedestrians". That project identified the major pedestrian risks facing older (65+) adults and suggested actions they can take to avoid accidents. The risks included Turning Vehicles, Backing Accidents, and Other Intersec-

tion Accidents. In addition, it was confirmed that accidents by elderly persons increase markedly in the winter months when the sun angle is lowest. This increase appears to be a problem of conspicuity. Pedestrian safety messages were then developed for each of the four accident situations and have been used in several ways.

One initiative was a joint NHTSA/FHWA research project entitled, Development, Implementation and Evaluation of a Pedestrian Safety Zone for Elderly Pedestrians" that was initiated in 1990 and continues on track. The project focuses on the idea that countermeasures can best be delivered when the target audience (the elderly in this case) congregates for some routine life purpose. This leads to the defining of pedestrian safety zones within a city that have a preponderance of elderly pedestrian accidents and elderly residents. Saturating such zones with engineering and behavioral countermeasures of known effectiveness may prove to be a more efficient way of preventing elderly pedestrian accidents than other distribution/application methods. The countermeasures are drawn from an existing body of safety education and engineering materials. Of particular importance is the safety advice developed in the above cited project and incorporated in the pamphlet "Walking Through The Years."

In 1992, the NHTSA began the production of a video version of "Walking Through The Years" for use both within the safety zones project, and for use separately by State and local safety officials with older groups. The zones project is taking place in two large cities, Phoenix, Arizona, and Chicago, Illinois. To date, the cooperation of these cities has been secured, their pedestrian crash data have been analyzed, older pedestrian crash zones have been identified, and, for Phoenix thus far, the crashes within the zones have been reviewed in depth and onsite, countermeasure recommendations have been made, and countermeasure materials are being produced. Implementation in both cities in 1993 will permit an initial assessment of the program's effectiveness.

A second initiative stemming from the Development of Safety Information Materials and Media Plans for Elderly Pedestrians' project was providing this information to major organizations having access to older audiences. Such organizations as the American Automobile Associations, the National Safety Council (NSC), and the American Association of Retired Persons were contacted and assistance was provided to them in adapting the information to their needs.

In 1987, NHTSA and FHWA contracted with the National Safety Council (NSC) to develop a community approach to pedestrian safety issues. The Walk Alert Program was the product of that contract. In 1991, the agencies awarded another grant to the NSC to revise the program and address issues not adequately covered in the first edition. Special attention is being given to elderly pedestrian issues. In 1992, the revised program was the focus of a second multiyear joint agency program in pedestrian safety. Specifically, the Walk Alert Manual was professionally revised and work was undertaken to develop a series of promotional efforts designed to encourage widespread acceptance of the program.

Research and Special Programs Administration

The DOT University Transportation Centers are conducting the following research which is focused on the travel and mobility problems of elderly persons.

Aging Driver Needs for Mobility in an Automobile Oriented Region concentrates on transportation standards and practices that are affected by consideration of the aging driver as a transportation user.

Maintaining the Independence, Mobility and Safety of Old Drivers focuses on efforts to develop and assess cognitive skills loss on driving skills of older drivers, particularly those age 70 and older. The project will test two driver cognitive skills already identified as relating to driving performance for deficiencies that affect safe driving and begin development of means of detecting significant levels of these deficiencies in the older driver.

Information Dissemination

Research and Special Programs Administration

The Department's centralized Technology Sharing Program, run by RSPA, continued to disseminate technical materials dealing with the transportation problems of elderly and disabled Americans. Some were actually published by the Program, while some were published by other elements of DOT and disseminated through program channels.

DISSEMINATION ACTIVITIES

Technology Sharing assisted in the dissemination of the Departmental Pamphlet *New Horizons for the Air Travelers with a Disability.* An announcement of the publication's availability was mailed to over 5,000 State and local government officials and social service agencies. Many of them requested multiple copies for use by their constituents.

During the peak demand for the documents, Technology Sharing assisted the FTA in responding to requests for the regulations implementing the *Americans With Disabilities Act (ADA)* and the companion *ADA Paratransit Handbook.* Responsibility for distribution was returned to the FTA after demand for the publications began falling off.

The Technology Sharing Program also announced the availability, through its white card abstracts, of the *Accessibility Handbook for Transit Facilities* through the Volpe National Transportation Systems Center. This will be the first of four technical reports dealing with how to bring transit services, vehicles, and infrastructure into compliance with the ADA.

REPRINTS

The Technology Sharing Program reprinted the State of Ohio's *Handbook for Coordinating Transportation Services.* The handbook describes the procedures needed to take advantage of opportunities for coordination of social service transportation services at three levels: cooperation, joint use arrangements, and full consolidation. Reaction to the reprint has been good.

NEW PUBLICATIONS

The Technology Sharing Program has been disseminating new publications developed for the FTA on Advanced Public Transportation Systems (APTS). Such systems offer elderly persons the potential for substantial improvements in mobility: their brokerage elements can tailor public transportation services to individual needs. Four documents have been released so far:

Advanced Public Transportation Systems: A Bibliography with Abstracts, 1985–1991, April 1992

Assessment of Computer Dispatch Technology in the Paratransit Industry, March 1992

California Smart Traveler System, February 1992

Mobility Management and Market Oriented Local Transportation, March 1991

Federal Railroad Administration

To inform senior citizens and Americans with disabilities about special services and accessible stations, a brochure entitled, "Amtrak Travel Planner" is available in stations, local sales offices, and through travel agencies.

National Highway Traffic Safety Administration

During 1992, the NHTSA and the National Institute on Aging developed a second special edition of the journal "Human Factors" dealing with the older driver. Current status of older driver issues were also presented at meetings of the Transportation Research Board, American Association of Motor Vehicle Administrators, and the 13th National Conference on Accessible Transportation and Mobility.

NHTSA assisted the Transportation Research Board in publishing an "Older Driver Resource Directory" and "Research and Development Needs for Maintaining the Safety and Mobility of Older Drivers".

ITEM 13. DEPARTMENT OF THE TREASURY

DECEMBER 18, 1992.

DEAR MR. CHAIRMAN: I am pleased to submit, for inclusion in *Developments in Aging*, the Treasury's report on the Department's activities during 1992 which affected the aged. I hope our report will be of use to the Special Committee on Aging and others studying the problems faced by older Americans.

Sincerely,

MARY C. SOPHOS,
Assistant Secretary (Legislative Affairs).

Enclosures.

TREASURY ACTIVITIES IN FISCAL YEAR 1992 AFFECTING THE AGED

The Treasury Department recognizes the importance and the special concerns of older Americans, a group that will comprise an increasing proportion of the population in decades ahead.

The Secretary of the Treasury is Managing Trustee of the social security trust funds. The short- and long-run financial status of these trust funds is presented in annual reports issued by the Trustees. The 1992 reports concluded that combined Old-Age and Survivors Insurance and Disability Insurance (OASDI) benefits can be paid on time well into the next century. However, the Disability Insurance (DI) fund is facing a shortfall by 1997 and as reflected in the past several reports, the financial outlook for Medicare, in particular Hospital Insurance (HI), may become troublesome shortly after the turn of the century. Congressional action on the DI fund will be required soon. Although legislation enacted in late 1990 has provided additional breathing space for the HI Trust Fund, some Congressional action may be required by early in the next century. During 1992, the OASDI cost-of-living increase was 3.7 percent. The taxable base for OASDI was $55,500, the taxable base for HI was $130,200, and the amount a 65- to 69-year-old beneficiary could earn before his or her OASDI benefits were reduced was $10,200 per year.

With respect to the personal income tax, in 1992 the width of the income tax brackets and the sizes of personal exemptions and of the standard deductions were indexed to reflect the effects of inflation of approximately 5.3 percent which occurred during the preceding year. The personal exemption increased by $150 to $2,300 for each taxpayer and dependent.

Taxpayers age 65 or over (and taxpayers who are blind) are entitled to larger standard deductions than other taxpayers. For 1992, each taxpayer who is single and who is at least 65 years old is entitled to an extra $900 standard deduction. Each married taxpayer age 65 or over is entitled to an extra $700 so that a married couple both of whom are over age 65 are entitled to an extra $1,400. Including these extra standard deduction amounts and the basic standard deduction amounts, taxpayers over age 65 are entitled to the following standard deductions for tax year 1992: $4,500 for a "single" taxpayer; $6,150 for a taxpayer entitled to claim "unmarried head of household" status; $6,700 for a married couple filing a joint tax return, only one of whom is 65 or older; and $7,400 for a married couple filing jointly if both are age 65 or older. The corresponding amounts for tax year 1991 were: $4,250 for a "single" taxpayer; $5,850 for a taxpayer entitled to claim "unmarried head of household" status; $6,350 for a married couple filing a joint tax return, only one of whom was 65 or older; and $7,000 for a married couple filing jointly if both were age 65 or older.

Two other special provisions for the elderly were retained: the tax credit for the elderly (and permanently disabled); and the one-time exclusion of the first $125,000 of profit from the sale of the personal residence of a taxpayer age 55 or older.

INTERNAL REVENUE SERVICE ACTIVITIES AFFECTING THE AGED

The Internal Revenue Service (IRS) recognizes the importance and special concerns of older Americans, a group that will comprise an increasing proportion of the population in the years ahead. Major programs and initiatives of the Office of the Assistant Commissioner (Taxpayer Services) that are of interest to older Americans and to others are described below.

The following publications, revised on an annual basis, are directed to older Americans:

Publication 523, *Selling Your Home*, sets forth the rules regarding the once in a lifetime exclusion of $125,000 of the gain on the sale of a personal residence of a person 55 years of age or older.

Publication 524, *Credit for the Elderly or Disabled*, explains that individuals 65 and older are able to take the Credit for the Elderly or Disabled, reducing taxes owed. In addition, individuals under 65 who retire with a permanent and total disability and receive taxable disability income from a public or private employer because of that disability may be eligible for the credit.

Publication 554, *Tax Information for Older Americans*, explains that single taxpayers age 65 or older are not required to file a Federal income tax return unless their gross income for 1992 is $6,800 or more (as compared to $5,900 for single taxpayers under age 65). Married taxpayers who can file a joint return are not required to file unless their joint gross income for 1992 is $11,300 or more if one of the spouses is 65 or over, or $12,000 if both spouses are 65 or older.

Publication 721, *Tax Guide to U.S. Civil Service Retirement Benefits*, and Publication 575, *Pension and Annuity Income*, provide information on the tax treatment of retirement income.

Publication 907, *Information for Persons with Handicaps or Disabilities*, covers tax issues of particular interest to persons with handicaps or disabilities and to taxpayers with disabled dependents.

Publication 915, *Social Security Benefits and Equivalent Railroad Retirement Benefits*, assists taxpayers in determining the taxability, if any, of benefits received from Social Security and Tier I Railroad Retirement.

All publications are available free of charge. They can be obtained by using the order forms found in the tax forms packages and in Publication 910, or by calling 1-800-TAX-FORM (1-800-829-3676). Many libraries, banks, and post offices stock the most frequently requested forms, schedules, instructions, and publications for taxpayers to pick up. Also, many libraries stock a reference set of IRS publications and a set of reproducible tax forms.

OUTREACH PROGRAMS INCLUDE

The *Tax Counseling for the Elderly (TCE) Program*, which provides free tax assistance to persons 60 and older. The IRS enters into cooperative agreements with public and private nonprofit organizations (sponsors) whose members will be trained by IRS to act as volunteer tax assistors at selected sites identified by the sponsors. Sponsors also now have the option to operate telephone answering sites to assist the elderly with tax questions, help with forms, or schedule appointments. IRS assistance to older Americans through the TCE program has been growing since the program began in 1980. Some 30,000 volunteers helped 1.6 million persons during the past filing period.

The *Volunteer Income Tax Assistance (VITA) Program* provides tax assistance to targeted groups including low income persons, non-English speaking persons, and the elderly. The IRS trains volunteers who offer their services to taxpayers needing assistance. This service is free and many VITA volunteers also help the elderly in preparing their State and local returns and answering their questions. In addition, volunteers helped elderly taxpayers compute their estimated tax for the current tax year. The training that is available was developed in response to a study that included evaluations by educational authorities and surveys of volunteers and IRS employees involved in VITA and TCE. In fiscal year 1992, 48,000 volunteers helped 1.6 million persons.

The *Small Business Tax Education (STEP) Program* provides information about business taxes and the responsibilities of operating a small business. Through a partnership between IRS and about 1,800 community colleges, universities, and business associations, small business owners and other self-employed persons have an opportunity to learn what they need to know about business taxes. Assistance is offered at convenient community locations and times. Many elderly persons, such as those beginning second careers, avail themselves of this program.

As part of the *Banks, Post Offices, and Libraries (BPOL) Programs*, the IRS supplies 12,000 libraries with free tax aids such as reproducible tax forms, reference publications, and audio-visual materials that can assist older Americans in preparing Forms 1040EZ, 1040A, 1040 and related schedules. Also, banks and post offices distribute the Form 1040 family and other forms.

The Community Outreach Tax Education Program provides individuals with group income tax return preparation assistance and tax education seminars. IRS employees and trained volunteers conduct these seminars that address a variety of topics. They are tailored for groups and individuals with common tax interests, such as groups of older Americans. These seminars are conducted at convenient community locations.

The 1990 tax year was the first year older Americans could use the expanded Form 1040A to report income from pensions and annuities, as well as other items applicable to older Americans such as estimated tax payments and the credit for the elderly or the disabled. More than half of the potential filing population eligible to use this simpler, shorter form rather than the much longer Form 1040 made the switch.

Responding to requests from the public for such a product, the Tax Forms and Publications Division developed large-print versions of the Form 1040 and Form 1040A packages earmarked for older Americans. These packages (designated as Publications 1614 and 1615, respectively) are newspaper-size and contain both the instructions and the forms (for use only as worksheets, with the amounts to be transferred to regular-size forms for filing).

The Tax Forms and Publications Division reviews annually two publications for Congress. These are *Protecting Older Americans Against Overpayment of Income Taxes*, from the Senate Special Committee on Aging, and *Federal Income Tax Guide for Older Americans.*

OTHER TREASURY ACTIVITIES AFFECTING THE AGED

Other agencies of the Treasury also have an impact on the elderly as part of their specific functions. Developments during 1992 are summarized below.

FINANCIAL MANAGEMENT SERVICE

The Financial Management Service makes over 500 million Social Security, Supplemental Security Income, and Veteran payments annually. Nearly half of these payments are made via paper check, which are mailed. There are certain vulnerabilities associated with checks, such as the possibility of forgery, theft, and loss. We have several initiatives which will significantly improve the certainty of the payments reaching the intended recipients on a timely basis.

As the Federal Government's lead agency for the development of Electronic Benefit Transfer (EBT), the Financial Management Service (FMS) continues to make progress toward making EBT a viable payment mechanism. Geared toward those individuals without a bank account or who choose not to use Direct Deposit EBT represents an alternative benefit delivery mechanism by combining the best of existing technologies. With a plastic debit card, an individual can access their benefits at an automated teller machine or point-of-sale terminal. There are currently 7 operating projects delivering State benefits (e.g., Food Stamps, Aid to Families with Dependent Children, and General Assistance) and 1 project in Houston, Texas delivering direct Federal benefits (e.g., Social Security and Supplemental Security Income). Twenty-one other states are currently planning an EBT project or investigating the possibility of using EBT.

The Federal pilot in the Houston, Texas area, operated under the direction of FMS, began in January, 1991 and was recently extended 2 years. The pilot is geared toward those individuals who receive their monthly benefit by check. The programs participating in the project are: Social Security, Supplemental Security Income, Railroad Retirement, and Civil Service Retirement. There are currently over 3,700 recipients enrolled in the project with a goal of 5,000 by April, 1993.

A comprehensive marketing campaign has been developed to attract recipients to enroll in this voluntary program. There has been preliminary discussion within the Financial Management Service to begin expanding the project into other areas.

Other projects currently underway in the EBT program include a project to combine Federal and State benefits on one EBT system and developing a cost model to identify all costs associated with the delivery of EBT.

U.S. SAVINGS BONDS DIVISION

During Fiscal Year 1992 the U.S. Savings Bonds Division continued to provide information about Bonds to the public, including older Americans. The program included informing the news media, financial institutions, employers and major national organizations—such as the American Association of Retired Persons—of current Savings Bonds interest rates, tax implications, exchange privileges, and maturity status of Bonds. Updated promotional materials and public service advertising contained references to the benefits of saving for retirement by investing in Savings Bonds. The Division also provided information via a toll-free telephone service, and mail ordering via IRS refund checks that totalled $12,030,662 for FY 1992. As of September 30, 1992, the total value of Savings Bonds held by Americans was $150.32 billion.

BUREAU OF THE PUBLIC DEBT

The Bureau of the Public Debt continues to make improvements in programs to better serve all investors. The Bureau's efforts to streamline and simplify access to Treasury securities are of particular benefit to elderly investors.

SAVINGS SECURITIES

Regulatory Simplification

Voluntary Guardians.—A long overdue regulation change was needed to eliminate outdated and paternalistic restrictions on the ability of voluntary guardians to redeem savings bonds. The savings bonds regulations governing voluntary guardians

were amended to remove overly restrictive requirements governing the use of this special Treasury-created feature by simplifying the rules concerning payment of savings bonds and notes to a person acting as a voluntary guardian for an incompetent. Voluntary guardians are now permitted to redeem bonds up to $20,000, face value, and no longer are constrained to a payment confined to a 90-day expense limitation.

Powers of Attorney.—Savings bonds regulations are changed to authorize the acceptance of powers of attorney that conform to State law. Specifically, powers of attorney would be accepted for reinvestment, redemption or exchange and limited reissues, and the like, where the reissue does not affect the ownership rights of the grantor.

MARKETABLE SECURITIES

Book Entry Conversion

Public Debt continued its effort to encourage owners of registered and bearer securities to convert their holdings to book-entry form by launching a program on April 10, 1992, called the Smart Exchange. Investors making the change TREASURY DIRECT no longer have to be concerned about lost, stolen, or destroyed certificates and will benefit from the convenience of book-entry. The Smart Exchange is a first step to reach our goal of achieving full book-entry for all Treasury marketable securities by the year 2000. Investors can receive additional information on the Smart Exchange and a conversion kit by calling 1-(800)-366-3144.

Matured Unredeemed Securities

Public Debt has made significant progress in locating investors owning matured registered securities which have not been presented for payment. This year Public Debt will work with the Internal Revenue Service (IRS) to continue this effort by providing the agency with magnetic tape containing more than 10,000 Social Security Account Numbers that appear on the bonds. IRS then forwards the letters that Public Debt prepared to the addresses shown on its records. The letter instructs the addressee to contact Public Debt to claim the bonds. In Fiscal Year 1991, over $950 million in undeliverable principal and interest payments was released to investors.

Signature Certifications

The Securities Transfer Agents Medallion Program (STAMP) became effective October 22, 1992. This program allows STAMP as an acceptable certification for transactions in marketable Treasury securities. This change in policy has positive ramifications for our elderly investors in that it widens the range of acceptable signature guarantors for securities transactions. Prior to this development, for example, an investor who dealt with a credit union for most of his or her financial transactions would be referred to a different financial institution for the purpose of obtaining a signature guarantee on a transaction dealing with Treasury securities. With the acceptance of the STAMP program, Public Debt is able to accept the signature guarantee of a variety of financial institution. This saves the investor a great amount of time and effect.

Treasury DIRECT Survey

In February 1992, a survey was conducted among individual investors with TREASURY DIRECT accounts to determine, among others, the TREASURY DIRECT investor profile. The survey confirmed that the majority 81 percent of our individual investors in marketable securities are over age 55; 62 percent are over age 64. Many features of TREASURY DIRECT are of particular benefit to the elderly investor.

The availability of recorded messages 24 hours a day and analyst assistance during business hours provides easy access to information and help with individual problems. Special attention is paid to the volume of recorded messages and to the color and size of print on forms and brochures. Several TREASURY DIRECT servicing sites have toll-free telephone service for recorded messages to reduce the cost for those on fixed incomes. Nationwide toll-free telephone service is being considered for the future.

Over 75 percent of the investors surveyed chose the telephone as the mode of communications with their servicing office. Efforts are being made to improve the already high quality and content of recorded messages and analyst assistance in order to provide even better service to our elderly investors.

OFFICE OF THE COMPTROLLER OF THE CURRENCY

During 1992, the Office of the Comptroller of the Currency (OCC) continued its active liaison with national organizations representing bank customers, including the American Association of Retired Persons, to share information about banking related issues. In addition, OCC district offices continued their outreach programs for purposes of contacting and meeting with local consumer and community groups to share information about banking related issues. Organizations representing the elderly were among those contacted. The OCC also distributed eleven banking issuances to over 1,300 consumer and community groups throughout the United States including those representing the elderly.

Throughout the year, the OCC provided copies of its publications, including *Community Development Finance: Tools and Techniques for National Banks,* to national banks, bank trade associations and bank customer groups, including those representing the elderly. Affordable housing for all citizens, including the elderly, continues to be an issue voiced by consumer and community groups in meeting with the OCC. The publications provided by the OCC provides guidance to bankers on innovative programs banks can utilize in partnership with community organizations, as well as Federal, State, and local governments to finance low- and moderate-income housing and other community economic development programs. The object of these programs is to increase the supply of affordable housing and economic opportunities for low- and moderate-income persons, including the elderly.

The OCC also is responsible for resolving complaints against national banks. Through the first 10 months of 1992, the OCC received over 13,490 complaints. Older Americans seek OCC's assistance in resolving problems with their bank.

SECRET SERVICE

The Treasury Department continued to protect elderly recipients of Government payments through the vigilance of the Secret Service. During Fiscal Year 1992, the Secret Service closed 18,299 Social Security check investigations. In addition, the Secret Service closed 3,290 check investigations involving Veterans' benefits, 498 involving Railroad Retirement checks, and 716 involving Office of Personnel Management checks. The majority of these checks were issued to retirees.

The Secret Service also conducted over 4,776 investigations involving attempts by individuals to illegally divert funds during the direct deposit/electronic funds transfer process. Elderly Americans have been encouraged to utilize the electronic transfer process as a matter of convenience and as a safeguard against the loss of funds.

BUREAU OF ENGRAVING AND PRINTING

The Bureau of Engraving and Printing continued to recognize the special needs of aging citizens during 1992. Services to assist senior citizens who tour the bureau's visitor center include:

The Bureau provides CPR training on an ongoing basis to its tour, medical, and police units in the event that an emergency should occur.

The Bureau has wheelchairs available for senior citizens touring the facility, as well as tour guides training to assist senior citizens with special needs.

The Bureau has constructed ramps, wide entrances, and restrooms designed to accommodate persons using wheelchairs or walkers.

With respect to Bureau employees:

The Office of Equal Employment Opportunity and Employee Counseling Services works with older employees who have experienced problems with housing, finance, health, or energy conservation requirements. The Office also provides assistance to employees who are part of the "sandwich" generation, who are responsible for providing care for both older and younger generations. In addition to providing for their children, they often are the primary caregivers for elderly parents or relatives, who must have adult day care or require nursing home placement. The Office also maintains information on referral services available to older employees or to employees who are providing for older parents or relatives.

The Bureau periodically conducts a Pre-retirement Program for employees 50 years of age and over. The Program, also available to spouses, emphasizes the importance of planning for retirement in advance. It is offered to employees who are planning to retire within the next 5 years, and covers such areas as calculation of benefits, financial planning, discovering hidden talents, legal affairs, relationships and health.

The Bureau's on-site medical staff provides life-style counseling for employees who are senior citizens. The emphasis is on wellness, prevention of disease, and

includes advice on nutrition and weight control, testing of blood pressure and cholesterol level, and examination of possible vision and hearing deficiencies.

U.S. CUSTOMS SERVICE

The U.S. Customs Service does not specifically target any group of individuals, including the aged, for expedited Customs processing. However, the aged are included among those who are entitled to request special treatment when they arrive from abroad. This group not only includes the elderly, but also persons who are handicapped or ill and are unable to wait in line, persons returning home for emergency reasons such as a death in the family, and a parent arriving with several infants. Travelers meeting any of the aforementioned criteria may request to speak with a Customs supervisor as soon as he or she arrives in the Customs processing area of the airport or other Customers port of entry. The supervisor will provide all possible assistance within his or her means to facilitate the traveler's Customs clearance without compromising Customs enforcement responsibilities.

In addition, Customs works with Government and private architects to ensure that Federal inspection facilities, including restrooms, permit the unrestricted movement of those individuals who must rely on wheelchair or walker.

The U.S. Customs Service places a high priority on professionalism and the courteous treatment of travelers. Our policy of professional pride, image, and attitude is not only limited to our treatment of the elderly, but to all travelers to this country.

U.S. MINT

In consideration of the special needs and concerns of senior citizens, and in appreciation of this special group's support of U.S. Mint programs, the following activities affecting older persons are provided:

Special accommodations for elderly visitors are available at the Mint facilities (Philadelphia Mint, Denver Mint, and San Francisco Old Mint Museum) that offer public tour programs.

A project is currently underway at the Denver Mint to install new sound reduction enclosures on coining presses and other production equipment. Installation of new ceiling panels and floor coverings along the tour route is also being planned. These improvements will reduce the noise levels on the public tour route and be of benefit to elderly visitors with hearing difficulties.

An engineering study is currently being conducted to convert an elevator at the Denver Mint for the exclusive use of visitors. This conversion will allow exit from the tour route to the salesroom with ramp access to the street level. This will result in easier egress for seniors with special ambulatory needs.

The installation of monitors along the tour route that will provide video close-ups of production operations is being considered. The monitors will be especially beneficial to the aged with visual impairment.

BUREAU OF ALCOHOL, TOBACCO AND FIREARMS

The Bureau of Alcohol, Tobacco and Firearms began a program called Project Outreach in May 1990. This is a public awareness program which informs citizens of the growing threat of street gang violence. The information is presented to civic groups as well as local community anti-drug educational organizations.

Pre-retirement programs are offered to employees within 3 years of retirement. Information is presented on financial planning, retirement benefits, and health and legal affairs.

The ATF Health Improvement Program provides life-style counseling for employees who are senior citizens. The program emphasizes wellness, prevention of disease, nutrition, and weight control. It provides for blood pressure and cholesterol testing, and for the examination of vision and hearing.

In FY 1992, the Bureau entered into an agreement with the American Association of Retired Persons (AARP) to be a Host Agency for their Senior Community Service Employment Program (SCSEP). ATF's Compliance Operations Sacramento Area Office is the Host Agent and has solicited clerical support through the agreement.

ITEM 14. ACTION

DECEMBER 18, 1992.

DEAR MR. CHAIRMAN: Thank you for your letter of November 3, 1992, requesting ACTION's report on our 1992 accomplishments for Volume II of the Senate Special Committee on Aging's annual report, *Developments in Aging.*

FY 1992 was another very successful year for ACTION's Older American Volunteer Programs—Retired Senior Volunteer Program (RSVP), Foster Grandparent Program (FGP), and Senior Companion Program (SCP).

In FY 1992, ACTION successfully continued to work with a number of public and private sector agencies and organizations to enhance both financial and nonfinancial support for all three programs. The efforts resulted in new and continuing agreements with national organizations to implement new components and provide the services of additional volunteers.

As indicated in the enclosed report, 1992 saw more than 465,000 senior volunteers supported by ACTION programs continuing to make an important contribution to their communities and the Nation.

I sincerely appreciate the opportunity to submit the FY 1992 report on ACTION's Older American Volunteer Programs.

Sincerely,

JANE A. KENNY,
Director.

Enclosure.

RETIRED SENIOR VOLUNTEER PROGRAM

In FY 1992, with a budget of $34.1 million, the Retired Senior Volunteer Program (RSVP) completed its 21st successful year. There were 746 ACTION-funded projects and over 432,500 ACTION-funded volunteers assigned to 56,200 community agencies nationwide, providing almost 78 million hours of service. RSVP volunteers serve in courts, schools, museums, libraries, hospices, hospitals, nursing homes, and a wide range of other public and private nonprofit organizations. Volunteers serve without compensation, but may be reimbursed for, or provided with, transportation and other out-of-pocket expenses. All volunteers are covered by appropriate accident and liability insurance coverage.

The Program continues to expand its efforts to match resources to the diverse needs of hundreds of American communities by providing increased opportunities for retired persons 60 years of age and older to serve their communities on a regular basis in a variety of settings. ACTION's current RSVP projects emphasize intergenerational activities, especially with "at-risk" youth, literacy, substance abuse, and in-home care.

A total of 45 projects received "Programs of National Significance" awards totalling $235,000. These awards support an additional 1,769 new volunteers serving in 10 specific program areas. These areas include intergenerational activity, literacy, mentoring, and services to persons with chronic and debilitating illnesses.

ACTION-funded projects received augmentations of approximately 1.4 percent to provide some relief from inflationary increases in administrative cost items. Augmentations totalled $468,000.

During 1992, Research Triangle, Inc., under contract to ACTION, published the final report of an evaluation of RSVP volunteer involvement in the area of drug abuse prevention and education.

PROJECT EXAMPLES

Portland, Oregon.—The Portland/Multnomah County RSVP has launched a special program called VIEWS, "Volunteers Involved for the Emotional Well Being of Seniors". VIEWS is a collaborative effort of RSVP, Project DARE (Drug and Alcohol Resources for the Elderly), the Oregon State Council of Senior Citizens, and Mt. Hood Community Mental Health Center. These groups have come together to address the mental health issues of the senior population, who rarely seek help and may feel uncomfortable dealing with younger practitioners.

The RSVP volunteers involved with this program receive 50 hours of training, and commit themselves to working with one or two clients in a supportive counseling relationship. Clients seen by peer treatment counselors receive an initial assessment by a professional, and treatment plans are developed under the direction of professionals. Peer counselors receive ongoing supervision, support-group involvement, and refresher training sessions following their initial intensive training course. In addition to helping their peers achieve higher levels of contentment in their lives, this program offers RSVP volunteers an opportunity to reflect on their own aging process and problems they may encounter in their own lives.

Summit County, Ohio.—In Summit County, Ohio, the project is involved in a significant intergenerational effort. The "Poison Jungle" is a drug prevention/education effort for pre-school and early elementary school children. This effort is funded by a grant from the Ohio Department of Aging. RSVP volunteers utilize "The

Poison Jungle" slide show as a lead into a presentation and discussion. Puppets and other props are used to inform the children about what is around them. The "Poison Jungle" takes them on a safari where animals they are familiar with warn about taking pills and playing with unknown bottles. It stresses not to eat or drink anything unless a caregiver, teacher or other known and trusted adult provides it. The children make paper bag animal puppets to bring home to be a reminder of the volunteer presentation. The "Poison Jungle" assists children to understand the dangers of household cleaning aids, prescription and over-the-counter medications, tobacco and other substances.

Nationwide.—In 1992, over 18,000 RSVP volunteers nationwide provided services in the area of substance abuse prevention, education, and treatment. These efforts include both intergenerational programs and peer education and support.

In collaboration with the National Council on Patient Information and Education, all RSVP projects received "Brown Bag" Starter Kits. RSVP volunteers conduct reviews to provide older residents with a free personalized check-up of their medicines. Local pharmacists volunteer their time to conduct the medicine review. During these reviews, the pharmacists look at each prescription and discuss the older person's medicine-taking routine. The conversation is private and confidential, and many older people and their families appreciate the chance to get about 20 minutes of health professional's undivided attention—free of charge. Pharmacists look for problems that are easy to solve, but which can lead to severe consequences for patient's health. Some medicines should not be taken together, but patients may receive prescriptions from different doctors, who may not be aware of a patient's other medicines. About half of all medicines prescribed are taken incorrectly, sometimes because patients don't have complete instructions or don't understand why it is important to follow them exactly.

NON-ACTION SUPPORT

Projects have successfully generated non-ACTION resources to help expand and improve volunteer services. RSVP sponsors, their advisory councils and staff, have used imaginative and varied approaches to attract cash and in-kind contributions. RSVP's total non-ACTION support was over $35.6 million in FY 1992. Non-ACTION support was 51 percent of the total funding for RSVP.

Characteristics of RSVP Volunteers

	Percent
Distribution by gender:	
Female	76
Male	24
Distribution by age:	
60–69	32
70–79	47
80+	21
Distribution by ethnic group:	
White	84
Black	10
Hispanic	4
Asian/Pacific Islanders	1
American Indian or Alaskan Native	1

FOSTER GRANDPARENT PROGRAM

The Foster Grandparent Program (FGP) is one of the most successful and respected volunteer efforts in the United States. Through FGP, low-income persons aged 60 and older provide person-to-person service to children with special or exceptional needs.

In FY 1992, there were 262 ACTION-funded FGP projects in all 50 States, the District of Columbia, Puerto Rico and the Virgin Islands. In addition, there were 13 projects totally supported by State funds.

Nearly 23,400 volunteers contributed about 21 million hours assisting children with special or exceptional needs, such as those who are mentally retarded, autistic, and physically disabled. Children with special needs also include those who have been abused and neglected, runaway youth, juvenile delinquents, as well as those in need of protective intervention.

Foster Grandparents assist approximately 77,400 children every day. They usually serve 4 hours a day, 5 days a week. The Program provides certain direct benefits to these low-income volunteers, including a modest stipend which was increased to $2.45 per hour in FY 1992, transportation and meal assistance when needed, insur-

ance protection and an annual physical examination. Foster Grandparent services are provided through designated volunteer stations in private nonprofit organizations and public agencies. They include schools, hospitals, juvenile detention centers, Head Start programs, shelters for abused or neglected children, State schools for the mentally retarded, and drug abuse rehabilitation centers.

In FY 1992, $167,992 was allocated to nine existing projects to develop "Programs of National Significance." The objective of this new initiative is to expand program services in areas such as drug/alcohol abuse, teen pregnancy, border babies, and child care programs.

PROJECT EXAMPLES

Providence, Rhode Island.—During the past 2 years, Foster Grandparent volunteers assigned to the FGP project sponsored by the John Hope Settlement House in Providence, RI have served approximately 20 toddlers who come from homes of crack abusers. These homes are typically headed by single, female heads-of-household.

The volunteers work at day care centers to develop bonding relationships and to reduce the hyperactive behavior of the children. The children, who are developmentally delayed, require extra one-on-one attention, which the Foster Grandparents generously provide.

Monticello, Arkansas.—Several years ago, Eudora High School was experiencing a 35 percent drop-out rate. The school searched for alternatives and came up with one—a "suspension classroom"—using Foster Grandparent volunteers.

When the school faces a discipline problem with one of its students, rather than suspend the student from school, the student is assigned to the suspension classroom. The classroom is staffed by one teacher and five Foster Grandparent volunteers. The volunteers provide direct one-on-one counseling and support to these at-risk students while working with them on their school assignments.

The drop-out rate, as a result of the participation of the Foster Grandparent volunteers, has declined to 10 percent from 35 percent. School officials attribute this decline in drop-outs directly to the involvement of the FGP volunteers. The volunteers help to quiet the students, help them through their crises and at the same time help provide a continuity of classroom work so that when the students re-enter the classroom they are not behind in their work and can therefore resume normal status.

Anchorage, Alaska.—Living on the streets can be a dangerous and often deadly business in Alaska where temperatures in the winter hover around zero degrees and frequently fall to −30 degrees. As a result, the shelter for runaway youth is frequently full to capacity with young people who have no place else to go. The shelter is a haven for a short period of time. It offers warmth from the weather; it also offers the warmth generated by a Foster Grandparent volunteer. When new residents arrive at the shelter, it does not take long for them to learn that "Grandma" is special and is to be treated with respect. No one swears in front of her and if trouble erupts, she is surrounded by protectors. In the course of a day, she may hold and comfort a pregnant teen who has no idea what will happen to her own life, let alone the new one she is carrying; she may have an in-depth discussion with a young man trying to get a job, but refusing to cut his hair and clean up; or she may encourage a teen to talk to his/her parents and try to work out their differences.

Perhaps the most significant thing that happens to these young people while at the shelter is the experience with their Foster Grandparent. She makes them feel special and loved and she points the way to a future which may have some hope, because somebody cared.

NON-ACTION FUNDING

Non-ACTION funding increased in FY 1992. Approximately $29.2 million in non-ACTION funding was contributed to support FGP projects nationwide—an increase over last year's $28.2 million. A major portion of these funds come from State governments, either through direct appropriations or contributions from State-funded agencies. The balance comes from county-city governments and private sector sources. Total non-ACTION funds matched approximately 45 percent of the Federal appropriation for FGP in 1992.

Thirteen non-ACTION-funded FGP projects are operating in the country today—seven in Michigan, one in Wisconsin, three in New Mexico, and two in Georgia.

DEVELOPMENTS IN 1992

During FY 1992, the Commission on National and Community Service entered into an Interagency Agreement with ACTION/FGP for the purpose of stimulating FGP involvement with Head Start Parent Child Centers. To this end, the Commission transferred $200,000 to ACTION.

In FY 1992, Congress approved an increase of $0.10 in the volunteer stipend rate to $2.45 an hour.

Characteristics of FGP Volunteers

	Percent
Distribution by gender:	
Female	89
Male	11
Distribution by age:	
60–69	37
70–79	49
80–84	11
85+	3
Distribution by ethnic group:	
White	50
Black	36
Hispanic	9
Asian/Pacific Islanders	2
American Indian or Alaskan Native	3
Ages of children served:	
0–5	36
6–14	41
15–20	19
21+	4

SENIOR COMPANION PROGRAM

The Senior Companion Program (SCP) offers person-to-person volunteer opportunities for low-income Americans 60 years of age and older. The Companions provide personal assistance and peer support, primarily to older adults. Clients served by Companions are chronically homebound with physical and mental health limitations and at risk of institutionalization. Senior Companions strengthen their clients' capacity to live independently in the community. They also ease the transition from institutions back into the community.

The Program's appropriation for FY 1992 was $28.7 million, funding 144 projects and nearly 7,800 volunteer service years nationwide. In addition, there were 38 projects totally supported by non-ACTION funds.

Five projects received "Programs of National Significance" awards totalling $52,500. These awards are supporting an additional 16 volunteer service years that: (1) assist individuals with chronic and debilitating illnesses, (2) decrease drug and alcohol abuse, (3) provide respite care for caregivers of frail elderly and individuals, and (4) provide care to developmentally disabled adults.

A total of $100,000 in administrative costs increases was awarded to the 144 SCP projects to provide some relief to projects adversely impacted by inflation. Funds were used for administrative and volunteer expenses.

American Foundation for the Blind (AFB) Demonstration

The 2-year grant that ended July 31, 1992, successfully demonstrated the feasibility and value of visually disabled Senior Companions providing service to the fail elderly, homebound visually impaired. A key product of the grant was the publication of the AFB guide: *Visually Impaired Seniors As Senior Companions: A Reference Guide for Program Development.*

ACTION/Visiting Nurse Associations of American Public/Private Partnership Program

FY 1992 marked the completion of the second year of a 3-year partnership grant between ACTION and the Visiting Nurse Associations of America (VNAA).

Under the grant, local visiting nurse associations have joined with 18 SCP projects nationwide to increased home health care to frail elderly persons. The support services provided by Senior Companions free visiting nurses to extend professional services to a greater number of their clients. Approximately 100 volunteers

are serving homebound older persons with chronic physical and mental health limitations.

The VNAA is the national association representing non-profit home health agencies that offer a wide range of home health care services in urban and rural areas. The ACTION/VNAA partnership is designed to increase and improve volunteer service through application of the SCP program model. Through the partnership grant, the VNAA is obligated to assist the projects to identify potential funding sources and make a best effort to assure continuance of the program after Federal funds are terminated. Based on progress to date, VNAA and ACTION are focussing activities for the remaining months on outcomes in the areas of public affairs, evaluation and resource development.

ACTION/ADMINISTRATION ON AGING JOINT INITIATIVE FOR VULNERABLE ELDERLY

A three-year demonstration program between ACTION and the Administration on Aging is nearing the end of its second phase, providing volunteer service opportunities to Senior Companions in 17 projects located in 11 states.

The volunteer placements are coordinated through State Agencies on Aging and are designed to enable Senior Companions to assist vulnerable homebound older persons. The focus is on clients aged 80 and older who are at risk of institutionalization. By providing volunteer in-home services such as grocery shopping, meal preparation, and monitoring of service delivery, SCP volunteers become client advocates who stimulate the community's natural support system needed to keep people independent of more costly public services.

The scope of the agreement between the two agencies is to increase collaboration at all levels to expand: (1) meaningful volunteer service opportunities for older people, and (2) volunteer services for the homebound elderly. An extensive evaluation supported by ACTION to measure the impact of the program is underway. The Administration on Aging is responsible for developing community support to extend services after the demonstration period.

PROJECT EXAMPLES

Boston, Massachusetts.—Monthly training for Senior Companions, conducted by Boston's Commission on Affairs for the Elderly, mirrors the rich ethnic diversity of the city.

Special attention is given to older volunteers born in Haiti, China, Russia, Italy, and Spain to help mostly homebound linguistic minorities from these and other countries bridge the gap to the larger community.

A 68-year-old Senior Companion is one of five Companions assigned to the Greater Boston Chinese Golden Age Center. One of the Companion's four clients, a frail 98-year-old woman who speaks only Cantonese, immigrated from Hong Kong 4 years ago. In the 2 years they have been together, the Companion has helped the client settle in an elderly public housing project apartment in Chinatown, enrolled her in Medicaid and helped her access food stamp and fuel assistance benefits. In addition to Senior Companion Program activities, the Companion is a Cantonese translator at the New England Medical Center Hospital.

Coeur d'Alene, Idaho.—A 92-year-old legally blind woman who lives on a remote ranch in Northern Idaho is able to remain in her home of 40 years thanks to the Senior Companion.

For nearly 4 years, her Companion, age 74, has driven the 14 miles from her home to the ranch 5 days per week where she provides a variety of services to her client. The client, a widow of 20 years, has heart disease, arthritis, and is unable to drive. There is no immediate family in the area. The Companion prepares lunch and dinner meals, shops, picks up medications and provides light housekeeping chores.

She is in frequent contact with Panhandle Health District nurses assigned to the Home Health Unit. By actively monitoring her client's condition, the Companion ensures that busy health care professionals are able to spend more time with patients with more critical health problems. The five northern counties in Idaho and its regionalized Panhandle Health District operate a unique rural home support service that benefits isolated older persons.

The Companion is determined to help her client remain on the property she and her husband homesteaded in the 1940's. "Helping someone stay in her own home where she is happy makes me happy."

Cincinnati, Ohio.—For 8 months, a 74-year-old Senior Companion has assisted an 80-year-old woman recover from hip surgery and helped her progress to the point she can walk around her apartment building with a cane.

When this Senior Companion met her, her client was depressed and doubted she could ever walk again. Both her hips had been fractured and recovery from surgery to mend them was progressing slowly. Her medical support services benefits had expired. Mobility was limited to walker-assisted trips from her bed to the bathroom. The Companion's first task was to restore her confidence. Then, under the supervision of health professionals at Catholic Social Services of Southwest Ohio, she helped her with range of motion exercises and, with her walker, took her on short walks up and down the corridors of her high rise apartment building.

Eventually, they went outside and, in time, substituted the walker with a cane. Now the woman can walk independently and her confidence has been restored.

Funds to pay for this Companion's stipend and two other Senior Companions who provide aftercare medical services to the homebound came from a $10,400 Programs of National Significance (PNS) grant awarded in 1991 to the Cincinnati SCP project.

NON-ACTION FUNDING

Some $16.1 million in non-ACTION-funding was contributed to support SCP projects. Most funds come from State governments, either through direct appropriations or contributions from State-funded agencies. County/city governmental and private community sources make up the balance. Thirty-eight non-ACTION projects are operating nationwide. New Mexico, Michigan and Illinois have the greatest number of such projects.

Characteristics of SCP Volunteers

	Percent
Distribution by gender:	
Female	85
Male	15
Distribution by age:	
60–69	45
70–79	46
80–84	7
85+	2
Distribution by ethnic group:	
White	55
Black	32
Hispanic	9
Asian/Pacific Islanders	2
American Indian or Alaskan Native	2
Ages of client served:	
22–45	6
46–59	5
60–74	31
75+	57

ITEM 15. COMMISSION ON CIVIL RIGHTS

DECEMBER 17, 1992.

DEAR SENATOR PRYOR: This is in response to your letter to Arthur A. Fletcher, Chairperson of the U.S. Commission on Civil Rights, requesting information for your annual report, *Developments in Aging.*

During fiscal year 1992, the Commission continued to process complaints; of 2,102 complaints received as of November 23, 1992, 94 alleged discrimination on the basis of age and were referred to the appropriate agency. (The Commission is not authorized to investigate complaints, except for those alleging denial of voting rights.)

As indicated in last year's report to you, the Commission's New York State Advisory Committee held a forum in Buffalo, New York, on October 29, 1990, on housing issues. One of the areas covered was nursing home availability for minority elderly persons. A copy of the New York State Advisory Committee's fact finding report concerning this issue is enclosed for your information.*

If you have any questions, please feel free to call my office. Our new telephone number is 202/376–7700, and our new address is 624 Ninth Street, NW, Washington, DC 20425.

Sincerely,

WILFREDO J. GONZALEZ,
Staff Director.

* This report is held in Committee files.

Enclosure.

ITEM 16. CONSUMER PRODUCT SAFETY COMMISSION

NOTE: Information was not submitted prior to publication.

ITEM 17. ENVIRONMENTAL PROTECTION AGENCY

DECEMBER 15, 1992.

DEAR MR. CHAIRMAN: In response to your request of October 27, 1992, to Administrator Reilly regarding information on the activities of older workers at the Environmental Protection Agency to be included in your annual report, *Developments in Aging,* I have enclosed a summary report of the activities of the Senior Environmental Employment Program for 1992.

Sincerely yours,

ERICH W. BRETTHAUER
Assistant Administrator for Research and Development.

Enclosure.

ENVIRONMENTAL PROTECTION AGENCY

In 1976, the U.S. Environmental Protection Agency (EPA) and the Administration of Aging established the Senior Environmental Employment (SEE) Program. The program has two purposes. It demonstrates the effectiveness of older Americans in helping to prevent, abate, and control environmental pollution. It also provides meaningful employment to retired/unemployed older Americans who have a wealth of talent, experience, and skills. EPA has used the SEE program to marshal the expertise of older Americans in support of the Agency's Legislative Goals. SEE enrollees perform a wide range of technical assistance for EPA from answering telephones to performing clerical support activities to analyzing samples. Older workers are stationed in all of EPA's 10 regional offices, 20 laboratories, field sites and several State offices. Retired noise experts have provided technical assistance to local communities in conducting noise surveys and serving as noise abatement teachers in classes for local businessmen. When indoor radiation became a major public concern, SEE experts helped to gather and analyze samples, maintain equipment, and answer questions for local citizens. In the area of solid waste management, SEE enrollees provided the experienced "extra hands and minds" to help local communities establish proper disposal procedures. Through the Asbestos in Schools program, a small army of very knowledgeable SEE enrollees were temporarily hired and trained to work with local school districts to assess the problem and recommend the technically correct remedial action.

The Federal Communications Commission (FCC) has established their own Senior Environmental Employment Program using EPA's program as a model. Additional programs are being developed with the technical assistance and support of EPA's SEE staff, again using EPA's very successful SEE Program as the model, for the Occupational Safety and Health Commission (OSHA), Federal Departments of Interior, Agriculture, Defense, Veterans Affairs, and in the States.

No matter what is the critical environmental concern of the day—from understanding and explaining in a credible manner the analyzed data of nearby toxic exposures to local citizens and politicians or providing the "hands-on" sea of local monitors to spot check underground storage tanks and nozzle violations—the SEE program marshals the temporary technical talent when and where it is most needed. The utilization of the Senior Environmental Employment Program offers EPA a golden opportunity for achieving the environmental challenges of today.

ITEM 18. EQUAL EMPLOYMENT OPPORTUNITY COMMISSION

NOVEMBER 10, 1992.

DEAR CHAIRMAN PRYOR: On behalf of Chairman Kemp, I am responding to your October 27, 1992 request for the Equal Employment Opportunity Commission's submission for the committee's annual report, *Developments in Aging.*

Enclosed are copies of fiscal year 1991 annual reports from EEOC's Office of General Counsel* and Office of Program Operations.* These reports contain information on EEOC's compliance and litigation enforcement efforts on behalf of victims of employment discrimination.

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* These reports are held in Committee files.

Also included is a copy of the Semiannual Report of the Office of the Inspector General, U.S. Equal Employment Opportunity Commission, for the period April 1, 1992 to September 30, 1992, pursuant to Section 5(b) of the Inspector General Act of 1978, as amended.

Please call me at 663-4900 if I can be of further assistance.

Sincerely,

ANN COLGROVE,
Director of Communications and Legislative Affairs.

Enclosures.

OFFICE OF INSPECTOR GENERAL

Semiannual Report to the Congress

EXECUTIVE SUMMARY

The *Inspector General Act Amendments of 1988, Public Law 100-504,* requires semiannual reporting to the U.S. Congress on the accomplishments and activities of Offices of Inspector General. This report represents the U.S. Equal Employment Opportunity Commission (EEOC), Office of Inspector General's (OIG), seventh semiannual report to Congress.

Fiscal Year 1992 presented OIG its most serious staffing dilemma in the brief three year existence of the office. Due to budgetary shortfalls and resultant hiring restrictions, OIG entered FY 1992 with only 15 of its 18 authorized positions filled, and critical vacancies in the positions of counsel to the IG, supervisory auditor, supervisory inspector, and supervisory investigator. Then, due to attrition, OIG lost 2 of 4 auditors, 1 of 3 inspectors, and 2 of 3 investigators. During the April 1, 1992 through September 30, 1992 reporting period alone, OIG experienced a 33 percent decline in staff resources. As the reporting period closed, OIG received approval to fill several key vacancies including counsel to the IG, supervisory auditor, nonsupervisory auditor (2), and an inspector.

To compensate for staff shortages, OIG management streamlined the annual audit plan, reassigned employees, and assumed direct auditing, inspections, and investigative responsibilities. Coupled with increased output from the professional and clerical support staff, OIG was able to meet its most fundamental mission objectives.

AUDITS AND INSPECTIONS

The Audits and Inspections Division issued 2 financial related audit reports and 4 field office inspection reports during the second half of fiscal year 1992. One audit report identified questionable (proposed) contractor costs of more than $236,800, while the other report revealed improper procurement practices. OIG found that over a three year period daytime cleaning services, for EEOC's headquarters building, were procured by dividing requirements into separate purchase orders covering 6 month periods. This practice allowed the requests for services to remain within the Federal Acquisition Regulations (FAR) small purchase limitation of $25,000. Procurement Management Division officials took action to correct this practice while our audit was in progress.

Inspections of four field offices identified findings similar to those reported in earlier semiannual reports. Our analysis of the 22 inspection reports, issued over a three year period, revealed significant internal control weaknesses in the management of equipment and property, the maintenance of time and attendance records, and the control of GSA vehicle usage. OIG plans to more fully address these findings in "management alerts" during the next reporting cycle.

INVESTIGATIONS

The Investigations Division conducted and closed 6 investigations involving a variety of criminal and other serious employee misconduct issues. For example, during a joint OIG/FBI investigation an EEOC employee was arrested for the theft, unlawful reproduction, and unauthorized possession of official government identification documents (IDs). The employee plead guilty, resigned her job at EEOC, and was sentenced to 30 months probation and ordered to serve 50 hours of community service work. Another OIG investigation uncovered a scheme by a former contractor mail room clerk who stole and cashed checks totaling approximately $6,000. The matter was referred to local authorities for further disposition.

OTHER OIG ACTIVITIES

OIG coordinates the U.S. General Accounting Office (GAO) evaluations of EEOC program and directs inquiries to appropriate agency personnel. During this reporting period OIG conducted a briefing for EEOC's Office of Federal Operations (OFO) new management team on GAO activities in the area of Federal Affirmative Employment. We also revised and consolidated comments from several offices on GAO's report entitled *Age Employment Discrimination: EEOC's Investigation of Charges Under 1967 Law,* issued September 4, 1992. In addition, OIG coordinated agency responses to corrective actions taken on recommendations from earlier GAO reports.

On September 30, 1992, two IGs appointed by the Executive Council on Integrity and Efficiency (ECIE) began the first peer review of the OIG. The results of this review will be reported in our next semiannual report to Congress.

Several OIG staff members received continuing professional education credits by attending courses in report writing, supervision, financial statement auditing, and audit followup.

INTRODUCTION

The U.S. Equal Employment Opportunity Commission (EEOC) was created by *Title VII of the Civil Rights Act of 1964,* which prohibits employment discrimination based on race, color, sex, religion, or national origin. Since 1979, EEOC also has been responsible for enforcing the *Age Discrimination in Employment Act of 1967 (ADEA),* which protects employees 40 years of age or older from age-based employment discrimination, the *Equal Pay Act of 1963,* which protects men and women who perform substantially equal work in the same establishment from sex-based wage discrimination, and *Section 501 of the Rehabilitation Act of 1973,* which prohibits federal sector handicap employment discrimination. EEOC enforces *Title I of the Americans With Disabilities Act of 1990,* which prohibits employment discrimination against individuals with disabilities.

The President designates a chairman, who serves as the five member Commission's chief executive officer, and a vice-chairman. Currently, the Honorable Evan J. Kemp, Jr. serves as chairman. The Honorable R. Gaull Silberman serves as vice-chairman, while the Honorable Joy Cherian, Tony E. Gallegos, and Joyce E. Tucker serve as commissioners.

EEOC's mission is to ensure equality of employment opportunity by vigorously enforcing federal laws prohibiting employment discrimination. This mission is accomplished through investigation, conciliation, litigation, coordination, education, and technical assistance. EEOC is responsible for all compliance and enforcement activities relating to equal employment opportunity for Federal employees and applicants; and promotes voluntary action programs by employers, unions, and community organizations to ensure equal employment opportunity.

The Equal Employment Opportunity Commission is headquartered in Washington, D.C., and enforces equal employment opportunity through a field structure composed of 23 district offices, 17 area and 9 local offices, and the Washington, D.C. field office. These offices receive direction and coordination from the Office of Program Operations. The Commission employs a staff of approximately, 2,800.

THE OFFICE OF INSPECTOR GENERAL

The Inspector General Act Amendments of 1988, Public Law 100-504, expanded the cadre of Inspectors General appointed by the President in executive branch departments. It also established offices of inspector general in 33 designated Federal entities, including EEOC. All audit and investigative activities of each agency were consolidated in these newly created offices of inspector general.

OIG AUTHORITY AND RESPONSIBILITY

Public Law 100-504 provides the Office of Inspector General with authority and the responsibility to:

Conduct and supervise audits, inspections, and investigations of EEOC programs and operations;

Provide leadership and coordination, and recommend policies for activities designed to promote economy, efficiency and effectiveness in the administration of EEOC programs and operations, and to detect and prevent fraud and waste in EEOC programs and operations; and

Provide a means for keeping the Chairman and Congress fully and currently informed about problems associated with EEOC programs and operations, and the need for—and progress of—corrective actions.

EEOC's Office of Inspector General is under the supervision of Inspector General William D. Miller II, who provides overall leadership, direction, and coordination. OIG has two operating divisions: the Audits and Inspections Division, and the Investigations Division. An assistant inspector general heads the Audits and Inspections Division which is comprised of the Audits Branch and the Inspections Branch. The position of assistant inspector general for investigations is currently vacant. During the period, the Inspections Branch chief was selected and an Audits Branch chief position was advertised.

Audits and Inspections

The Audits and Inspections Division (AID) is responsible for the conduct of independent audits, inspections, evaluations, and special studies of agency programs, functions, and activities, and operations. AID ensures balanced coverage of the Commission through the development and execution of an annual audit plan that complies with the requirements of the *Office of Management and Budget Circular A-73, Revised, Audit of Federal Operations and Programs.* Audits are selected on an audit universe, structured to identify findings the functions and programs within the Commission. The audit universe is used to track the degree of audit coverage in each area, considering prior audit coverage, noted weaknesses or deficiencies, and current management priorities.

The results of AID reviews are issued in reports to the chairman and appropriate management officials. Generally, these reports identify findings related to inadequate internal controls, noncompliance with appropriate regulations, and deficiencies in agency programs. As well, OIG's reports recommend measures to ensure compliance with policies and regulations, and strengthen internal controls. Our audits are performed in accordance with generally accepted government auditing standards established by the Comptroller General of the United States.

AID began fiscal year 1992 with a total of 10 professional staff members. However, by the end of the fiscal year resources declined 40 percent due to separations and reassignments. Despite diminished resources, AID issued 6 audit and inspection reports which are listed in Appendix I.

AUDITS BRANCH ACTIVITIES

Pre-Award Contract Analyses Resulted in Questioned Costs of $236,877.—At the request of the Procurement Management Division, OIG analyzed costs associated with two contractor proposals to determine the reasonableness and acceptability of salary rates, direct labor, overhead, travel, general and administrative expenses and other direct costs. We identified a total of $236,877 in questioned costs.

Procurement Control Procedures Need Improvement.—A review of the EEOC headquarters building services contract revealed that over a 3-year period, the Procurement Management Division (PMD) improperly issued purchase orders for day time cleaning services on a 6 month basis. This practice allowed the procurement to remain within the Federal Acquisition Regulations small purchase limitation of $25,000. We also found that PMD failed to issue purchase orders and pay for day time cleaning services rendered during two 6-month periods. PMD officials initiated corrective actions while our audit was in process.

INSPECTIONS BRANCH ACTIVITIES

OIG's inspection program is designed to review office's compliance with selected Federal regulations, and test for the application of sound management practices in the areas of: (1) procurement; (2) time and attendance; (3) equipment and property; (4) GSA vehicles; (5) financial cuff (accounting system); and (6) imprest fund (petty cash) and travelers checks.

During the reporting period we conducted four field office inspections. Specific examples of our findings in those inspections are outlined below:

Vehicle Usage Records Poorly Maintained.—OIG inspections continue to identify poor recordkeeping and ineffective internal controls over the usage of GSA vehicles. In one office over 5,400 miles were not reported during an 18-month period.

As previously noted in other OIG reports, management officials had failed to periodically monitor vehicle usage and review motor vehicle logs to ensure that employees recorded trips taken.

Property Inventories Inaccurate.—We found significant differences among EEOC's Property Management Inventory System (PMIS), data submitted by field offices for entry into PMIS, and on-site inspections of field office's property by OIG staff. In one field office 96 percent of the items selected for review were not consistent with

PMIS. In addition, one office's inventory continued to report property assigned to four individuals who separated from the office in fiscal years 1990 and 1991.

During fiscal years 1990, 1991, and 1992, a total of 22 field office inspection reports were issued. Generally, OIG found that offices were in compliance with applicable EEOC and other Federal regulations. However, we consistently identified significant internal control weaknesses in the management of GSA vehicles, equipment and property, and time and attendance.

An analysis of the reports disclosed that 14 or 63 percent of the offices inspected did not maintain complete records for each GSA vehicle assigned to the office. This absence of control resulted in the accumulation of approximately 8,000 unreported and/or unexplained miles in three of the offices. Further, 17 or 77 percent of the offices did not accurately and consistently update the agency's Property Management Inventory System (PMIS).

On September 30, 1991, OIG issued a "management alert" to all headquarters and field offices identifying time and attendance weaknesses. Since that time, OIG conducted 8 field office inspections and still found that timekeepers maintained their own timecards in 50 percent of the offices; their supervisors' timecards in 75 percent of the offices; and their alternates' timecards in 88 percent of the offices.

OIG plans to conduct a review of the agency's management of GSA vehicles and personal property inventory system, and issue the results during the next reporting period.

INVESTIGATIONS

OIG's Investigations Division investigates allegations of criminal and serious administrative misconduct involving EEOC programs, personnel, and operations. During the April 1, 1992 through September 30, 1992 reporting period, OIG received 23 new requests for investigative services, encompassing 36 distinct investigative issues. Seven were referred to the appropriate program area, and seven were administratively closed. The remaining requests are pending disposition.

During this reporting period OIG lost two of its three investigators due to promotion and reassignment. Nonetheless, the Investigations Division conducted and closed six investigations involving alleged criminal wrongdoing and other serious employee misconduct. Two of the investigations were conducted in concert with other law enforcement personnel.

Table of Investigative Allegations

Classification of Allegations:	
Employee Misconduct	1
Misconduct by Management Official	1
Program Matters	8
Misuse of Government Vehicles	1
Conflict of Interest	3
Theft	4
Outside Employment	1
General Criminal Activity	1
Time and Attendance Abuse	3
Falsification of Government Documents	1
Unauthorized Use of Government Property	2
General Fraud	1
Impersonating Agency Personnel	3
Imprest Fund	1
False Claims Act	1
Outside OIG Purview	4
Total	36

EXAMPLES OF INVESTIGATIVE ACTIVITIES

Bogus Agency Credentials Used to Perpetrate Assortment of Fraudulent Activities.—Following a lead provided by a bank security official, OIG participated in a multijurisdictional investigation consisting of law enforcement authorities from Baltimore, the State of Maryland, and the District of Columbia. The investigation uncovered a ring of individuals operating between New York and Virginia, who used bogus EEOC identification documents to engage in an assortment of criminal activities including fraudulently obtaining checking accounts and drivers licenses. The bogus credentials were also used to cash checks and to purchase a wide range of merchandise at various retail establishments. Several arrests were made.

Employee Arrested in Joint Undercover Operation.—In a separate matter, a joint OIG/FBI undercover operation lead to the arrest of a data automation clerk for the theft, unlawful reproduction, and unauthorized possession of official identification documents (IDs). The employee was arrested "off-site" while attempting to sell the IDs, for $50 each, during a joint OIG/FBI undercover operation. The employee plead guilty to the unlawful possession of stolen identification documents, and resigned her job at EEOC. She was sentenced to 30 months probation and ordered to serve 50 hours of community service work.

Checks Stolen from Headquarters' Mail System.—In another investigation, management officials reported instances of missing or stolen checks from the agency's Washington, D.C. headquarters' facility. OIG's investigation uncovered a scheme by a former mail room clerk, employed by a private contractor, who apparently intercepted incoming and outgoing mail containing checks totaling approximately $6,000 and subsequently cashed the checks at a local bank. The matter has been referred to local authorities for further processing.

Theft of Checks and Unauthorized Use of EEOC Credit Card.—OIG investigated a report by a field office regarding the theft of agency checks, and the unauthorized use of an EEOC Diners Club card. OIG was joined by the General Services Administration's Law Enforcement Investigations division in an investigation which uncovered evidence that the suspect, an employee of a GSA cleaning maintenance contractor, attempted to make purchases with both the checks and the credit card. The case has been referred to local law enforcement authorities for further disposition.

Other OIG Activities

In addition to audit, inspection, and investigative work, OIG staff participated in other related activities.

LIAISON WITH GAO

OIG coordinates GAO evaluations of EEOC programs and directs inquiries to appropriate agency personnel. During the reporting period the following GAO activities required the involvement of EEOC officials:

(1) EEO in Small Federal Agencies, requested by the Chairman and Ranking Member, Subcommittee on Post Office and Civil Service;

(2) EEO Barriers at Department of Interior, State, Agriculture and Navy, requested by the Chairman, Senate Committee on Governmental Affairs;

(3) Reduction-in-Force Policies and Practices, requested by the Chairman, Subcommittee on Human Resources, House Committee on Post Office and Civil Service; and

(4) A self-initiated review of federal flexitime programs and practices.

OIG conducted a briefing for EEOC's Office of Federal Operation's senior management officials on GAO evaluations of affirmative employment programs, coordinated agency comments addressing the status of corrective actions implemented as a result of prior GAO recommendations, and revised and consolidated agency comments on a GAO draft report on age employment discrimination.

On September 4, 1992, GAO issued a report entitled *Age Employment Discrimination: EEOC's Investigation of Charges Under the 1967 Law.* This report is a result of GAO audit work listed in the last four OIG semiannual reports.

OIG'S PEER REVIEW

September 30, 1992, marked the beginning of OIG's first peer review since the establishment of the OIG and appointment of the first inspector general in January 1989. Inspectors General of the Pension Benefit Guaranty Corporation and the Federal Communications Commission are conducting the review. Results will be reported in the next semiannual report to Congress.

OIG CONTINUING PROFESSIONAL EDUCATION

Several OIG Audits and Inspections Division staff members received training in continuing professional education courses such as:

Financial Statement Auditing
Supervision and Group Performance
Management Forum on Audit Followup
Report Writing

Due to budgetary shortfalls and hiring restrictions, OIG entered FY 92 with only 15 of its 18 allotted positions filled, and critical vacancies in the positions of counsel to the IG, supervisory auditor, supervisory inspector, and supervisory investigator.

Then, due to attrition, OIG lost 2 of 4 auditors, 1 of 3 inspectors, and 2 of 3 investigators. During the April 1, 1992 through September 30, 1992 reporting period alone, OIG experienced a 33-percent decline in staff resources.

As the reporting period closed, OIG received approval to fill several key vacancies including counsel to the IG, supervisory auditor, nonsupervisory auditors (2), and an inspector.

Glossary of Audit Terms

Questioned Cost—A cost the OIG has questioned because of an alleged violation of law, regulations, contract, grant, cooperative agreement or other agreement or document governing the expenditure of funds; such cost is not supported by adequate documentation; or the expenditure of funds for the intended purpose is unnecessary or unreasonable.

Unsupported Cost—A cost the OIG has questioned because of lack of adequate documentation at the time of the audit.

Disallowed Cost—A questioned cost that management, in a management decision, has sustained or agreed should not be charged to the government.

Funds to be Put to Better Use—Funds the OIG has identified in an audit recommendation that could be used more efficiently by reducing outlays, deobligating program or operational funds, avoiding unnecessary expenditures, or taking other efficiency measures.

Management Decision—Management's evaluation of audit findings and recommendations and issuance of a final decision concerning management's response to such findings and recommendations.

Final Action—The completion of all management actions—which are described in a management decision—with respect to audit findings and recommendations. If management concluded no actions were necessary, final action occurs when a management decision is issued.

Financial Audits—Financial audits include financial related audits and financial statement audits. Financial related audits include determining whether financial reports and related items are fairly presented, and whether there has been adherence to specific financial compliance requirements. Financial related audits may include audits of contracts, computer-based systems, and expenditures for specific programs or services. Financial statement audits determine whether the financial statements of an audited entity present fairly the financial position, results of operations, and cash flows or changes in financial position in accordance with generally accepted accounting principles.

Performance Audits—Performance audits include economy and efficiency, and program audits. Economy and efficiency audits include determining (1) whether resources are properly acquired, protected and utilized, (2) the causes of inefficiencies and uneconomical practices, and (3) whether there is compliance with laws and regulations concerning matters of economy and efficiency. Program audits include determining (1) the extent to which desired results or benefits are being achieved, (2) the effectiveness of programs and activities, and (3) whether there is compliance with laws and regulations applicable to the program.

APPENDIX I - OIG AUDIT AND INSPECTION REPORTS

Report Title	Report Number	Date Issued	Dollar Value of Questioned Costs	Dollar Value of Better Used Funds	Dollar Value of Unsupported Costs
FINANCIAL AUDITS					
GSA Buildings Service Contract for Daytime Cleaning Services	92-13-INV	07/01/92	$ -0-	$ -0-	[$ -0-]
Mettare Industries, Inc., and Chilton Research Services	92-19-APA	09/30/92	236,877	-0-	[-0-]
		Subtotal	$236,877	$ -0-	[$ -0-]
INSPECTIONS					
New Orleans District Office	92-12-INSP	07/08/92	$ -0-	$ -0-	[$ -0-]
Philadelphia District Office	92-16-INSP	09/30/92	-0-	-0-	[-0-]
Pittsburgh Area Office	92-17-INSP	09/30/92	-0-	-0-	[-0-]
Newark Area Office	92-18-INSP	09/30/92	-0-	-0-	[-0-]
		Subtotal	$ -0-	$ -0-	[$ -0-]
		Total	$236,877	$ -0-	[$ -0-]

APPENDIX II - OIG REPORTS WITH QUESTIONED COSTS

REPORTS	No. of Reports	Dollar Value (shown in thousands)	
		Questioned Costs	Unsupported Costs
A. For which no management decision has been made by the commencement of the reporting period	3	42 *	[9]
B. Which were issued during the reporting period	1	237	[0]
Subtotals (A+B)	4	279	[9]
C. For which a management decision was made during the reporting period	4	279	[9]
(i) dollar value of disallowed costs	4	279	[9]
(ii) dollar value of costs allowed	0	0	[0]
D. For which no management decision has been made by the end of the reporting period	0	0	[0]
Reports for which no management decision was made within six months of issuance	0	0	[0]

* The previously reported questioned costs inadvertently included $9,000 in unsupported costs twice. To rectify the error, $9,000 was deducted from the previously reported questioned costs.

APPENDIX III - OIG REPORTS WITH RECOMMENDATIONS THAT FUNDS BE PUT TO BETTER USE

REPORTS	No. of Reports	Dollar Value *(shown in thousands)*
A. For which no management decision has been made by the commencement of the reporting period	-0-	-0-
B. Which were issued during the period	1	237
Subtotals (A+B)	1	237
C. For which a management decision was made during the reporting period	1	237
(i) dollar value of recommendations that were agreed to by management	1	237
- based on proposed management action	-0-	-0-
- based on proposed legislative action	-0-	-0-
(ii) dollar value of recommendations that were not agreed to by management	-0-	-0-
D. For which no management decision was made by the end of the reporting period	-0-	-0-
Reports for which no management decision was made within six months of issuance	-0-	-0-

APPENDIX IV - OTHER REPORTING DATA REQUIRED BY PUBLIC LAW 100 - 504

SIGNIFICANT RECOMMENDATIONS FROM PREVIOUS SEMIANNUAL REPORTS

There are no significant recommendations described in previous semiannual reports where corrective action was not implemented.

AGENCY REFUSALS TO PROVIDE INFORMATION OR ASSISTANCE

There were no reports of instances in which information or assistance requested under *Section 6(b)(2) of the Inspector General Act of 1978, as amended,* was not provided.

REPORTS WITH OUTSTANDING MANAGEMENT DECISIONS

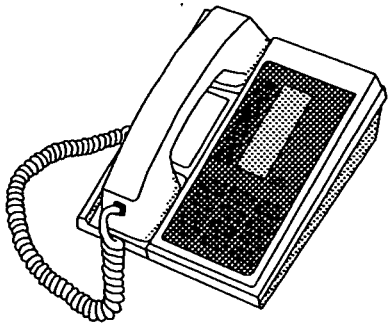
There were no audit reports issued before the reporting period which contain recommendations for which no management decisions have been made.

SIGNIFICANT MANAGEMENT DECISIONS WHICH WERE REVISED

No significant management decisions were revised during this reporting period.

INSPECTOR GENERAL'S DISAGREEMENT WITH SIGNIFICANT MANAGEMENT DECISIONS

The Inspector General has no disagreement with significant management decisions made during the reporting period.



OIG HOTLINE

CONFIDENTIAL / ANONYMOUS
(202) 663-7020

U.S. Equal Employment Opportunity Commission

Office of Inspector General
1801 L Street, N.W.
Suite 3001
Washington, D.C. 20507

The Inspector General Act provides that the Inspector General may not, after receipt of a complaint or information from an employee, disclose the identity of the employee without the employee's consent, unless the Inspector General determines that such disclosure is unavoidable during the course of the investigation. Further, the statute makes it illegal for supervisors or managers to threaten or take action against an employee as a reprisal for making a complaint or disclosing information to the Inspector General.

PART I
TABLE 1

MANAGEMENT REPORT ON FINAL ACTION ON AUDITS WITH RECOMMENDATIONS TO PUT FUNDS TO BETTER USE FOR THE SIX-MONTH PERIOD ENDING SEPTEMBER 30, 1992		Number of Audit Reports	Funds To Be Put To Better Use (In thousands)
A.	Audit reports with management decisions on which final action had not been taken at the beginning of the period.	0	0
B.	Audit reports on which management decisions were made during the period.	1	237
C.	Total audit reports pending final action during period (total of A and B).	1	237
D.	Audit reports on which final action was taken during the period.		
	(1) Value of recommendations implemented (completed).	1	237
	(2) Value of recommendations that management concluded should not or could not be implemented or completed.	0	0
	(3) Total of 1 and 2	1	237
E.	Audit reports needing final action at the end of the period (subtract D3 from C).	0	0

PART I
TABLE 2

MANAGEMENT REPORT ON FINAL ACTION ON AUDITS WITH DISALLOWED COSTS FOR THE SIX-MONTH PERIOD ENDING SEPTEMBER 30, 1992			Number of Audit Reports	Disallowed Costs (in thousands)
A.	Audit reports with management decisions on which final action had not been taken at the beginning of the period.		6	334*
B.	Audit reports on which management decisions were made during the period.		1	237
C.	Total audit reports pending final action during period (total of A and B).		7	571
D.	Audit reports on which final action was taken during the period.			
	1.	Recoveries	7	571
		(a) Collections and offsets	0	0
		(b) Property	0	0
		(c) Other	0	0
	2.	Write-offs	0	0
	3.	Total of 1 and 2	7	571
E.	Audit reports needing final action at the end of the period (subtract D3 from C).		0	0

* The closing balance from the prior period contained $9,000 in unsupported costs which were included twice. This $9,000 has been deducted from the beginning balance (Item A), for this period.

* $21,000 (Rounded), of the beginning balance ($334,000), (Item A), represents the disallowed cost for the audit report titled, "Cost Analysis of International Association of Official Human Rights Agencies." This report was inadvertently omitted from the Table for the previous period.

PART II-TABLE 1

SEMIANNUAL MANAGEMENT REPORT TO THE CONGRESS

STATEMENT ON AUDIT REPORTS ON WHICH MANAGEMENT DECISIONS HAVE BEEN MADE, BUT FINAL ACTION HAS NOT BEEN TAKEN

TITLE OF REPORT	REPORT NUMBER	REPORT DATE	COMMENTS	DISALLOWED COST	FUNDS PUT TO BETTER USE	REFERENCE NUMBER
PERFORMANCE AUDITS						
Limited Evaluation of Advisory and Assistance Services at the U.S. Equal Employment Opportunity Commission for FY 1991	92-04-APO	01/31/92	-	-0-	-0-	1
General Management Review of the Office of General Counsel (OGC)	91-03-MIS	02/20/92	-	-0-	-0-	2
Review of Administration of Settlement Agreements, Office of General Counsel, Systemic Litigation Services	91-14-MIS	03/31/92	-	-0-	-0-	3
FINANCIAL AUDITS						
Contract Closeout of C.A.C.I.	91-21-ACC	09/30/91	$8,499 UNSUPPORTED	$18,634	-0-	4
Audit of GSA Public Buildings Service Contract for Daytime Cleaning Services	92-13-INV	07/01/92	-	-0-	-0-	5
Cost Analysis of Metters Industries, Inc., and Chilton Research Services	92-19-APA	09/30/92	-	$236,877	-0-	6

NOTE: The Column "Reference Number" refers to information on pages 4, 5, & 6

PART II-TABLE 1 - REFERENCE SHEET

REFERENCE NUMBER	REQUIRED ACTION(S)	ACTION(S) COMPLETE/NOT COMPLETE
STATUS OF AUDIT REPORTS ON WHICH MANAGEMENT DECISIONS HAVE BEEN MADE BUT WITHOUT FINAL ACTION		
1	Perform quarterly reviews of advisory and assistance review practices.	Complete
	Ensure that reappointment justification statements for "experts" are prepared and included in employee's OPF.	Complete
	Ensure that documentation in OPF files is complete.	Complete
2	Ensure that contract monitors receive proper training and pertinent regulations in procurement and contract processes.	Corrective actions in process. Supplemental workplan due on October 15, 1992.
	Ensure that all Administrative and Technical Services Staff employees have training and access to needed regulations.	Corrective actions in process. Supplemental workplan due on October 15, 1992.
	Ensure that timekeepers adhere to all governing regulations.	Complete
	Ensure that OGC staff member at supervisory level be designated to certify time and attendance records for supervisor who is blind and unable to verify such records.	Complete
	Ensure that General Counsel enforce certain administrative and technical staff functions as outlined in audit report.	Complete
	Ensure that other than firm fixed price contracts are used for litigation support procurement.	Complete
	Ensure that delivery receipts are received in the Finance Division within 24 hours of receipt of goods.	Complete
3	General Counsel should ensure that: (a) all settlement agreements are fully implemented.	Complete

PART II-TABLE 1 - REFERENCE SHEET CONTINUED

REFERENCE NUMBER	REQUIRED ACTION(S)	ACTION(S) COMPLETE/NOT COMPLETE
STATUS OF AUDIT REPORTS ON WHICH MANAGEMENT DECISIONS HAVE BEEN MADE BUT WITHOUT FINAL ACTION		
3 (Cont'd)	(b) status of all settlement agreements are periodically reviewed and reviews are documented.	Complete
	(c) Regional Attorneys' Deskbook contains specific guidance on settlement agreements.	Complete
	(d) SLS officials only sign settlement agreements for which they have delegated authority and that such authority is documented.	Complete
	(e) SLS adequately document claims and release form procedures.	Complete
	(f) All phases of claimants receipt of settlement checks are adequately prepared, issued, verified, and documented.	Complete
4	Disallow $1,050 for honoraria for Technical Advisory Committee.	Complete
	Disallow $6,724 of other direct costs.	Complete
	Disallow subcontractor fee of $7,178 and other direct costs of $603.	Complete
	Disallow consultant fees of $725.	Complete
	Disallow travel costs of $260.	Complete
	Disallow office supplies of $400.	Complete
	Disallow General and Administrative expenses of $1,694.	Complete
	Approve for payment, balance of the fixed fee totaling $1,647.	Complete
	Obtain evidence from C.A.C.I. of the sale of EEOC's surplus equipment and the application of any earned credit.	Complete
	Complete contract closeout procedures.	Complete

REFERENCE NUMBER	REQUIRED ACTION(S)	ACTION(S) COMPLETE/NOT COMPLETE
STATUS OF AUDIT REPORTS ON WHICH MANAGEMENT DECISIONS HAVE BEEN MADE BUT WITHOUT FINAL ACTION		
5	Ensure that GSA contracts for daytime cleaning services for EEOC Headquarters are requested through a Reimbursable Work Agreement.	Complete
	That Smithy Braedon be paid for services for the periods of April 1990 through September 1990 and April 1991 through September 1991.	The final payment for the cited services will be made on October 29, 1992.
	That Procurement Management Division review purchase orders to ensure that EEOC offices do not "split" purchase orders.	Complete
	Ensure that persons responsible for monitoring procurement actions receive appropriate guidance and adequate training.	Complete
6	That proposed costs totaling $246,000, be disallowed when/if the contract is awarded.	Complete (The contract was awarded within amounts prescribed in the Audit Report).

PART II-TABLE 2

SEMIANNUAL MANAGEMENT REPORT TO THE CONGRESS

STATEMENT ON AUDIT REPORTS ON WHICH MANAGEMENT DECISIONS WERE MADE IN PRIOR PERIODS, AND FINAL ACTIONS WERE TAKEN DURING THIS PERIOD

TITLE OF REPORT	REPORT NUMBER	REPORT DATE	COMMENTS	DISALLOWED COST	FUNDS PUT TO BETTER USE
PERFORMANCE AUDITS					
Limited Review of EEOC's FY 1991, Internal Control Systems and Federal Managers' Financial Integrity Act (FMFIA) Report	92-03-AIC	12/13/91	-	-0-	-0-
FINANCIAL AUDITS					
Cost Analysis of Dynamic Concepts, Inc.	92-01-APA	10/11/91	AWARDED	$105,976	$51,888
Cost Analyses of Disability Rights Education and Defense Fund, Inc. and Independent Living Research Utilization/TIRR, and Abt Associates, Inc.	92-02-APA	11/27/91	AWARDED	$152,928	-0-
Cost Analyses of International Association of Official Human Rights Agencies	92-05-APA	12/31/81	AWARDED*	$20,747	-0-
Cost Analyses of Best and Final Offer from Disability Rights Education and Defense Fund, Inc. and Independent Living Research Utilization/TIRR and Abt Associates, Inc.	92-06-APA	02/14/92	AWARDED	$33,159	-0-
Contract Closeout of DBS Corporation	91-22-ACC	09/30/91	$276 UNSUPPORTED	$2,064	-0-

*See Note on Page 2 of this Report

ITEM 19. FEDERAL COMMUNICATIONS COMMISSION

DECEMBER 15, 1992.

DEAR CHAIRMAN PRYOR: Thank you for your letter regarding initiatives taken by the Federal Communications Commission on behalf of older Americans.

The Federal Communications Commission Authorization Act of 1990, provided the Commission with the authority to issue financial awards to private, nonprofit organizations representing older Americans for the purpose of using older Americans to assist the Commission in carrying out its programs.

In October 1991, the Commission signed a cooperative agreement with the National Council on Aging (NCOA) to launch a pilot program to enlist older workers for critical technical and clerical work in the agency. Under the auspices of this agreement, the Commission filled three engineering positions in 1992. The pilot proved successful but due to financial constraints, the program has not been expanded this fiscal year.

Thank you for providing us this opportunity to report on our activities affecting the elderly.

Sincerely,

ALFRED C. SIKES,
Chairman.

ITEM 20. FEDERAL TRADE COMMISSION

DECEMBER 21, 1992.

DEAR MR. CHAIRMAN: In response to your letter of October 27, 1992, I am pleased to forward the enclosed staff summary of Federal Trade Commission activities on behalf of older consumers and their families. While many of our law enforcement initiatives affect consumers of all ages, in reviewing this report I am again struck by the number of activities that directly benefit older members of our society.

I hope this information will be helpful to the Committee. Please let me know if we can provide any additional assistance.

By direction of the Commission.

JANET D. STEIGER,
Chairman.

Enclosure.

STAFF SUMMARY OF FEDERAL TRADE COMMISSION ACTIVITIES AFFECTING OLDER AMERICANS—1992 REPORT

This report discusses the Federal Trade Commission's activities that have particularly affected older consumers in fiscal year 1992. Relevant information up to December 1992 has also been included. The first section of the report describes activities relating to the health concerns of older consumers. Because older consumers may experience increased health problems, they may be more vulnerable to claims made about health-related benefits of a product or service. The second section discusses Commission law enforcement activities of particular importance to older consumers in nonhealth related matters. The final section of the report addresses the Commission's relevant consumer education initiatives.

HEALTH RELATED ACTIVITIES

HOSPITAL SERVICES

Older consumers make greater use of health care facilities, including hospitals, than other segments of the population. Thus, as a group, they stand to benefit more from effective competition among health care providers. Many of the Commission's actions are aimed at protecting competition in the health care market place.

In September 1992, the Commission issued a consent agreement with a nonprofit hospital in Augusta, Georgia. The agreement was the result of the Commission's successful challenge of a proposed merger that would have combined a large general acute care hospital in that city with one of only four competitors. Earlier, a Federal district court had preliminarily enjoined the merger at the direction of a Federal Court of Appeals, upholding the Commission's allegation that the merger created a significant danger of higher hospital prices and lower quality of care. Under the terms of the agreement the hospital consented for the following 10 years not to acquire any hospital in the Augusta area, not to be acquired by any hospital in the Augusta area, and not to enter into any joint venture with any hospital in the Au-

gusta area for the purpose of establishing a new hospital without prior approval from the Commission.

On December 9, 1992, an administrative law judge dismissed the Commission's complaint challenging a merger of two general acute care hospitals in Ukiah, California. The Commission's administrative complaint charged that the merger gave one company control of three of the five general hospitals in the Ukiah area and that the resulting dominant position in the local hospital market could deny consumers competitive prices and quality hospital care. The decision of the administrative law judge is subject to review by the full Commission on its own motion or at the request of either party within 30 days of its issuance.

In the past year, the Commission staff has investigated several additional hospital mergers. In one of these matters—a proposed merger of two national rehabilitation companies, each having competing hospitals in several metropolitan areas in the South—the merger was abandoned while the staff of the Commission was conducting its investigation.

Nursing Homes

The Commission staff also monitors the nursing home industry to ensure that nursing home care is available at competitive prices. In August 1992, the Commission issued its complaint and consent order settling charges that six nursing homes in Rockford, Illinois, unlawfully agreed to stop using temporary nurse registries following an increase in prices charged by the registries for nursing assistants. The Commission's complaint alleged that the nursing homes had entered into this agreement in order to reduce the prices paid for nursing services provided by the registries.

Home Health Care

Home health care services offer the possibility of reduced health care expenses and can enable some people who would otherwise require institutional care to remain at home. Durable medical equipment often is an important component of effective home health care. The staff of the Commission investigated potentially anticompetitive mergers or proposed mergers among producers of such medical equipment.

In FY 1992, the Commission issued a consent order settling a challenge to a consummated merger between American Stair-Glide and Cheney, the country's largest producers of curved and straight stairlifts, vertical wheelchair lifts, and other accessibility equipment for the disabled. The consent order requires the respondents to grant a nonexclusive perpetual license of technology for the production of the relevant products and to provide necessary technological assistance to a licensee approved by the Commission. In addition, for 5 years, the respondents may not enter into long-term sales or distribution agreements or exclusive agreements limiting distributors' ability to sell the relevant products of another manufacturer, and may not condition the sale of products or the provision of services on an agreement with a distributor not to sell the relevant products of another manufacturer.

Physician Joint Ventures

The staff of the Commission is investigating possibly anti-competitive activities by physicians involving their referral of patients to joint ventures owned (or operated) by the physicians. These joint ventures provide medical services and products ancillary to the physicians' practices. There has been mounting concern that physician-owners may be over-prescribing to their patients goods or services from their venture for which the need is marginal or nonexistent and referring patients to their venture when an objective evaluation of the patient's condition or the price and quality of needed service dictates that no treatment is needed or that a competitive service suits the patient's needs, respectively.

Physician Services

In March 1992, the Commission accepted a consent agreement from the former chairman of the OB/GYN department at a hospital in Miami, Florida, who allegedly conspired with other physicians to coerce the hospital into paying physicians for emergency room call services by threatening to refuse to take emergency room call duty.

In September 1992, the Commission issued a consent agreement settling charges that a physician who was the Chief of Staff at Broward General Medical Center in Fort Lauderdale, Florida, had conspired with the medical staff to threaten to boy-

cott the hospital in order to coerce the hospital not to enter a business relationship with the Cleveland Clinic, which provides specialized care, using innovative means of delivery and pricing.

In 1992, the staff also continued to conduct investigations of various allegations that doctors organized boycotts in order to reduce competition and increase prices.

Chiropractic Services

In November 1991, the Commission issued a consent order settling allegations that the Connecticut Chiropractic Association had restrained competition unreasonably by prohibiting its members from offering free services or services at discounted fees; advertising in a manner that the Association considered to be "undignified" and not in "good taste"; and implying that they possess "unusual expertise."

Restraints on Advertising by Health Care Professionals

Advertising by professionals in general, and by health care providers in particular, has grown tremendously since the mid-1970's. The Commission supports the right of professionals to advertise truthfully. However, the Commission also recognizes the importance of policing the marketplace to ensure that health care professionals and associations do not engage in deceptive or misleading advertising practices.

In September 1992, the Commission accepted, subject to final approval, a consent agreement in which a professional association of psychologists agreed not to restrict its members from truthful advertising, solicitation, or participation in patient-referral services. The agreement allows the professional association to adopt and enforce guidelines to protect certain persons vulnerable to undue influence from in-person solicitations, however. The staff of the Commission also has investigated advertising restrictions by other health care professional associations.

Prescription Drugs

One way of keeping medicines affordable is to preserve competition in the pharmaceutical industry. To that end, the staff of the Commission monitors mergers and acquisitions in the pharmaceutical industry and challenges those that are likely to be anticompetitive. In 1992, the staff of the Commission investigated an acquisition involving two companies that make products used in prescription pharmaceuticals, over-the-counter drugs, vitamins and other nutritional products. The acquisition was abandoned after the Commission requested additional information about the proposed merger.

The Commission also accepted, subject to final approval, a consent agreement settling charges that pharmacies and a pharmacy association in Colorado boycotted the State's prescription drug program for retired employees in order to force an increase in reimbursement rates. Such a boycott could result in higher out-of-pocket expenses for retirees whose pharmacy benefits are provided through the program. The staff of the Commission is also investigating allegations that pharmacists boycotted a major city's prescription drug plan for its employees in an effort to prevent a reduction in the prices paid for prescription drugs under that program.

In April 1992, in another drug plan boycott matter, the Commission concluded that Peterson Drug Company of North Chili, New York, conspired with others to refuse to participate in the New York State Employees Prescription Program (NYSEPP), adopting the initial decision of the administrative law judge. The NYSEPP was a program through which New York State sought to obtain lower prices for State employees and retirees. The Commission found that the unlawful activity led to higher prescription drug prices. The Commission decision orders Peterson Drug to cease and desist from its unlawful activities.

In another matter, the Commission in July 1992, issued its final decision and order settling charges that Sandoz Pharmaceuticals Corporation illegally tied the sale of its antischizophrenic drug, Clozaril, to the sale of patient monitoring services. The order prohibits Sandoz from requiring purchasers of Clozaril to purchase monitoring services from Sandoz or its designee. The order also permits providers other than Sandoz's designee to provide monitoring systems for Clozaril, so that consumers are able to select among providers and may be able to obtain the monitoring for lower prices. Other purchasers, such as the Veterans' Administration, can provide the required patient monitoring on their own, thereby cutting the previous cost of Clozaril treatment, which came to almost $9,000 per person per year. The Veterans' Administration estimated that it can save approximately $20 million annually as a result.

The order in the Sandoz matter also guards against the possibility that Sandoz might restrict other firms that want to market generic clozapine in the United States after Sandoz's exclusive selling right expires in 1994. The order requires that if such a company needs information about patients who have had adverse reactions to clozapine, Sandoz must provide that information upon request and on reasonable terms, not to exceed $10. Further, the order requires that Sandoz, for 8 years, not unreasonably withhold information about clozapine patients from scientists and researchers examining the medical aspects of clozapine use and prohibits Sandoz from charging a fee to provide such information.

Food and Food Supplement Advertising

Many older persons have special dietary needs and concerns, making them particularly sensitive to the advertisement of health claims for foods, drugs, and health care. One way the Commission assists older Americans in this regard is its program of monitoring advertising in these areas and bringing law enforcement actions to stop deceptive claims.

In the fall of 1992, the Commission accepted, subject to final approval, a proposed consent agreement with the Clorox Company. The agreement would settle charges that the company deceptively advertised its Take Heart "fat-free" salad dressings as containing no fat. The FTC charged that the Take Heart ads falsely represented that the salad dressings were fat-free in any amount that might be reasonably consumed. The FTC alleged that the salad dressings contained about 1 or 2 grams of fat per 2 teaspoons, depending on the variety. The proposed agreement would prohibit Clorox from misrepresenting the total fat, saturated fat, cholesterol, or sodium content of any of its salad dressings in the future.

The Commission's proposed consent agreement with the Isaly Klondike Company settles charges that Klondike made false claims about the fat and calorie content of its Klondike Lite frozen dessert bars and their effect on consumers' serum cholesterol levels. The proposed consent agreement would prohibit the company from misrepresenting the amount of fat or any other nutrient or ingredient in any of its frozen foods in the future. The agreement would also prohibit the company from misrepresenting the effect of any of these products on serum cholesterol levels or the risk of heart disease through the use of terms such as "low in cholesterol." The settlement would allow Klondike to make claims specifically permitted by food-labeling regulations promulgated by the Food and Drug Administration pursuant to the Nutrition Labeling and Education Act.

Also in 1992, the Commission gave final approval to a consent agreement with Nestle Food Company and Nestle Beverage Company settling charges that certain advertisements for Carnation Coffee-mate Liquid falsely represented it to be a low-fat product when consumed in amounts normally used on cereal, over fruit, or in cooking, and lower in fat than other foods such as 2 percent milk or whole milk. The FTC alleged that a ½ cup serving of Coffee-mate Liquid has 8.5 grams of fat, nearly twice the fat in an identical serving of whole milk and nearly four times that in 2 percent milk. The two companies are prohibited from misrepresenting the amount of total fat, saturated fat, or cholesterol in any milk product or nondairy substitute, as well as from misrepresenting the amount of total fat, saturated fat, or cholesterol relative to the serving size or the amount customarily consumed for any particular use depicted in ads or promotional materials.

The FTC and Campbell's Soup Company reached a final consent agreement in 1992 concerning health claims made in some of Campbell's soup advertisements. The final agreement settles 1989 FTC charges that a Campbell's Soup Company advertisement linked the low-fat, low-cholesterol content of most of its soups to a reduced risk of some forms of heart disease but failed to disclose that the soups were high in sodium and that diets high in sodium increase the risk of heart disease. The agreement requires Campbell to disclose in certain future advertisements for its soups both the sodium content of the soup and the maximum daily limit on sodium intake.

Diet and Weight Loss Advertising

Many older consumers purchase services from diet clinics. In 1992, the Commission continued its investigations of medically supervised and commercial, storefront diet programs to determine, among other things, whether these firms have made deceptive or unsubstantiated claims about the safety and long-term success of their programs. In 1992, the Commission accepted consent agreements with three marketers of very-low-calorie diet programs—Optifast, Medifast, and Ultrafast. These are the first settlements resulting from these investigations. The consent orders prohib-

it, among other things, misrepresentations about the likelihood of regaining lost weight and unsubstantiated claims about the success of clients in achieving or maintaining weight loss.

The agreements also set out detailed requirements for substantiation and disclosure when weight loss and weight loss maintenance success claims are made, including the obligation, when claims of successful maintenance are made, to include factual disclosures of the average weight loss maintained, how long patients have maintained the loss, the representativeness of the successful clients in terms of the overall patient population, and a statement that for many dieters, weight loss is temporary. Safety claims would have to be accompanied by a disclosure that physician monitoring is necessary to minimize the potential for health risks.

In 1992 the Commission obtained a permanent injunction against fraudulent misrepresentations and a $21 million court ordered judgment for consumer redress against a multistate diet clinic chain, Pacific Medical Clinics Management, and the individual who controlled the clinics, Norman Wells. The Federal district court complaint alleged that defendants fraudulently misrepresented the safety and ability of their diet program: (1) to adjust consumers' metabolism through the use of an amino acid tablet supplement known as Growth Hormone Releaser (GHR) and, in some cases, the prescription drug Synthroid, a thyroid hormone; and (2) to enable consumers to lose up to a pound-and-a-half a day without exercise or strict dieting. The complaint charged that defendants' program did not produce metabolic adjustment sufficient to produce significant weight loss and that GHR does not reduce fat tissue. The complaint further alleged that the defendants' representation that the diet program was safe and effective was deceptive because they failed to tell consumers that Synthroid was not approved by the U.S. Food and Drug Administration for treatment of obesity and, in fact, the FDA requires a warning that Synthroid should not be used for the treatment of obesity.

Drug Advertising

The Commission accepted, subject to final approval, a consent agreement with Medical Marketing, Inc., and its principal, Michael Wallerstein, settling allegations that they falsely represented the risks, pain and recovery period associated with a chemical face-peel procedure. The respondents had claimed that the procedure was an effective and virtually pain-free way to eliminate facial wrinkles and folds of skin. The consent would prohibit Wallerstein from making misrepresentations about the chemical face-peel procedure or any other health care service.

Other Health-Related Advertising

The FTC gave final approval to a consent agreement with Viral Response Systems, Inc. (VRS), and its president settling charges that false and unsubstantiated claims were made regarding the efficacy of the "Viralizer System," a hand-held device for treating colds and allergies. Under the final consent order, VRS is prohibited from, among other things, representing that the Viralizer can or will destroy, disable, or help destroy or disable any virus responsible for the onset or continuance of colds unless the respondents can adequately substantiate the claims with at least two adequate and well-controlled, double-blind clinical studies or have approval from the Food and Drug Administration to make the claim.

In 1992, the Commission gave final approval to a consent agreement with Newtron Products Company, Inc., settling charges that Newtron deceptively advertised the ability of the Newtron Electrostatic Air Cleaner to remove fungal spores and pollen from the air in consumers' homes. The final order prohibits claims that scientific tests conducted in the homes of allergy sufferers establish that the air cleaner, or any substantially similar device, can remove 94 percent of fungal spores or 100 percent of pollen from air in homes. The order also prohibits the misrepresentation of the contents, validity, results, conclusions, or interpretations of any test or study. In addition, Newtron must have competent and reliable evidence to substantiate any future claims about the performance characteristics of any air cleaning product.

NON-HEALTH-RELATED ACTIVITIES

Funeral Services

The Commission's Funeral Rule, which became effective in 1984, seeks to increase consumer access to accurate information about prices, options, and legal requirements before consumers make funeral arrangements. Since its promulgation, the Commission has filed 34 enforcement actions charging violations of the rule, thir-

teen of which were filed during FY 1992. In addition to prohibitions against future violations of the rule, the consents in these cases usually require a payment of a civil penalty, and some require consumer redress to remedy the funeral provider's charges for unauthorized services or failure to render goods or services for which the consumer was charged.

The Funeral Rule requires the Commission to re-evaluate the rule no later than 4 years after its effective date to determine whether the rule should be expanded, modified, or repealed. This proceeding is underway and, following hearings, both the rulemaking staff and the presiding officer recommended retention of the rule with several modifications designed to increase compliance and consumers' understanding of their rights under the rule.

In addition to enforcing the Funeral Rule, Commission staff continues to monitor mergers and acquisitions in the funeral industry as a means of keeping the industry competitive. In one such matter, the Commission has accepted a consent order settling charges that Service Corporation International's acquisition of Sentinel would enhance the possibility of collusion among the remaining firms in Georgia and Tennessee. In 1992, the Commission accepted another consent agreement to settle allegations that Service Corporation International's acquisition of Pierce Brothers could lead to a dominant firm in the Riverside/San Bernardino region of California. The Commission also accepted a consent against Sentinel concerning that company's acquisition of several independent funeral homes in Georgia and Arkansas. That consent requires the divestiture of a number of funeral homes in the relevant geographic markets. The Commission staff is also currently conducting investigations into potentially anticompetitive funeral home mergers in the South and the Southwest.

Through the Office of Consumer and Competition Advocacy, Commission staff submitted comments on a Michigan proposal to permit joint ownership and operation of funeral establishments and cemeteries, observing that joint ownership could make possible new business formats and may promote efficiencies that ultimately could result in lower prices to consumers. Staff also testified before the California legislature on the Commission's regulation of the funeral industry.

Living Trusts

The marketing of living trusts, by telephone, door-to-door sales, or in seminars presented in various cities, is a burgeoning area in which consumer fraud and deceptive practices may disproportionately harm elderly consumers. Currently, the Commission is conducting nonpublic investigations of various companies that, in the course of promoting information and services on estate planning, market services to create living trusts.

Mail Order Sales

At the time of issuing the Mail Order Rule, the Commission noted that those consumers with mobility problems, including older consumers, frequently order by mail. The rule requires sellers to make timely shipment of orders; give options to consumers to cancel an order and receive a prompt refund or to consent to any delay; have a reasonable basis for any promised shipping dates (the rule presumes a 30-day shipping date when no date is promised in an advertisement); and make prompt refunds. The staff of the Commission works closely with industry members and trade associations to obtain compliance with the rule, and it initiates law enforcement actions where appropriate. In the past year, the Commission filed three mail order consent decrees in Federal district court, obtaining a total of $420,000 in civil penalties.

The Commission is now engaged in the final stage of a rulemaking proceeding to determine whether the rule should be extended to telephone order sales. During the proceeding, the American Association of Retired Persons provided evidence indicating that a significant percentage of persons age 65 and older order products and services by telephone and, therefore, that the proposed amendment would benefit its members. On November 18, 1992, the Commission tentatively approved the proposal to extend the Mail Order Rule to telephone sales and directed staff to draft a Statement of Basis and Purpose (SBP) for the amendments, for the Commission's approval. Once the Commission has given final approval to the amendments and the SBP, they will be published in the Federal Register.

Used Car Sales

The Used Car Rule requires that used car dealers display "Buyers Guides" on the windows of their cars to tell consumers whether the vehicle comes with a warranty or is sold "as is." These warranty disclosure requirements can be of particular benefit to older consumers, who may be on fixed incomes and therefore may need to purchase used cars and who may be less able to meet sudden, unexpected repair expenses. In 1992, the Commission obtained consent decrees against 19 used car dealers for rule violations, obtaining a total of $140,000 in civil penalties, and initiated litigation against two other dealers.

Door-to-Door Sales

The Cooling-Off Rule requires that consumers be given a 3-day right to cancel certain sales that occur away from the seller's principal place of business. This rule can particularly benefit older Americans who are retired and at home.

In 1992, the FTC obtained a court judgment against Doro Lee, Inc., which does business as Brown Hearing Aid Centers, for violating the Cooling-Off Rule in connection with the sale of hearing aids. This judgment prohibits additional violations and requires the company to pay a civil penalty. The Commission also obtained a consent decree with Marquez, Inc., doing business as Miracle-Ear Hearing Aid Center, to settle charges that the company violated the rule in its door-to-door sale of hearing aids. The decree also enjoins future rule violations and imposes a $15,000 civil penalty.

In addition, in 1992 the Commission brought suit against two companies selling magazines door-to-door allegedly in violation of the rule. In one of those matters, the Commission brought a civil penalty action against Budget Marketing, Inc., a nationwide telemarketer of magazines. This case, presently in litigation, arose from many complaints from elderly citizens who believed that they had been tricked into paying hundreds of dollars from multiyear magazine subscriptions.

Energy Costs

The cost of heating and cooling one's home can be especially burdensome to older consumers. Retired individuals, who tend to spend more time at home than working individuals, may have less opportunity to lower their home heating or cooling requirements during the day. In addition, the elderly may be more susceptible to hypothermia and, therefore, are often counselled to maintain a higher temperature in their homes than younger persons might comfortably tolerate. Those on fixed incomes also may face greater relative economic burdens in times of rising energy costs.

The Commission's R-value Rule assists consumers by requiring that sellers of insulation accurately disclose the "R-value," or insulating effectiveness, of such products. The rule also requires installers and new home sellers to give consumers a written disclosure of the type and R-value of the insulation installed. In 1992, to gauge the extent of compliance with the rule, the Commission conducted the second part of its industry-wide survey of home insulation manufacturers.

The Commission's Appliance Labeling Rule also enables consumers to reduce energy costs by requiring sellers to disclose the energy usage of major household appliances. Because energy-efficient appliances cost less to run over the life of the product, the rule enables those elderly consumers who may be on fixed incomes to keep down monthly expenses for running major home appliances. The rule requires disclosure, based on standardized tests, of specific energy costs or efficiency information for covered products in catalogs. It also requires information at the point of sale in the form of an "EnergyGuide" label or fact sheet, or in an industry directory. The labels include the energy cost or efficiency figure, a range showing the highest and lowest energy costs or efficiencies for all similar appliance models, and a chart that enables consumers to estimate more closely how much it may cost to run the appliance each year based on local utility rates. Compliance with the rule is generally good, and the industry is largely self-policing through certification programs maintained by the several large trade associations that represent most manufacturers. The Commission is currently conducting a proceeding to consider ways to modify the rule.

The Commission also has conducted investigations under its Octane Rule, that establishes standard procedures for determining, certifying and posting octane ratings on gasoline pumps. Accurate certification and posting of octane ratings deter distributors and retailers from deceptively selling lower octane fuel as higher octane fuel. This rule may benefit retired persons who have the time for leisure activities

involving car travel. Five consent decrees settling charges of Octane Rule violations were filed in Federal district courts in 1992. In addition, the Commission completed the first round of its nationwide survey of gasoline distributors to determine compliance with the Octane Rule's certification and recordkeeping requirements.

Dance Studios

Commission staff continues to monitor compliance with Commission orders issued against Arthur Murray, Inc., and Ronby Corp. (Fred Astaire Dance Studios), the two largest dance studio chains. These orders require broad cancellation and refund rights for consumers, many of them elderly, who pre-pay for dance lessons and are then fraudulently dissuaded from completing the paid-for courses. In addition, staff has been assisting State and local authorities in their efforts to stop fraud and deception in dance studios.

Credit

In the area of consumer credit, the Commission protects older consumers by enforcing the age discrimination provisions of the Equal Credit Opportunity Act (ECOA). Although Federal law permits creditors to consider information related to age, creditors may not deny, reduce, or withdraw credit solely because an otherwise qualified applicant is over 61 years old. Retirement income must be considered in the same manner that employment income is considered in evaluating a credit application. Moreover, although credit-related insurance may be unavailable to older persons because of their age, a creditor may not use this as a reason for credit denial.

In December 1991, the Commission settled age discrimination actions against a group of related finance companies doing business in two different jurisdictions. The complaints alleged that the defendants denied credit to elderly applicants whose income derived from a public assistance program (Social Security), part-time employment, or retirement benefits, rather than from full-time employment. In the settlement, the defendants agreed to an injunction against future violations of the ECOA and to a combined civil penalty of $55,000.

Credit Fraud

During the past year, the Commission has also worked closely with Federal and State law enforcement agencies to combat advance-fee loan scams. In these scam, companies "guarantee" loans to consumers in exchange for an advance fee, typically ranging from $100 to several hundred dollars. After taking consumers' money, the companies frequently disappear. In January 1992, the Commission held an interagency summit on advance-fee loan scams, which was attended by representatives of the FBI, the Secret Service, Postal Inspectors, and State law enforcement and regulatory agencies. A public warning was also issued at that time.

In a related matter, the Commission charged Delta Financial Services in June 1992, with falsely representing that it routinely obtained unsecured loans for people with poor credit histories. The complaint alleges that Delta led consumers to believe that by calling a "900" number and completing a loan application over the phone—at a cost of $3.95 per minute—their file would be referred to a lender that would review the application. In fact, the complaint alleges, the defendants rarely, if ever, referred the applications to a lending institution for review. This case is still in litigation.

Other types of credit scams may also affect the elderly. For example, in April 1992, the Commission settled charges against Mandy Enterprises and its principals that they misrepresented to consumers their credit card program and the cost of their services. The Commission's complaint alleged that the defendants gained access to consumers' checking accounts by misrepresenting that consumers were guaranteed to receive credit cards, loans, and other types of credit. The defendants allegedly used consumers' checking account numbers to submit bank drafts to consumers' banks and to debit their accounts for $98 to $120. The complaint further charged that, rather than provide consumers with the promised credit services, the defendants merely sent customers information about how to get credit cards or loans. Among other things, the settlement agreement prohibits the defendants from misrepresenting their credit-related products or services, requires them to disclose any conditions or fees for their services, and to obtain written pre-approval before debiting consumers' checking accounts.

Investment Fraud

The Commission's investment fraud program is another example of a program that benefits all consumers but especially older, retired persons. Investment frauds frequently victimize the public through false promises of large returns on "safe" investments. These frauds obviously harm all investors, but they can particularly hurt older investors, who are vulnerable to fraudulent operators and often ill-prepared to recoup the losses. Some investment fraud firms have bilked individual consumers of $5,000 to $10,000 or more by promising large returns for investments in art works, motion picture film cells, gold mines, gemstones, precious metals, rare coins, oil and gas leases, cellular telephone licenses, or wireless cable licenses. These firms usually employ telephone room salespersons who use high-pressure, polished sales pitches.

In fiscal year 1992, the Commission filed 12 cases in Federal district court involving such schemes. In all of these cases, the Commission secured preliminary or permanent orders halting the challenged conduct.

Other Telemarketing Fraud

Since 1982, the Commission has obtained court ordered injunctions against telemarketers with combined sales of nearly $1 billion. Many of these cases involved the sale of goods and services of special interest to older consumers, including travel packages, prize contests, credit opportunities, health products, and various home products.

The Commission has focused its recent enforcement efforts on the sophisticated network of "roots"—list brokers, credit card processors, telephone service bureaus, and suppliers of products and services. This approach has allowed the Commission to attack an entire network of telemarketers by disrupting their access to the essential services that allow them to perpetuate their fraud.

Travel Fraud

This is an area in which the Commission's "root" approach has been extremely successful. Last year the Commission brought an action against Jet Set Travel, a Silver Spring, Maryland, telemarketer that was misrepresenting the costs and restrictions associated with the travel certificates it was selling. During discovery, Commission staff learned that Jet Set sold "Passport Travel" vacation certificates. Investigations of other telemarketers pointed to the same supplier, and in April of this year, the Commission brought suit against Passport.

The complaint alleged that Passport had been selling vacation travel certificates through telemarketers using numerous alleged misrepresentations, including a claim that consumers were specially selected to receive a luxury vacation. The Commission obtained a preliminary injunction against the Passport defendants, banning them from using telemarketers to sell their packages and prohibiting them from engaging in further deceptive practices. This case is still in litigation.

Prize Promotions

The elderly are frequently victimized by prize promotion schemes, where telemarketer either make unsolicited calls or mail notification cards to consumers stating that they have won a valuable prize, such as a vacation, a car, cash or jewelry. In 1992, the Commission obtained a preliminary injunction and asset freeze against Pioneer Enterprises, Inc., and its principals. The Commission charged Pioneer with operating a nationwide telemarketing operation that sells water purifiers, vitamins, and other merchandise by fraudulently representing to consumers that they are "absolutely guaranteed" to receive an award such as a luxury automobile, expensive jewelry, or expense-paid vacation.

The defendants allegedly charged consumers several hundred to several thousand dollars for merchandise costing between $2 and $60 and allegedly awarded prizes of nominal value rather than the promised items. Many of the alleged victims were elderly. This case is still in litigation.

"900" Numbers

The Commission continues to monitor and bring enforcement actions involving the use of "900" and other caller-paid telephone services to sell information and products over the telephone. Calls to 900 numbers are billed at rates set by the seller of the information program, and the rates often are higher than those of ordinary long distance calls. While 900 numbers can provide valuable services, this technology has been used by some information providers to mislead consumers as to the

cost of calls and the performance or nature of the goods or services the caller will receive. Some 900 number abuses, such as easy credit schemes discussed above, have disproportionately affected older consumers. By continuing to bring cases against 900 number providers, the Commission hopes to deter these and other 900 number scams.

Pursuant to the Telephone Disclosure and Dispute Resolution Act, signed by the President on October 29, 1992, the Commission has initiated a rulemaking proceeding to prescribe rules with regard to the advertising and operation of the pay-per-call services, as well as billing and collections procedures for such services. The rulemaking must be completed within 270 days of enactment.

CONSUMER EDUCATION ACTIVITIES AFFECTING OLDER CONSUMERS

The Commission, through its Office of Consumer and Business Education, is involved in preparing and distributing a variety of consumer publications and broadcast materials. Many of the subjects are of significant interest to older consumers. Some recent consumer education activities are discussed below.

Complaint Resolution

In late 1992, the Commission worked with the National Institute for Dispute Resolution (NIDR) to produce "How to Resolve Consumer Disputes." This brochure describes two popular dispute resolution mechanisms, arbitration and mediation, how to prepare for a dispute resolution forum, and how to preserve the right to go to court. More than 11,000 copies of the publication have been distributed by the FTC.

During 1992, the Commission continued its distribution of "Road to Resolution: Settling Consumer Disputes." The booklet, produced in cooperation with NIDR, describes how dispute resolutions work, the options offered by these programs and where consumers can find such programs in their communities. The FTC has distributed more than 32,000 copies since its release in 1991. These two dispute resolution publications may be helpful to those older Americans who might otherwise be reluctant to complain.

Telemarketing Scams and Other Frauds

In 1992, the Commission developed one new publication, "Advance-Fee Loan Scams" and updated three others focusing on telemarketing fraud: "Art Fraud," "Telephone Investment Fraud," and "Prize Offers." These brochures may be of significant importance to older persons, since some estimate nearly one-third of telemarketing fraud victims are age 65 and older.

"Advance-Fee Loan Scams" was prepared in cooperation with Call For Action, Inc., a Washington, D.C.-based international network of radio and television consumer hotlines. The brochure warns consumers about companies that often misrepresent guaranteed loans opportunities. It also tells consumers how to recognize ads for advance-fee loan scams and how to distinguish them from offers by legitimate credit grantors. Further, the publication tells consumers how to protect themselves, what to do if they are victimized, and where to find low-cost help in dealing with credit problems. The FTC distributed nearly 55,000 copies of this publication in English and Spanish during 1992.

The "Art Fraud" brochure describes a telemarketing scam in which fraudulent telemarketers may claim to be offering a "fabulous opportunity" to obtain limited edition prints as "excellent investments." The brochure tells consumers how to protect themselves and what to do if they are victimized. Nearly 60,000 copies of the publication have been distributed by the FTC since its original release in 1988.

The "Telephone Investment Fraud" brochure explains how telephone investment fraud works, describes a typical sales pitch, and offers tips to help consumers avoid losing their money. The brochure also lists government agencies and business organizations that register, investigate, or monitor companies and individuals who offer investment opportunities. Since its original release in 1987, the Commission has filled more than 228,000 requests for this publication in English and Spanish.

The "Prize Offers" brochure, another joint effort with Call For Action, discusses promotions that use deceptively-advertised prizes, advises consumers how to avoid being victimized, and suggests how to handle complaints. Since its original release in 1983, more than 300,000 copies have been distributed.

The FTC also continued to distribute existing brochures concerning various aspects of telemarketing fraud. Over the past 5 years, for example, the Commission has filled requests for nearly one-half million copies of publications such as "Magazine Telephone Scams," "Fraud by Phone," and "Telemarketing Travel Fraud."

Consumer Services and Products

The Commission also continued its efforts to provide information about other kinds of marketplace issues that could be of special importance to older consumers. Such publications include: "Dance Studios," which cautions consumers against certain contract sales used by dance studios; "Car Rental Guide," which explains car rental contract terms and suggests ways to negotiate a lower price; and "Infomercials." Other publications that advise consumers about products and services include: "Buying a Home Water Treatment Unit," which gives purchasing information about these products; and "Lawn Service Contracts," which describes how to select a lawn service contractor who will meet work requirements and address environmental concerns. Over 460,000 orders for these five publications have been filled over the last 4 years.

Credit

In 1992, the Commission updated "Truth in Leasing." This publication describes the Consumer Leasing Act which requires leasing companies to tell consumers the facts about the cost and terms of their contracts. Consumers can use this information to compare one lease with another or to compare the cost of leasing with the cost of buying the same property. Since its re-release in 1992, the FTC has filled nearly 40,000 requests for this publication.

During 1992, the FTC continued to distribute credit publications that may be especially useful to widows and older persons who may have problems getting credit. "Women and Credit Histories" explains two Federal laws—the Equal Credit Opportunity Act and the Fair Credit Reporting Act—that give consumers specific rights to help them protect their credit histories and make it easier to obtain credit. Since the brochure was released in 1978, more than 350,000 copies have been distributed. "Credit and Older Americans," produced in 1987, explains the Equal Credit Opportunity Act, focusing on its anti-age-discrimination provisions. Since its release, nearly 200,000 copies have been distributed.

"Credit Repair Scams," a brochure and video news release produced in cooperation with the National Association of Attorneys General (NAAG), warns consumers about fraudulent credit repair companies that claim, for a fee, they can erase bad credit and remove bankruptcy and liens from credit files. The brochure and video tell consumers how to spot credit repair scams, what information is in a credit report, and how consumers can correct mistakes themselves. More than 68,000 requests have been filled for this publication.

Other credit publications useful to the elderly include: "Fix Your Own Credit Problems," "Lost or Stolen: Credit and ATM Cards," and "Buying and Borrowing: Cash in on the Facts." "Fix Your Own Credit Problems" is a how-to publication that also cautions consumers about credit repair clinics. More than 415,000 copies of this publication have been distributed in English and Spanish during the last 6 years. "Lost or Stolen: Credit and ATM Cards," which discusses card-holder liability in the event of such loss, has been distributed to more than 230,000 consumers since 1987. "Buying and Borrowing," a summary of information about buying on credit, buying on layaway, and buying by phone and mail, has been distributed to nearly 100,000 requestors over the past 6 years.

Funerals

During 1992, the Commission continued its funeral education campaign by producing "Caskets and Burial Vaults." This brochure discusses the uses of caskets and burial vaults and their protective claims. It also briefly discusses the option of funeral pre-planning and lists organizations consumers may contact for further information. More than 13,000 copies of this publication were distributed in 1992.

The FTC also updated "Funerals: A Consumer Guide," which explains the Funeral Rule and lists business, professional, and consumer groups providing additional information on how to make funeral arrangements and the available options. In response to individual requests, the FTC and the Consumer Information Center (CIC) sent out approximately 50,000 copies of the brochure last year, bringing total distribution since 1984 to nearly 445,000

Health

In 1992, the Commission worked with NAAG and the U.S. Food and Drug Administration to produce a multimedia campaign on weight loss products and programs. A video was released via satellite to 700 stations, and radio Public Service Announcements received a confirmed audience of more than 24 million, based on

follow-up phone calls to 20 percent of the stations receiving the spots. The Commission has received more than 32,000 requests for the companion print piece, "The Facts About Weight Loss Products and Programs," in 1992.

In 1992, the Commission also developed "Food Advertising Claims," which helps consumers interpret fat, "no" or "low" cholesterol, and "light" claims in food advertising and labeling. The brochure also briefly discusses the FDA's proposed food labeling regulations that will go into effect in 1994. Nearly 25,000 copies of this publication were distributed in 1992.

During 1992, the Commission continued its distribution of two publications prepared in conjunction with the American Association of Retired Persons (AARP). "Hearing Aids" describes the two basic types of hearing loss: conductive and sensorineural. It also offers purchase suggestions for hearing aids and outlines Federal and State standards for their sale. More than 115,000 copies of this publication have been distributed by the FTC and AARP since its release in 1991. "Healthy Questions" explains how to select and use the services of health care professionals. Since the publication's release in 1985, more than 665,000 copies have been distributed by the FTC, AARP, and CIC.

In addition, the Commission produced its own consumer brochure, "Health Claims: Separating Fact From Fiction," on specific aspects of health fraud. Since its release in 1986, more than 175,000 copies have been distributed in English and Spanish.

Housing

In 1992, the Commission updated "Getting a Loan: your Home as Security." This brochure explains the Federal Truth in Lending Act's "right of recession" and how it gives consumers three business days to reconsider personal loan agreements if they are thinking about using a principal home as security. Since its original release in 1981, more than 170,000 copies of this publication have been distributed by the Commission.

The Commission continues to distribute other housing-related publications that may be of special interest to older consumers: "Fire Detectors," "Your Home, Your Choice," "Real Estate Brokers," and "How to Buy a Manufactured Home."

Financial Matters

During 1992, the Commission continued its print education campaign on financial issues. In late 1991, the FTC, AARP, and the National Center for Home Equity Conversion produced "Reverse Mortgages." The brochure explains how reverse mortgages (RMs) work for consumers who are house-rich and cash-poor. More than 65,000 copies of this publication have been disseminated since its release.

In 1990, the FTC and AARP produced "Facts About Financial Planners." This booklet provides information to help consumers decide if they need a financial planner and offers guidelines for selecting a good planner. The publication also provides sample questions to ask planners during the initial interview. In 1992, the booklet was distributed to more than 50,000 consumers by AARP, the FTC, and CIC, bringing total distribution to more than 285,000.

The FTC and AARP developed "Money Matters." This booklet explains how to select and use the professional services of lawyers, accountants, financial planners, real estate brokers, and tax preparers. In 1992, the publication was distributed to nearly 120,000 requestors by the FTC, AARP, and CIC, bringing total distribution since 1986 to approximately one million.

Conclusion

This report reviews Commission programs that may be of particular concern to older consumers and their families. Through a combined effort of law enforcement and consumer education described in this report as well as other efforts, the Commission continues to strive to ensure a vigorous and competitive marketplace that serves the needs of all the community.

ITEM 21. GENERAL ACCOUNTING OFFICE

AGING ISSUES

RELATED GAO REPORTS AND ACTIVITIES IN FISCAL YEAR 1992

DECEMBER 23, 1992.

DEAR MR. CHAIRMAN: This report was prepared in response to the Committee's October 7, 1992, request for a compilation of our fiscal year 1992 products and ongoing work regarding older Americans and their families.

GAO's work in aging reflects the continuing importance of Federal programs for an increasing aged population. The 1990 Census counted over 31 million older Americans, comprising 12 percent of the nation's population. By the year 2020, that number will exceed 53 million, or 17 percent of the population, of which 7 million will be 85 or older. Although most of the nation's elderly citizens are healthy and independent members of society, a growing number of them continue to need assistance to maintain their independence and avoid institutionalization. This changing demography will continue to challenge both government and the private sector in the 1990's and beyond.

Our work in fiscal year 1992 covered a range of issues, including Federal Government activities in employment, health care, housing, income security, social services, and veterans issues. Some Federal programs, such as Social Security and Medicare, are directed primarily at older Americans. Other Federal programs target older Americans as one of several groups served, such as Medicaid or Federal housing programs. We have organized the summaries of our fiscal year 1992 reports accordingly.

In the appendixes, we describe four types of GAO activities that relate to older Americans:

(1) Reports on policies and programs directed primarily at older Americans (see app. I).

(2) Reports on policies and programs that include older Americans as one of several target groups (see app. II).

(3) Congressional testimonies on issues related to older Americans (see app. III).

(4) Ongoing work on issues related to older Americans (see app. IV).

The issues addressed by these products and ongoing work are presented in table 1. The table shows that health and income security were the leading issues addressed among reports focused primarily on older Americans. Health was the leading issue that either primarily affected older Americans or affected both older Americans and other groups.

TABLE 1.—GAO ACTIVITIES RELATING TO THE ELDERLY IN FISCAL YEAR 1992

Issue	Reports focused on the elderly	Reports with elderly as one of several target groups	Testimonies	Ongoing work as of 9/30/92
Employment	2	4	2	0
Health	18	22	26	60
Housing	1	4	3	7
Income Security	12	2	7	20
Social Services	3	0	3	6
Veterans-DOD	3	20	7	35
Other	0	4	1	0
Total	39	56	49	128

Appendix I provides summaries of 39 issued reports on policies and programs directed primarily at older Americans. We include in this section reviews of employment, health, housing, income security, social services, and veterans' issues.

Appendix II provides summaries of 56 reports in which older Americans were one of several target groups for specific Federal policies. Many of these activities are generally financed in conjunction with services to other populations. For example, Medicaid finances nursing home care, as well as medical care for poor people of all ages.

Appendix III describes 49 testimonies given during fiscal year 1992 on subjects focused on older Americans. We testified most often on health issues. In appendix IV, we have listed 128 studies related to older Americans that were ongoing as of September 30, 1992.

In addition, appendix V lists four GAO publications that are related to our work involving older Americans. These publications summarize GAO reports and testimonies on aging, health, income security, and housing and community development issues.

We have also provided information on GAO's employment of older Americans. As you are aware, our policies prohibit age discrimination (see app. VI). On September 30, 1992, about 56 percent of our work force was 40 years of age and older. We continue to provide individual retirement counseling and group preretirement seminars.

As arranged with your office, we are sending copies of this report to interested congressional committees and subcommittees. Copies will also be made available to others on request.

This report was prepared under the direction of Joseph F. Delfico, Director, Income Security Issues, who may be reached at (202) 512-7215 if you have any questions. Other major contributors are listed in appendix VII.

Sincerely yours,

LAWRENCE H. THOMPSON,
Assistant Comptroller General.

APPENDIX I—FISCAL YEAR 1992 GAO REPORTS ON ISSUES PRIMARILY AFFECTING OLDER AMERICANS

During Fiscal Year 1992, we issued 39 reports on issues primarily affecting older Americans. Of these, 2 were on employment, 18 were on health, 1 on housing, 12 on income security, 3 on social services, and 3 on veterans issues.

EMPLOYMENT

Age Employment Discrimination: EEOC's Investigation of Charges Under 1967 Law (GAO/HRD-92-82, Sept. 4, 1992)

People who believe that they are victims of age discrimination can file charges with the Equal Employment Opportunity Commission (EEOC). The Age Discrimination in Employment Act of 1967 required that lawsuits in Federal court be filed within 2 years of the alleged violations. During the 1980s, however, sizable numbers of suits filed in Federal court lapsed. The Government had not finished investigating these charges even though 2 years had passed since the alleged violations took place. The Congress, concerned about the lapse problem, deleted the 2-year limitation in 1991. Charging parties' rights to file private lawsuits now expire 90 days after receiving notice that EEOC has completed action on the charge. This report responds to several questions from Members of the Congress about how EEOC investigates employment discrimination charges.

Employee Benefits: Improved Plan Reporting and CPA Audits Can Increase Protection Under ERISA (GAO/AFMD-92-14, Apr. 9, 1992)

The Department of Labor's Office of Inspector General revealed in November 1989 that it had uncovered major deficiencies in audits of private employee benefit plans, raising concerns about how well American workers are being protected. More than one-third of the 25 plan audits GAO reviewed had weaknesses so serious that their reliability and usefulness were questionable. In some cases, the auditors failed to adequately test investments amounting to millions of dollars or to test the appropriateness of millions of dollars in payments to insurance companies. To protect the interests of plan participants, legislation is needed to (1) eliminate limited scope audits; (2) require reports by plan administrators and auditors on internal controls; (3) require reporting by auditors of fraud and serious Employee Retirement Income Security Act violations; and (4) require peer review of auditors conducting plan audits.

HEALTH

Durable Medical Equipment: Specific HCFA Criteria and Standard Forms Could Reduce Medicare Payments (GAO/HRD-92-64, June 12, 1992)

The Health Care Financing Administration (HCFA) could cut Medicare spending on durable medical equipment subject to unnecessary payments by developing more detailed coverage criteria that give carriers a clear, well-defined, objective basis for

paying or denying claims. Medicare paid about $1.7 billion in 1990 for durable medical equipment purchases and rentals, such as hospital beds and wheelchairs. To save even more money, HCFA could also develop medical necessity certification forms for equipment subject to unnecessary payments. These forms should require doctors to explain patients' needs for the prescribed equipment. Among carriers that use this kind of form, Medicare payments for three types of equipment have fallen significantly because the forms gave detailed information that led to denial of claims.

Elderly Americans: Health, Housing, and Nutrition Gaps Between the Poor and Nonpoor (GAO/PEMD-92-29, June 24, 1992)

The elderly poor, many of whom are burdened by medical and housing costs, also tend to suffer from more health and nutritional problems than do higher income elderly. Although many Federal programs are tailored to the needs of the poor, participation by the elderly is rather low. Possible reasons include (1) the inability of Federal programs with limited money to serve all needy elderly; (2) the lack of effective Federal outreach efforts to enroll eligible individuals; and (3) differing state eligibility criteria for some programs, such as Medicaid. Absent definitive information on this gap between needs and services, the Congress may want to focus on this issue to see what can be done to close the gap.

GAO summarized this report in testimony before the Congress; see *Elderly Americans: Health, Housing, and Nutrition Gaps Between the Poor and Nonpoor* (GAO/T-PEMD-92-10, June 24, 1992), by Robert L. York, Director of Program Evaluation in Human Services Areas, before the House Select Committee on Aging.

Home Health Care: HCFA Evaluation of Community Health Accreditation Program Inadequate (GAO/HRD-92-93, Apr. 20, 1992)

How well does the Community Health Accreditation Program ensure that home health agencies adhere to Medicare conditions of participation? GAO found that the Health Care Financing Administration's evaluation of the program's effectiveness is inadequate. HCFA determined that the program's standards were similar to Medicare conditions of participation and, where differences existed, the agreed-upon modifications to the program's standards were documented. But other areas cited in the proposed regulation, such as examining the accrediting organization's staff and other resources, received little or no evaluation. While HCFA has tried to address these issues, it plans no further program evaluation because it believes that its earlier work, together with GAO's, adequately evaluates the program's ability to ensure that Medicare conditions of participation are met. GAO disagrees because its work was not intended to be a detailed evaluation of the program, and believes that HCFA should do a comprehensive evaluation before granting the program deemed status.

Long-Term Care Insurance: Better Controls Needed in Sales to People With Limited Financial Resources (GAO/HRD-92-66, Mar. 27, 1992)

Among the eight insurance companies it reviewed, GAO found that except for Medicaid recipients, companies are doing little to prevent the sale of long-term care insurance to low-income people. While company officials said that there policy is to avoid selling such insurance to low-income individuals, this policy is not always in writing, and companies' actual practices are hard to determine. Despite their stated intentions, the companies have few controls over such sales. Most of the companies' training materials are vague or silent about whether an insurance agent should consider a consumer's income and assets when selling long-term care insurance. In addition, companies do not monitor whether agents sell this insurance to low-income people. Substantial agent commissions could spur policy sales to people who do not need such insurance. Marketing materials from half of the companies do not caution consumers to consider whether long-term care insurance is appropriate, given their particular income and assets.

Long-Term Care Insurance: Risks to Consumers Should Be Reduced (GAO/HRD-92-14, Dec. 26, 1991)

The National Association of Insurance Commission's (NAIC) long-term care insurance standards, which provide a national model for the States, have improved significantly in the past 5 years. Although state standards have also improved, many States have not adopted key NAIC standards, and insurers have not incorporated more recent NAIC standards into their policies. In addition, NAIC standards do not adequately address several significant issues. For example, the absence of uniform terms, definitions, and eligibility criteria makes it hard for consumers to understand what benefits will be provided under what circumstances and how certain provisions

can limit eligibility. Consumers also face considerable pricing risks, such as unpredictable pricing increases, that may force many policyholders to lapse policies and lose their investment in premiums. Finally, in the absence of standards, consumers are limited in their options to upgrade policies and are vulnerable to sales abuses created by high first-year commissions for insurance agents. GAO believes that additional standards are needed to address these issues. While these standards would likely increase premiums, GAO believes that they would significantly improve consumer protection in a rapidly evolving, complex market. Many states still have not adopted NAIC standards, however, and the Congress may want to pass legislation setting minimum federal standards for long-term care insurance.

Medicare: Effect of Durable Medical Equipment Fee Schedules on Six Suppliers' Profits (GAO/HRD-92-22, Nov. 6, 1991)

Medicare maintains a fee schedule payment system for durable medical equipment, such as wheelchairs and oxygen systems, used in patients' homes. In reviewing the appropriateness of the payment amounts in the fee schedules, GAO found that equipment suppliers have not been maintaining records in a manner that permits direct computation of costs and profits by item. As a result, GAO had to individually develop these data for each supplier. GAO selected six suppliers representative of various sized firms in different parts of the country. The aggregate profit margin for these suppliers in 1988 was 19 percent on Medicare business versus a 24-percent loss on other business. The overall loss was 2 percent. GAO estimates, using the same volume of services and constant 1989 dollars, that the six suppliers' aggregate profit margin on their Medicare business would be higher under both the original fee schedules and those revised by the Omnibus Budget Reconciliation Act of 1990 than under the reasonable charge payment method the fee schedules replaced.

Medicare: Excessive Payments Support the Proliferation of Costly Technology (GAO/HRD-92-59, May 27, 1992)

Have Medicare payments for sophisticated radiology services like magnetic resonance imaging (MRI) been adjusted to reflect declining costs for such technology? In some localities, GAO has found that Medicare payments for MRI do not take into account lower costs arising from faster scanning and broader diagnostic uses for the machines. Medicare payments generally do not take into account providers' costs and do not promote efficient use of expensive new technology. Even with legislatively imposed payment reductions in recent years, MRI payments in some areas are still too high relative to the costs incurred by high-volume providers. High Medicare payment rates encourage needless MRI proliferation by reimbursing providers for excess capacity. GAO believes that payment levels should be based primarily on the costs incurred by high-volume, efficient providers and should be updated periodically to reflect the economies achieved as the technologies evolve.

Medicare: HCFA Needs to Take Stronger Actions Against HMOs Violating Federal Standards (GAO/HRD-92-11, Nov. 12, 1991)

During the past decade, the Health Care Financing Administration has encouraged Medicare beneficiaries to enroll in health maintenance organizations (HMO). HMOs are attractive because they have financial incentives to control costs and utilization and offer beneficiaries more services than are normally covered under Medicare. Yet HCFA has been ineffective in getting certain HMOs to promptly correct violations of Medicare requirements. Continued violations by Humana Medical Plan in Florida demonstrate HCFA's unwillingness and inability to enforce Medicare requirements on HMOs serving Medicare beneficiaries. Press articles alleged widespread problems with Humana—Medicare's largest HMO contractor—including marketing and claims payment abuses and quality-of-care issues. HCFA found Humana in violation of federal standards in four areas: marketing, claims payment, processing of beneficiary appeals, and implementation of an internal quality assurance system. Deficiencies in these areas can mean that beneficiaries incur high out-of-pocket expenses or are denied appropriate care. As a result, GAO believes that allowing Humana to enroll more than 125,000 new beneficiaries during its protracted period of noncompliance was unreasonable. GAO concluded that HCFA can and should have done more to require Humana to resolve its deficiencies. To help prevent the recurrence of sustained difficulties, HCFA needs to unequivocally establish both its authority and intention to take timely and decisive action against HMOs that violate Medicare's minimum beneficiary safeguard standards.

GAO summarized this report in testimony before the Congress; see *Medicare: HCFA Needs to Take Stronger Actions Against HMOs Violating Federal Standards* (GAO/T-HRD-92-11, Nov. 15, 1991), by Janet L. Shikles, Director of Health Financ-

ing and Policy Issues, before the Subcommittee on Health and the Environment, House Committee on Energy and Commerce.

Medicare: Improper Handling of Beneficiary Complaints of Provider Fraud and Abuse (GAO/HRD-92-1, Oct. 2, 1991)

The fastest growing portion of Medicare is part B, which covers physician services, outpatient hospital services, durable medical equipment, and other services. Part B will account for an estimated half a billion claims and $445 billion in benefit payments in fiscal year 1991. The growth of these payments increases Medicare's vulnerability to erroneously paid claims that may result from provider fraud and abuse. A key line of defense in identifying and correcting fraud and abuse are the Medicare contractors (carriers) who process and pay part B claims. The carriers' primary source of information on possible fraud and abuse is part B beneficiaries. GAO found that carriers are missing opportunities to detect fraud and abuse because telephone personnel who first receive beneficiary complaints often do not refer them to the carriers' investigative units. Instead, beneficiaries are often told to submit their complaints in writing or to resolve them with providers—even though the caller has described the complaint in detail over the phone. Further, when complaints are referred, investigative units often do not examine those that contain substantial indications of potential fraud and abuse. Almost three-fourths of such complaints in GAO's sample were not fully investigated. Although the mishandling of complaints results partly from inadequate government guidance and oversight, the administration's initial fiscal year 1992 budget request significantly reduced funding for carrier personnel who answer beneficiary complaints, including those involving fraud and abuse. However, it appears that funds will be reallocated to minimize this reduction.

GAO summarized this report in testimony before the Congress; see *Medicare: Improper Handling of Beneficiary Complaints of Provider Fraud and Abuse* (GAO/T-HRD-92-2, Oct. 2, 1991), by Janet L. Shikles, Director of Health Financing and Policy Issues, before the Senate Special Committee on Aging.

Medicare: Millions of Dollars in Mistaken Payments Not Recovered (GAO/HRD-92-26, Oct. 21, 1991)

Although Medicare provides health care coverage for most citizens over 65, it is not always the primary insurer. Medicare is the secondary payer when beneficiaries are covered by both Medicare and workers' compensation, certain employer-sponsored group health insurance plans, and automobile and other liability insurance plans. Hospitals are responsible for obtaining data on beneficiaries' health insurance coverage to identify other insurers who should pay before Medicare. Hospitals receiving payments from both Medicare and a primary insurer must refund any amount due Medicare. Intermediaries (insurance companies under contract with Medicare) process Medicare claims for the hospitals, and they are responsible for ensuring that any mistaken payments are identified and returned to the program. GAO reviewed 196 patient accounts at 17 hospitals; each hospital owed Medicare refunds ranging from $1,300 to $327,400, which collectively amounted to more than $900,000. The credit balances resulted primarily from Medicare and another insurer mistakenly paying for the same inpatient service or Medicare paying twice for the same service. The five intermediaries that service these hospitals lacked the necessary internal controls to ensure that credit balances were identified and promptly recovered, and they gave recovery activities low priority. During GAO's review, Medicare officials initiated actions to help resolve many of the credit balance problems brought to its attention, but additional efforts are needed.

Medicare: Over $1 Billion Should Be Recovered From Primary Health Insurers (GAO/HRD-92-52, Feb. 21, 1992)

Medicare has already paid more than $1 billion in claims that should have been billed to private health insurers and another $1 billion in mistaken payments may be in the offing, but efforts to recoup the funds are hampered by deep budget cuts in Medicare safeguard efforts and time limits on recovery periods. During the last decade, the Congress sought to reduce Medicare costs by making certain insurers the primary payers for beneficiary services. Amounts owed by other health insurers, however, are unrecovered or, in many cases, unidentified even after Medicare contractors have confirmed that beneficiaries have other health insurance that provides primary coverage. Nationwide, large backlogs of mistaken payments remain unrecovered. Significant programs savings have gone unrealized because contractors do not have the money to recover mistaken payments under the Medicare secondary payer program. The fiscal year 1992 funding levels for the program were below the amounts provided in fiscal year 1989, yet the number of beneficiary claims is signifi-

cantly higher, and large backlogs remain. Increased funding of program activities is essential if over $1 billion in mistaken payments are to be recovered.

Medicare: Payments for Medically Directed Anesthesia Services Should Be Reduced (GAO/HRD-92-25, Mar. 3, 1992)

The Omnibus Budget Reconciliation Act of 1987 reduced Medicare payments to anesthesiologists when one anesthesiologist is involved in two or more overlapping surgeries. For each surgery, the anesthesiologist must meet several conditions, including being present when the patient enters and leaves anesthesia and providing directions to the nurse anesthetists, who actually do much of the work.

GAO found that Medicare still pays substantially more for directed cases than for services provided personally by an anesthesiologist. Because physicians' hourly revenue for concurrently directed services is much higher than for personally provided services, Medicare payments can influence the way in which anesthesia is delivered. GAO concludes that Medicare should set a fair price for anesthesia services and pay that amount regardless of how the service is delivered. GAO believes that the reduced payment was not large enough to cause anesthesiologists to alter their relationship with nurse anesthetists. Other factors that may contribute to maintaining the anesthesiologist-nurse status quo are the (1) shortage of nurse anesthetists and (2) ratio of anesthesiologists to nurse anesthetists in an area.

Medicare: Program and Beneficiary Costs Under Durable Medical Equipment Fee Schedules (GAO/HRD-92-78, July 7, 1992)

The fee schedule payment system for durable medical equipment sold or rented to Medicare patients—everything from wheelchairs to oxygen tents—has resulted in both Medicare and its beneficiaries paying more than they would have under the former reasonable charge system. For the high-volume items GAO reviewed, Medicare costs increased 17 percent in 1989. The recent legislative changes to the fee schedule payment system will return Medicare payments, in 1989 dollars, to the level that would have been incurred under the former reasonable charge system. The wide payment variations across geographic areas that existed under both the reasonable charge method and the fee schedules will be substantially reduced under the recent legislative changes.

Medicare: Rationale for Higher Payment for Hospital-Based Home Health Agencies (GAO/HRD-92-24, Jan. 31, 1992)

GAO concludes that allowing hospitals additional reimbursement for home health services is consistent with Medicare payment principles and federal legislation. The add-on is designed to pay a hospital for legitimate costs allocated to its home health agency if those costs cause its total home health agency costs to exceed predetermined Medicare cost limits. Nonetheless, the effect of this policy is to pay some hospitals more than freestanding home health agencies for the same services. GAO discusses several factors that suggest that the add-on may be unnecessary to ensure beneficiary access to home health care.

Medicare: Reimbursement Policies Can Influence the Setting and Cost of Chemotherapy (GAO/PEMD-92-28, July 17, 1992)

GAO has previously reported that oncologists have admitted sending patients to hospitals to avoid reimbursement problems associated with treating patients in their offices. In this report, GAO discusses the factors that influence where oncologists treat Medicare patients and the potential cost to the government of treatment in different settings. Some oncologists have treated cancer patients in hospital inpatient and outpatient settings when, by clinical standards, they could have received treatment at lower cost in the office. Financial factors influenced the oncologist's choice of setting, suggesting that the Health Care Financing Administration's reimbursement policies can have consequences beyond their intent. That it, whether and how much doctors are reimbursed by Medicare can influence the oncologist's choice of treatment setting and, as a result, can escalate Medicare expenditures.

Medicare: Shared Systems Policy Inadequately Planned and Implemented (GAO/IMTEC-92-41, Mar. 18, 1992)

To save administrative costs and promote uniformity, the Health Care Financing Administration has been encouraging its Medicare claims-processing contractors to share automated data processing systems. In fiscal year 1991, HCFA paid 85 contractors $1.4 billion to process more than half a billion Medicare claims. This report presents GAO's evaluation of (1) HCFA's implementation of this policy and (2) the policy's impact on Medicare claims processing.

GAO summarized this report in testimony before the Congress; see *Medicare: Shared Systems Policy Inadequately Planned and Implemented* (GAO/T-IMTEC-92-11, Mar. 18, 1992); by Frank Reilly, Director of Human Resources Information Systems Issues, before the Subcommittee on Oversight and Investigations, House Committee on Energy and Commerce.

Medicare: Third Status Report on Medicare Insured Group Demonstration Projects (GAO/HRD-92-53, Jan. 29, 1992)

Under an ongoing demonstration project authorized by 1987 legislation, a maximum of three employment-related groups, such as employers or unions, can agree to pay for Medicare beneficiaries' covered health care services in exchange for a fixed-per-capita payment from Medicare. The idea was that such projects, which are known as Medicare Insured Groups, could combine Medicare benefits with supplemental ones offered by an employer or union and reduce costs for both by managing the combined benefits better than could be done separately.

In this third status report on the projects, GAO reported that three companies had completed studies about the feasibility of establishing Medicare Insured Groups for their retirees. Two of the companies decided not to develop such group projects because of concerns that the operations might not be financially viable. The other company has submitted a proposal to develop a group project, which was being evaluated by Medicare administrators. Two additional Medicare Insured Group projects are active. In December 1990, a health care provider began trying to pool a group of employers to form a group project, and a year later was continuing this effort. A union-related Medicare Insured Group project continues to develop the health network necessary for the group project to become operational.

Medigap Insurance: Insurers Whose Loss Ratios Did Not Meet Federal Minimum Standards in 1988-89 (GAO/HRD-92-54, Feb. 28, 1992)

The percentage of premiums returned to Medigap insurance policyholders as benefits (called the loss ratio) for both 1988 and 1989 were 75 percent for policies sold to groups and 60 percent for policies sold to individuals. In 1988, 335 companies collected $7.3 billion in premiums for Medigap policies. By 1989, these numbers had increased to 348 companies and $8.1 billion. GAO found that 10 percent of premiums in 1988 (or $388 million) were for policies from companies that did not meet the loss ratio standards. By 1989, this had risen to 17 percent (or $805 million). As of November 1991, insurers must grant refunds or credits to policyholders in amounts sufficient to raise loss ratios to the standards. If this Federal requirement had been in effect in 1988-89, policyholders would have been entitled to about $75 million in refunds or credits.

Housing

Public Housing: Housing Persons With Mental Disabilities With the Elderly (GAO/RCED-92-81, Aug. 12, 1992)

The mentally disabled occupy about 9 percent of the public housing units for the elderly that GAO studied, and the number of such individuals housed among the elderly appears to be on the rise. Public housing authorities report that people in almost one-third of those households cause serious problems like threatening other tenants and having disruptive visitors. Although about 78 percent of public housing authorities say that mental health services are provided in their communities, the extent to which public housing residents avail themselves of such services is unclear. Agreements between public housing authorities and local mental health services, however, have helped to deliver needed mental health care to public housing residents with disabilities. The rights of the mentally disabled to live in federally subsidized housing primarily serving the elderly vary by federal program. Excluding the nonelderly mentally ill from public housing for the elderly or from section 8 rental housing would violate the antidiscrimination requirements of the Fair Housing Act and the Rehabilitation Act of 1973.

Income Security

District's Workforce: Annual Report Required by the District of Columbia Retirement Reform Act (GAO/GGD-92-78, Mar. 31, 1992)

The District of Columbia Retirement Reform Act provides for annual Federal payments to a retirement fund for D.C. police officers and firefighters. To encourage the District Government to control disability retirement costs, these payments are to be reduced when the disability retirement rate exceeds an established limit. GAO reviewed a report prepared by an enrolled actuary on the District's disability retire-

ment rate and concludes that no reduction is required in the fiscal year 1993 federal payment to the District's police and firefighters' retirement fund.

Employee Benefits: Financing Health Benefits of Retired Coal Miners (GAO/HRD-92-13OFS and GAO/HRD-92-137FS, July 22, 1992)

These two fact sheets provided information on proposed legislation in the 102nd the Congress concerning financing health benefits for retirees in the coal industry, an issue that has sparked considerable interest because of shortfalls in the two trusts that are providing benefits. GAO responded to questions about the characteristics of the trusts' beneficiaries, the benefits provided, and the present and projected financial condition of the trusts. The first fact sheet focus solely on benefits accruing to retired coal miners, while the second examines benefits accruing for coal industry retirees in general, including miners and white-collar workers.

Financial Audit: Pension Benefit Guaranty Corporation's 1991 and 1990 Financial Statements (GAO/AFMD-92-35, Mar. 2, 1992)

This report presents the results of GAO's attempt to audit the Pension Benefit Guaranty Corporation's (PBGC) financial statements for 1991 and 1990. Included is GAO's disclaimer of opinion on PBGC's 1991 financial statements and a description of weaknesses in internal controls and financial systems that continue to limit PBGC's ability to prepare reliable financial statements. PBGC has made a commitment to correct the weaknesses, and this report describes PBGC's efforts. It also discusses PBGC's reported financial condition and operations, which continued to deteriorate during the fiscal year. Reflecting a $600 million loss, the guaranty fund's deficit grew to more than $2.5 billion. In addition, the fund is increasingly exposed to underfunded plans sponsored by companies facing severe financial difficulty. While PBGC reports more than $5 billion in cash and invested assets on hand to pay future benefits and other operating needs, the continuing growth in the unfunded deficit raises concern about PBGC's ability to meet its long-term benefit obligations.

Financial Audit: System and Control Problems Further Weaken the Pension Benefit Guaranty Fund (GAO/AFMD-92-1, Nov. 13, 1991)

Serious financial system deficiencies and internal control weaknesses prevent the Pension Benefit Guaranty Corporation from preparing reliable financial statements. These conditions seriously affect the Congress's ability to assess whether PBGC's premium levels are adequate to meet its long-term obligation to pay timely and uninterrupted benefits on terminated plans. PBGC's reported financial condition as of September 30, 1990, while unaudited, indicates that it faces an uncertain financial future. While PBGC still has enough assets to meet its near-term benefit payment obligations, it reported an operating loss of $780 million for fiscal year 1990, increasing its accumulated deficit to $1.8 million. This deficit has arisen because PBGC's premiums and invested assets have not covered its losses and other operating expenses. In keeping with the self-financing nature of the guarantee program, sponsors of ongoing pension plans will be expected to fund the accumulated deficit in addition to financing the future cost of the guarantee program. During economic downturns like the current recession, the combination of falling investment values and an increased potential for losses from termination of underfunded pension plans places PBGC's financial condition at increased risk. Economic downturns tend to increase the risk posed by underfunded plans in distressed industries, such as steel, automobiles, and airlines, and PBGC's financial future will largely depend on the economic health of these industries. GAO is concerned that the ongoing weaknesses at PBGC reveal an ineffective management commitment to establishing and maintaining internal controls and financial systems.

These weaknesses, along with PBGC's accumulated deficit and possible future losses for underfunded ongoing pension plans, have led GAO and the office of Management and Budget to include PBGC on their respective lists of "high-risk" agencies and programs.

Pension Plans: Survivor Benefit Coverage for Wives Increased After 1984 Pension Law (GAO/HRD-92-49, Feb. 28, 1992)

In 1989, about 3 million widowed Americans aged 65 and over received survivor benefits on the basis of the pension of a deceased spouse. Women comprised virtually all benefit recipients and received on average about twice the benefits of men with survivor benefits. Although most of these women also received Social Security, they were far less likely to have a pension based on their own employment. For many widows, survivor benefits from their husbands' pension plan constituted a significant part of the retirement income received from employment-based sources.

Millions of spouses will receive survivor benefits if they outlive married retired workers. As of 1989, about 3 of 5 million pensioners had retained the joint and survivor annuity. Moreover, because more men than women earn pensions and keep the joint and survivor annuity, wives have a greater chance of receiving survivor benefits than do husbands. Survivor benefit coverage for wives of private-pension retirees has increased since the 1984 Retirement Equity Act, as evidenced by a 15-percent rise in the rate at which married men retained the joint and survivor annuity after the legislation's spousal consent requirement took effect.

Premium Accounting System: Pension Benefit Guaranty Corporation System Must Be an Ongoing Priority (GAO/IMTEC-92-74, Aug. 11, 1992)

The Pension Benefit Guaranty Corporation insures the pension benefits of more than 40 million Americans participating in about 85,000 private-sector plans. Although PBGC has an automated premium accounting system to process and account for the insurance premiums received from plan sponsors, this system has not been fully operational since 1988, when PBGC unsuccessfully tried to modify it in response to new legislative requirements. This failure is due mainly to insufficient management attention to efforts to modify the current system and procure a replacement system. PBGC, acknowledging this weakness, instituted an interim solution in July 1992 to beef up senior management oversight of the premium accounting system initiative. This is a step in the right direction, but PBGC must continue to make management of the system an ongoing priority, even after the replacement system is in place.

Private Pensions: IRS Efforts Underway to Improve Spousal Consent Forms (GAO/HRD-92-31, Dec. 20, 1991)

In 1989, GAO reported on the need for informative and understandable spousal consent forms for private pension plans. Since then, IRS has published two pamphlets to inform spouses about survivor benefits but has neither required employers to include the information GAO recommended on spousal consent forms nor developed nontechnical language examples. In December 1991, however, the Internal Revenue Service began work on regulations that would require forms to contain the needed information—including the survivor benefit's estimated dollar amount and the consequences of waiving the benefit. IRS has also started to develop language examples. In GAO's view, consent forms should also state (1) that the spouse's decision to waive survivor benefits is voluntary and (2) whether a spouse has the right to revoke an earlier decision. This information would further help spouses make well-informed decisions about survivor benefits. IRS has agreed to consider requiring this information on consent forms in its regulations.

Social Security: Causes of Increased Overpayments, 1986 to 1989 (GAO/HRD-92-107, Sept. 28, 1992)

GAO reported in July 1991 (GAO/HRD-91-46) that the amount of newly detected benefit overpayments by the Social Security Administration (SSA) had increased from $1 billion in 1986 to nearly $1.5 billion in 1989. Several factors account for the $500 million increase. First, a one-time accounting adjustment to SSA overpayment records cut the amount of overpayment detections in 1986 from about $1.3 billion to $1 billion. This $340 million adjustment accounts for 68 percent of the increase. Second, SSA estimates that an operational improvement enhanced overpayment detection by about $100 million, or 20 percent of the increase. Growth in the number of people receiving benefits along with increases in benefit levels accounts for the small remaining increase in overpayment detections. Although staff reductions could have led to increases in overpayments, GAO found no evidence to support this.

Social Security: Need for Better Coordination of Food Stamp Services for Social Security Clients (GAO/HRD-92-92, Sept. 25, 1992)

When seeking government services, the poor often confront fragmented delivery systems. Too often, those most in need have no idea what services are available to them or how to obtain them; many take advantage of only those services offered by the first agency they contact. To boost the use of food stamps by eligible Social Security clients, the Congress passed the Food Stamp Act of 1977. This legislation requires government agencies to work together to make food stamp services readily available at Social Security Administration offices. SSA has not, however, adequately carried out its responsibilities. It has taken relatively few food stamp applications from the Social Security clients that the Congress sought to help. Currently, SSA uses posters and brochures in its offices to inform the public of food stamp availability. Yet many offices do not have such displays. Moreover, this approach will not

reach the millions of people who apply for benefits by telephone. In addition, the use of unnecessarily complex food stamp application forms impedes the delivery of services. In GAO's view, the Department of Health and Human Services and the Department of Agriculture need to develop jointly a plan for dealing with the shortcomings in how food stamps are offered to Social Security clients. Further, the two agencies need to update the Congress on their progress and any need for legislation to remove obstacles to providing quality service.

Social Security: Reconciliation Improved SSA Earnings Records, but Efforts Were Incomplete (GAO/HRD-92-81, Sept. 1, 1992)

A 1987 GAO report noted that employers had reported $58 billion more in Social Security wages to the Internal Revenue Service than to the Social Security Administration. As a result, millions of workers may be shortchanged when their Social Security benefits are calculated because they were never credited for wages they had earned and paid Social Security taxes on. In addition, billions of dollars provisionally credited by the Department of the Treasury to the Social Security trust fund were not supported by SSA's records. Considerable progress has been made in addressing the differences between wages reported to SSA and IRS, although the reconciliation process would have been more successful had IRS met all of its commitments to share wage data. Its delays in setting up a penalty program caused IRS to overrun a statute of limitations on applying such penalties. IRS did not effectively institute provisions to help prevent known causes of reporting differences and arbitrarily limited the number of referred SSA cases that it worked on. In addition, SSA needs to do more to prevent employer reporting problems. Also unresolved is the trust fund problem arising from differences in SSA and IRS records. After reconciliation, more than $65 billion in wage differences remain for 1978-86 cases. Thus, about $9 billion credited to the trust funds—Social Security taxes on the unreconciled wages—are not supported by SSA's earnings records. GAO concludes that funding of the trust funds should be based on the amount of Social Security taxes collected.

Social Security: Reporting and Processing of Death Information Should Be Improved (GAO/HRD-92-88, Sept. 4, 1992)

Prompt receipt and processing of information about dead beneficiaries by the Social Security Administration (SSA) is crucial to preventing SSA overpayments. SSA's death information is also valuable to other Federal agencies in preventing millions of dollars in overpayments to deceased beneficiaries. This report discusses (1) how long it takes family members, States, and others to report deaths to SSA; (2) how long it takes SSA to stop payments once a death is reported; and (3) whether delays in reporting and processing death notices prevent SSA from recovering erroneous payments from the Department of the Treasury in a timely manner. GAO also discusses ways to improve the timeliness of death information reported to SSA.

Social Services

Administration on Aging: Operations Have Been Strengthened but Weaknesses Remain (GAO/PEMD-92-27, June 11, 1992)

Department of Health and Human Services (HHS) officials announced in April 1991 that the status of the Administration on Aging (AOA) had been elevated within the Department's organizational structure. As a result, AOA is now responsible for many administrative duties in addition to its existing programmatic functions. AOA's enhanced status means that the Commissioner on Aging is theoretically on an equal footing with other HHS division heads and that AOA's role as an advocate for the elderly should be strengthened. To assist with its new responsibilities, AOA received additional full-time staff for fiscal year 1992. AOA has also received substantial travel funds, has filled many key positions long vacant, and plans to beef up its program expertise. At the same time, however, AOA's oversight abilities remain questionable, its expertise in the regions has not been enhanced, and its plans to address program responsibilities may be inadequate. Further, the need persists to harmonize AOA's responsibilities, its program funds, and the demands of the elderly.

GAO summarized this report in testimony before the Congress; see *Administration on Aging: Autonomy Has Increased but Harmonization of Mission and Resources Is Still Needed* (GAO/T-PEMD-92-9, June 11, 1992), by Robert L. York, Director of Program Evaluation in Human Services Areas, before the Subcommittee on Human Resources, House Committee on Education and Labor.

Board and Care Homes: Elderly at Risk From Mishandled Medications (GAO/HRD-92-45, Feb. 7, 1992)

Board and care homes for the elderly are nonmedical, community-based facilities that provide room, meals, and some supervision of residents, including assistance with medications. In reviewing board and care homes in three States—California, Missouri, and Washington—GAO found that (1) staff receive little medication training and often violate medication-handling regulations, (2) State inspection procedures may not spot such violations, and (3) staff frequently did not keep required resident records. While resident records supported the appropriateness of medications for about half of the 35 residents GAO reviewed, they were insufficient for GAO to judge the others. GAO concludes that residents in these homes are at risk of medication errors and that the Department of Health and Human Services should help States address these medication handling issues and develop training programs.

GAO summarized this report in testimony before the Congress; see *Board and Care Homes: Medication Mishandling Places Elderly at Risk* (GAO/T-HRD-92-16, Mar. 13, 1992), by Joseph F. Delfico, Director of Income Security Issues, before the Subcommittee on Health and Long-Term Care, House Select Committee on Aging.

Older Americans Act: More Federal Action Needed on Public/Private Elder Care Partnerships (GAO/HRD-92-94, July 7, 1992)

A relatively new and unusual development—private corporations buying elder care services for their employees from public sector agencies—offers benefits but carries the risk of neglecting senior citizens with the greatest economic or social need. This report discusses (1) the status of State policies that permit elder care contracts between corporations and area agencies on aging and (2) whether such policies adequately ensure that their public missions will be preserved when area agencies on aging enter into corporate elder care contracts.

GAO summarized this report in testimony before the Congress; see *Public/Private Elder Care Partnerships: Balancing Benefit and Risk* (GAO/T-HRD-92-45, July 9, 1992), by Jane L. Ross, Associate Director for Income Security Issues, before the Subcommittee on Human Services, House Select Committee on Aging.

VETERANS-DOD

Disability Benefits: Selected Data on Military and VA Recipients (GAO/HRD-92-106, Aug. 13, 1992)

This report provides information on the Defense Department's (DOD) military disability retirement and the Department of Veterans Affairs (VA) disability compensation programs. GAO discusses (1) military retirements over time, (2) the ratio of officers to enlistees receiving military retirements benefits, (3) the number of years of service military personnel have when they begin disability retirement, and (4) the number of military disability retirees also receiving VA disability compensation.

VA Health Care: Offsetting Long-Term Care Costs by Adopting State Copayment Practices (GAO/HRD-92-96, Aug. 12, 1992)

The Department of Veterans Affairs (VA) could offset more of the costs of providing nursing home and domiciliary care in VA and community facilities if the Congress allowed it to increase charges to veterans. In fiscal year 1990, VA offset less than one-tenth of one percent of its costs to provide care. In comparison, the eight States GAO visited required copayments of between 4 and 43 percent of State home operating costs. If VA had offset similar percentages, its yearly recoveries would have been between $43 million and $464 million. State homes offset a larger percentage of their operating costs through copayments than does VA because more veterans are required to make copayments and veterans who contribute toward the cost of their care typically must make larger copayments. State homes also provide safeguards to help prevent copayments from impoverishing a veteran's spouse or dependent children and to help ensure that veterans capable of returning home retain enough financial resources to return to the community.

Veterans' Benefits: Savings From Reducing VA Pensions to Medicaid-Supported Nursing Home Residents (GAO/HRD-92-32, Dec. 27, 1991)

As a result of the Omnibus Budget Reconciliation Act of 1990, the Department of Veterans Affairs should be able to reduce pensions by about $174 million annually for veterans receiving Medicaid-supported nursing home care. If pending legislation that would include survivors is passed, VA could cut pensions by an additional $296 million. The combined $470 million cost would be transferred by VA to the Department of Health and Human Services and the states under the Medicaid program,

resulting in a net Federal savings of about $202 million annually. Passage of the bill would treat veterans and survivors in the same way. VA has not fully implemented the 1990 act. By not adequately controlling the case review process, VA did not reduce all affected veterans' pensions. VA is planning changes that eventually should identify all veterans' cases in which pensions should be reduced. If the proposed legislation reducing survivor benefits passes, significant savings could result. Thus, VA should revise its procedures to better ensure that survivor cases are reviewed and pensions reduced in a timely manner. VA also needs to improve its explanation of pension reductions to persons affected.

APPENDIX II—FISCAL YEAR 1992 GAO REPORTS ON ISSUES AFFECTING OLDER AMERICANS AND OTHERS

GAO issued 56 reports in fiscal year 1992 on policies and programs in which older Americans were one of several target groups. Of these, 4 were on employment, 22 on health, 4 on housing, 2 on income security, 20 on veterans issues, and 4 on other issues.

EMPLOYMENT

The Changing Workforce: Comparison of Federal and Non-Federal Work/Family Programs and Approaches (GAO/GGD-92-84, Apr. 23, 1992)

The tremendous growth in the number of women in the Nation's workforce in recent decades has dramatically affected both government and private-sector employment. Most husbands and wives now work, so many families with children or elderly parents no longer have a caregiver at home during working hours. Yet traditional human resources policies are ill equipped to help workers balance work and family responsibilities. For example, Federal employees are now prohibited from using any of their sick leave to care for parents with Alzheimer's disease. GAO found that nonfederal employers generally approach work/family issues strategically, establishing work/family offices or positions and forging their programs into an integrated support system designed to improve recruitment, retention, and productivity. In contrast, while individual Federal agencies have undertaken work/family initiatives, no governmentwide work/family strategy exists. The Federal Government offers many of the same kinds of work/family programs found in the private sector, but the Federal programs are often not as family supportive or fully utilized as they could be. Some programs are unavailable to Federal workers. The primary barriers to such programs are cost, a lack of statutory or regulatory authority, and concerns about their appropriateness for Federal employees. Non-Federal officials offered many suggestions on how to assess the need for and implement work/family programs.

The Changing Workforce: Demographic Issues Facing the Federal Government (GAO/GGD-92-38, Mar. 24, 1992)

A highly publicized 1987 report, *Workforce 2000: Work and Workers for the 21st Century,* issued dire warnings for the Nation's employers in the next century, highlighting tight labor markets, mismatches between job requirements and workers' skills, and dramatic demographic changes. A companion report made similar predictions for the Federal Government. In examining the reports' implications for Federal policymakers and workforce planners, GAO found that labor economists and other experts disagree that labor shortages and skill gaps are likely by the year 2000. Experts generally agree, however, that the demographic composition of the labor force has changed and will continue to do so in the future. While many of these workforce changes and conditions seem to be more prevalent in the Federal workforce, Federal workforce planners should not assume that labor shortages and skill gaps are a given. GAO believes that changes in the number of women, minorities, and older workers in the Federal Government can be addressed through a variety of human resources programs, such as child care, flexible work schedules, and diversity training.

Federal Employment: How Federal Employees View the Government as a Place to Work (GAO/GGD-92-91, June 18, 1992)

GAO surveyed a random sample of government employees during 1991 about what their experiences in working for the Government had been, how employment conditions compared with their expectations before they started working, what plans they had for staying or leaving, and what their views on possible employment policy changes were. While many employees believe that the government's employment programs fall short in meeting their needs, the many positive aspects of Fed-

eral employment pointed out by the respondents are encouraging. For example, most respondents indicated that their work is more important than they thought when starting out in Government—a belief that could help improve the public perception of government employment. Similarly, the willingness of many older workers to extend their careers if given the right incentives suggests that older workers could help meet future employment needs. The respondents' desire for more flexibility in Federal employment programs, including flexitime, expanded leave sharing, and child care, indicates that Government could be a much more attractive employer if it were to help employees balance work and family responsibilities.

Federal Workforce: Agencies' Estimated Costs for Counseling and Processing Discrimination Complaints (GAO/GGD–92–64FS, Mar. 26, 1992)

How much do Federal agencies spend on discrimination complaint counseling and formal discrimination complaint processing? For this fact sheet, GAO surveyed 29 departments and agencies to find out how much they spent to counsel people, investigate and reach decisions on complaints, and generally administer the discrimination complaint processing system. GAO found that they spent about $139 million in fiscal year 1991, most of which went for counseling ($40 million) and performing original investigations of formal complaints of discrimination ($39 million). Most counseling took place before any formal complaint was filed. About one out of four individuals who were counseled later filed a formal complaint.

HEALTH

Access to Health Care: States Respond to Growing Crisis (GAO/HRD–92–70, June 16, 1992)

States have taken the lead in expanding access to health insurance and containing the growth of health care costs. They have had a difficult time, however, overcoming Federal legislation preempting state authority to regulate self-insured employer health plans. States that have tried to move toward coverage of all their citizens have had to work within the constraints of the Federal law. One strategy used by Massachusetts and Oregon has been to create "play or pay" systems that rely on the State's power to tax. Employers who provide health insurance to employees generally receive a credit for the amount they spend on coverage; those who do not must pay a tax to help finance State-brokered insurance. These laws are expected to face legal challenges, however, and the outcome is uncertain. Some state initiatives have been more narrowly focused, creating programs to help specific groups, such as low-income children and adults. These programs have successfully extended coverage to some residents, but state budget problems have meant that only a fraction of the uninsured population is being served. State efforts to help the medically uninsurable and small business employees gain access to coverage through the private health insurance market have also achieved modest results. In addition, some states have implemented payment reforms to control medical inflation and reduce administrative costs. Maryland, for example, has lowered cost growth through its hospital rate-regulation system.

Access to Health Insurance: State Efforts to Assist Small Businesses (GAO/HRD–92–90, May 14, 1992)

Recognizing that employees of many small firms cannot obtain health insurance, states have increasingly sought to make health insurance for small businesses more affordable and accessible. Because of the difficulties in marketing new insurance policies to small firms and because most of the reforms have been introduced during the recession, it is too soon to tell whether the reforms will increase insurance coverage. Budget problems are limiting States' ability to adopt reform measures requiring substantial State subsidies or funding. As a result, States are tending to focus on reforms involving little or no cost to the State treasury. These reforms attempt to correct several serious problems in the market but have yet to significantly increase the number of small business employees with health insurance. Initiatives requiring State subsidization of the small business market are rarer, tend to be limited in scope and duration, and have produced limited results. Attempts to lower the cost of insurance by waiving State-mandated benefits have also produced only modest employer responses. Ultimately, small business market reforms may do little to make health insurance more affordable because they do not address the underlying growth in health costs. Advanced medical technology, the cost of uncompensated care to hospitals, medical malpractice insurance costs, and consumer trends in buying medical services are among the major factors driving the costs of health care.

GAO summarized this report in testimony before the Congress; see *Access to Health Insurance: States Attempt to Correct Problems in Small Business Health Insurance Market* (GAO/T-HRD-92-30, May 14, 1992), by Mark V. Nadel, Associate Director for National and Public Health Issues, before the Subcommittee on Health and the Environment, House Committee on Energy and Commerce.

Breast Cancer, 1971-91: Prevention, Treatment, and Research (GAO/PEMD-92-12, Dec. 11, 1991)

Twenty years ago, President Nixon launched the "war on cancer" with the signing of the National Cancer Act. This report reviews progress in prevention and treatment of breast cancer over the past two decades and determines what kinds of research are needed to help prevent breast cancer and improve survival rates. GAO concludes that while many breast cancer patients are living longer and their quality of life has improved, the struggle against the "dread disease" has not been won. The expectation is that the coming year will see more women stricken with the disease and more women dying from it than two decades ago. On the positive side, medical detection, diagnosis, and treatment of breast cancer have improved because of widespread availability of technologies like mammography. In addition, breast cancer surgery has been refined, with the Halstead, or radical mastectomy—and its disfiguring results—becoming much rarer. However, GAO concludes that gaps in fundamental knowledge of breast cancer (causes and their mode of operation) are critical obstacles to more effective detection, diagnosis, and treatment. Further, identifying chains of events leading to the onset of breast cancer and learning how to interrupt those sequences are the primary prerequisites for preventive measures.

GAO summarized this report in testimony before the Congress; see *Breast Cancer: Progress to Data and Directions for the Future* (GAO/T-PEMD-92-4, Dec. 11, 1991), by Richard L. Linster, Director for Planning and Reporting in the Program Evaluation and Methodology Division, before the Subcommittee on Human Resources and Intergovernmental Affairs, House Committee on Government Operations.

Canadian Health Insurance: Estimating Costs and Savings for the United States (GAO/HRD-92-83, Apr. 28, 1992)

In a June 1990 report (GAO/HRD-91-90), GAO noted that if the United States were to adopt key elements of the Canadian health insurance system—universal insurance with no deductibles or copayments, controls on provider reimbursement, and administration by a single, public payer—the administrative savings could offset any added costs associated with a Canadian-style system. GAO updates that work with a detailed discussion of how it arrived at its estimates. Although analyses of how U.S. health spending would change under a Canadian-style system generally suggest that administrative savings could be significant, estimates vary more widely on possible costs arising from eliminating copayments. GAO compares these studies and the range of estimates. GAO also presents detailed information on the methodology it used to develop its savings and cost estimates for a Canadian-style system.

Community Health Centers: Administration of Grant Awards Needs Strengthening (GAO/HRD-92-51, Mar. 18, 1992)

The Community and Migrant Health Center program helps obtain adequate health care for people who would otherwise be without it. In fiscal year 1990, the Congress appropriated $530 million to support about 550 health care grantees under the program. In reviewing the Bureau of Health Care Delivery and Assistance's policies and procedures for awarding grants to health centers and national associations, GAO found that the Bureau has deviated from legislative and agency grant requirements concerning competitive awards, funding levels, and application reviews.

D.C. Government: District Medicaid Payments to Hospitals (GAO/GGD-92-138FS, Aug. 24, 1992)

A dozen hospitals in the District of Columbia filed suit against the D.C. government in October 1990, contending that the District's Department of Human Services had shortchanged them by $46 million for inpatient hospital services over a 5-year period. In a 1991 settlement, the District government agreed to pay the various claims. This fact sheet provides information on two aspects of the District of Columbia's Medicaid Program. GAO looks at (1) the causes of the legal action taken by D.C. hospitals against the Medicaid Program and (2) whether the District could be using Federal Medicaid money to fund other District programs.

Drug Abuse Research: Federal Funding and Future Needs (GAO/PEMD-92-5, Jan. 14, 1992)

Federal support from the two principal agencies for drug abuse research—the Department of Health and Human Services (HHS) and the Department of Justice—increased more than 200 percent between 1980 and 1990 (more than 400 percent if funding related to acquired immunodeficiency syndrome (AIDS) is included). In contrast, outlays for national defense research and development rose by 83 percent while nondefense research and development fell by 5 percent during that same period. Of the three categories of drug abuse research funding GAO studied—causality, prevention, and treatment—HHS' National Institute on Drug Abuse spent the most on treatment, followed by prevention and causality. Funding for studies on the causes of drug abuse has remained tiny, never exceeding 0.01 percent of the Nation's drug control budget. The Department of Justice has spent as much on prevention studies as on causality and treatment studies combined. Expert researchers agree on the importance of more research on the psychological and social/environmental factors leading to drug abuse.

Employee Benefits: States Need Labor's Help Regulating Multiple Employer Welfare Arrangements (GAO/HRD-92-40, Mar. 10, 1992)

Rising health care costs during the last decade have made it hard for small companies to obtain health insurance for their workers, and more and more businesses have been turning to pooled funds, known as multiple employer welfare arrangements (MEWA), to provide health benefits. Many MEWAs have reneged on their obligations, however, leaving millions of dollars in medical bills unpaid and many people stranded without any insurance at all. This report focuses on (1) the nature and extent of MEWA failures to pay bills and other problems; (2) hindrances to state regulation and enforcement of MEWAs; and (3) Department of Labor efforts to prevent MEWA problems, protect MEWA participants and their beneficiaries, and assist State enforcement.

Federal Health Benefits Program: Open Season Processing Timeliness (GAO/GGD-92-122BR, July 8, 1992)

GAO reviewed the timeliness of changes to health insurance that had been requested by Federal workers or retirees during "open season." Overall, GAO discovered that more than half of the 104,000 changes it reviewed were unrecorded on insurance carriers' records by the effective date of the change. Almost all changes were recorded, however, within 60 days of the effective date. Wide variation in recording changes suggests that some agencies and carriers may have better ways of processing changes than others. GAO has told the Office of Personnel Management (OPM) that recording times could be improved by using a comparison of "benchmarking" effort in which the processes used by the most timely agencies and carriers are examined. OPM agrees with GAO's suggestion and has laid out a three-part plan to improve the timeliness of processing changes.

Federal Health Benefits Program: Stronger Controls Needed to Reduce Administrative Costs (GAO/GGD-92-37, Feb. 12, 1992)

GAO believes that the administrative costs of the fee-for-service portion of the Federal Employees Health Benefits Program were higher than those costs for the other large health benefits programs GAO reviewed primarily because the carriers were not given enough incentive to cut their operational expenses. Although small in relation to benefit payments, the program's administrative costs—more than half a billion dollars in 1988—are significant. GAO estimates that the potential annual savings could range from at least $35 million in the short term, by improving Office of Personnel Management controls over the operational expenses of the fee-for-service plans, to about $200 million through legislative reforms that change the way contractors are chosen and paid. Incentives can be more effectively provided through the competitive selection of contractors. If the program were restructured to have competitively selected commercial insurers assume all or part of the insurance risk, GAO believes that the cost of the program's administrative services could be better controlled. Regardless of whether the program is legislatively reformed, however, OPM needs to do more to ensure that the carriers provide quality services at reasonable prices.

Health Care: Most Community and Migrant Health Center Physicians Have Hospital Privileges (GAO/HRD-92-98, July 16, 1992)

Most doctors at community and migrant health centers have admitting privileges at local hospitals. Those who do not often have not applied for privileges because (1) physicians prefer not to have an inpatient practice, (2) they do not meet a hospital's

professional criteria, or (3) the distance from the doctor's residence or practice to the hospital is too far to allow for effective coverage of patients. In addition, 29 community and migrant health centers have no doctors with privileges. The lack of physician admitting privileges at a local hospital does not, however, prevent patients at these centers from gaining access to inpatient care. Alternative means, such as referrals to outside physicians with hospital privileges and to publicly funded hospitals, are used by the centers to help ensure that their patients have access to hospital services. Few doctors at the centers have been denied hospital admitting privileges because they failed to meet a hospital's criteria, although 42 centers indicated that they employ one or more doctors who have not applied for privileges because of doubts about whether they would meet professional or other hospital criteria.

Health Care Spending Control: The Experience of France, Germany, and Japan (GAO/HRD-92-9, Nov. 15, 1991)

France, Germany, and Japan achieve near-universal health insurance coverage with health care systems that, while extensively regulated, share three major traits with the U.S. system: (1) medical care is provided by private physicians and public hospitals, and patients are free to choose their physician; (2) most people receive health insurance coverage through their workplace; and (3) health insurance is provided by multiple third-party insurers. This report describes these countries' methods of providing universal coverage through their health insurance and financing systems, their policies intended to restrain increases in health care spending, and the effectiveness of these policies. While GAO does not endorse the specific health systems of the countries reviewed, the strengths and weaknesses in these systems could be instructive in helping resolve U.S. health care problems.

GAO summarized this report in testimony before the Congress; see *Health Care Spending Control: The Experience of France, Germany, and Japan* (GAO/T-HRD-92-12, Nov. 19, 1991), by Lawrence H. Thompson, Assistant Comptroller General for Human Resources Programs, before the Senate Special Committee on Aging and the Senate Committee on Governmental Affairs.

Health Care Spending: Nonpolicy Factors Account for Most State Differences (GAO/HRD-92-36, Feb. 13, 1992)

As it absorbs more and more of the national income, health care spending in the United States is coming under increasing scrutiny. Personal health care expenditures in this country totalled $585 billion, or $2,255 per capita, in 1990. Personal health care represented 10.7 percent of the U.S. gross national product in 1990, compared with 6.4 percent in 1970. To better understand what drives U.S. health care spending, this report determines the (1) per capita spending for health services in each State, (2) reasons for the differences in spending levels from one State to the next, and (3) extent to which State cost-containment policies have contributed to lowered health spending.

Health Insurance: Vulnerable Payers Lose Billions to Fraud and Abuse (GAO/HRD-92-69, May 7, 1992)

Health industry officials estimate that fraud and abuse contribute to about 10 percent of the $700 billion-plus annual cost of U.S. health care. Weaknesses in the health insurance system allow unscrupulous health care providers—including medical equipment suppliers as well as practitioners—to bilk health insurance companies out of billions each year.

Medical Malpractice: Alternatives to Litigation (GAO/HRD-92-28, Jan. 10, 1992)

Critics say the litigation system for resolving medical malpractice claims is flawed. Claims take a long time to be resolved, legal costs are high, and settlements and awards are unpredictable. In addition, many legitimate claims may never reach the courts. Frustrated by the litigation system and its impact on the costs of medical malpractice insurance, several States have passed laws establishing alternatives to litigation. This report describes voluntary arbitration, as well as other alternatives available in other States and from two private-sector health maintenance organizations—including mandatory arbitration, no-fault programs, and assessing compliance with approved standards of care.

Medical Technology: Quality Assurance Needs Stronger Management Emphasis and Higher Priority (GAO/PEMD-92-10, Feb. 13, 1992)

Despite regulations intended to prevent the production and distribution of unsafe or ineffective medical devices, some critical and life-supporting items like emergency ventilators and heart valves have been recalled from the market recently due to manufacturing defects. GAO found that the Food and Drug Administration's

(FDA's) compliance program for medical devices, which assesses manufacturers' implementation of quality assurance requirements, has been plagued by weaknesses. Inspections have been too infrequent to meet statutory minimum requirements. When inspections have occurred, they often did not find problems that emerged later. When problems were identified and targeted, they often went unreported despite requirements to report them. In addition, FDA inspectors have not received enough training, and the agency's data systems contain major gaps.

GAO summarized this report in testimony before the Congress; see *Medical Technology: Implementing the Good Manufacturing Practices Regulation* (GAO/T-PEMD-92-6, Mar. 25, 1992), by Eleanor Chelimsky, Assistant Comptroller General for Program Evaluation and Methodology, before the Subcommittee on Oversight and Investigations, House Committee on Energy and Commerce.

Nonprescription Drugs: Over the Counter and Underemphasized (GAO/PEMD-92-9, Jan. 10, 1992)

In reviewing Food and Drug Administration regulations, GAO discovered several differences in how the agency ensures the safety and effectiveness of over-the-counter versus prescription drugs. GAO found that (1) unlike prescription drugs, many over-the-counter drugs have not been required to demonstrate their safety and effectiveness before being made available to the public; (2) during FDA inspections for compliance with current good manufacturing practices, FDA has statutory authority to inspect records and documents of prescription drug manufacturers but not those of over-the-counter drug manufacturers; and (3) FDA collects less postmarketing surveillance information and conducts fewer product performance analyses for over-the-counter drugs than for prescription drugs. Postmarketing analyses routinely conducted for prescription drugs include patterns of usage, the magnitude of any identified problem and the appropriate level of response, and trends in adverse reactions.

Prescription Drug Monitoring: States Can Readily Identify Illegal Sales and Use of Controlled Substances (GAO/HRD-92-115, July 21, 1992)

Several hundred million doses of prescription drugs like morphine and codeine are diverted to illicit use each year, but several States have developed monitoring programs that seem to be effective in curbing the illegal practice. Drug diversions can involve the illegal sale of prescriptions by physicians, illegal dispensing by pharmacists, or "doctor shopping" by individuals who visit many doctors to obtain prescriptions. GAO reviewed the 10 existing State prescription drug monitoring programs and found that they save investigators' time and improve their productivity by providing information that allows them to identify potential cases of drug diversions. Prescription drug monitoring programs were not meant to measure their effect on reducing health care costs; however, two of the States with these programs have cut Medicaid prescription costs by an estimated $27 million over 2 years and $440,000 over 1 year, respectively. The other eight States were unable to estimate Medicaid savings. Claims by medical, pharmaceutical, and patient groups that prescription drug monitoring programs have harmed a doctor's ability to practice medicine or have compromised patient care or confidentiality have not been substantiated.

Prescription Drugs: Changes in Prices for Selected Drugs (GAO/HRD-92-128, Aug. 24, 1992)

Soaring prescription drug prices have burdened many Americans, particularly the elderly, who often must pay for these drugs out of pocket because they lack health insurance with drug benefits. Price increases for 29 widely used drugs that GAO reviewed exceeded the inflation rate for the 6-year period ended in 1991. Prices for 19 of the drugs, in fact, increased by more than 100 percent—with some surpassing 300 percent. By comparison, the rise in inflation for this same period was about 26 percent. Companies' explanations for the increases were vague and included few details because they consider information on pricing decisions to be confidential and proprietary. Among the factors they cited were increased research and development costs, expansion of manufacturing facilities, increasing product liability lawsuits, an accelerated approval process for generic drugs that shortens the period when companies can recoup their research and development costs, and inflation.

HOUSING

Community Development: HUD Oversight of the Dallas Block Grant Program Needs Improvement (GAO/RCED-92-3, Nov. 27, 1991)

Newspaper articles have alleged that the city of Dallas poorly administered housing programs funded by the Dallas Community Development Block Grant program. GAO found that the Department of Housing and Urban Development (HUD) did not adequately oversee and monitor the program. This report focuses on HUD's monitoring of the city's (1) timely expenditure of program funds, (2) use of program funds for enforcement of local housing codes, (3) control over subrecipients, and (4) accounting for planning and administrative costs.

Homelessness: HUD's Interpretation of Homeless Excludes Previously Served Groups (GAO/RCED-92-226, Aug. 12, 1992)

The Department of Housing and Urban Development, under new criteria established in 1991, began limiting its funds to programs that serve people who are literally homeless, the only exception being people threatened with immediate homelessness. Although HUD has revised its guidance, some of the terms and definitions that govern HUD field offices and assistance providers remain vague. Terms describing individuals as "imminently" homeless or "in the later stages" of eviction have been interpreted differently by various HUD offices, leading to inconsistency and confusion concerning program eligibility. HUD's new eligibility criteria have made the following groups ineligible for funding: institutionalized mentally ill or retarded persons; persons doubled up with families or friends or living in substandard housing; and the rural homeless, who are often "hidden" in overcrowded or substandard housing.

Homelessness: Policy and Liability Issues in Donating Prepared Food (GAO/RCED-92-62, Dec. 9, 1991)

To what extent do Federal laws, regulations, or policies hinder Federal facilities like cafeterias from making prepared food that is uneaten available to the homeless? Of 14 Federal departments that maintain food service facilities, 13 said that they had little unconsumed food to donate. The remaining agency—the Defense Department—has only just begun its donation policy and could not estimate how much food might be available. Almost all of the departments use food service contractors to run their facilities. These contractors are allowed to use their own discretion in donating food. None of the contractors GAO contacted had written policies on donating unconsumed food, but they said they do donate some food on an ad hoc basis. States have enacted food donation statutes, called good samaritan laws, that provide food donors various degrees of immunity from civil or criminal liability should someone become ill after eating donated food. Federal food service facilities that choose to donate food are covered by these statutes.

Public and Assisted Housing: Linking Housing and Supportive Services to Promote Self-Sufficiency (GAO/RCED-92-142BR, Apr. 1, 1992)

This report discusses the implications of linking Federal housing assistance to supportive services to promote self-sufficiency for low-income families. The Family Self-Sufficiency Program has been established within the Department of Housing and Urban Development (HUD) to promote local strageies for helping low-income families achieve greater self-sufficiency. GAO concludes that several factors will affect the evaluation and administration of the program. First, requiring public housing agencies (PHA) to report how many program participants have relinquished housing assistance and what alternatives to assisted housing they have found will permit meaningful and consistent assessments of the program's progress. Second, it is too early to tell whether HUD's proposed prohibition against the use of motivation as a factor in selecting program participants will affect how PHAs run their programs—including their ability to obtain needed support services. Finally, only limited data are available to determine the extent to which HUD's reimbursement of PHAs' administrative costs will cover the reasonable expenses that PHAs incur in running effective programs.

INCOME SECURITY

Social Security: Beneficiary Payment for Representative Payee Services (GAO/HRD-92-112, June 29, 1992)

Under legislation intended to strengthen the Social Security Administration's (SSA) representative payee program, a 3-year program has been established to allow SSA-approved nonprofit groups to collect a fee from SSA beneficiaries for providing

representative payee services. SSA appoints representative payees for about 5 million beneficiaries who cannot manage their own finances because of their youth or mental or physical impairments. Payees receive the benefits directly from SSA and must use them only for the beneficiaries' needs. While most payees are relatives of the beneficiaries, others may be court-appointed guardians or various public and private social service agencies. The representative payee fee program has been operating for only a short time, and its effectiveness remains to be seen. This report discusses the advantages and disadvantages of such a fee.

Social Security: Racial Difference in Disability Decisions Warrants Further Investigation (GAO/HRD-92-56, Apr. 21, 1992)

During the past 30 years, blacks have been allowed benefits at consistently lower rates than whites under the Social Security Disability Insurance program. Under the Supplemental Security Income program, a similar racial difference has been apparent for at least the last 5 years. GAO studied the lower allowance rate among blacks and found that, within the general population, blacks were receiving benefits at a higher rate than whites; within the severely impaired population, blacks were receiving benefits at a rate comparable to that of whites. This is so notwithstanding the lower allowance rate among blacks who apply for benefits each year. For the most part, the lower black allowance rate in 1988 initial decisions for the two programs appears to be due to black applicants having less severe impairments and being younger than whites. For Supplemental Security Income applicants aged 18 to 24, however, the racial difference in initial decisions was almost twice that of any other age group. The racial difference was largely unexplained by differences in severity and type of impairment or in demographic characteristics.

VETERANS-DOD

Defense Health Care: CHAMPUS Mental Health Benefits Greater Than Those Under Other Health Plans (GAO/HRD-92-20, Nov. 7, 1991)

The Department of Defense's (DOD) Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) pays for a substantial portion of the health care that civilian hospitals, physicians, and other providers give to DOD beneficiaries. This report compares the benefits for mental and substance abuse treatment available under CHAMPUS with similar benefits under private-sector plans and under the Federal Employees Health Benefits Program.

Defense Health Care: Implementing Coordinated Care—A Status Report (GAO/HRD-92-10, Oct. 3, 1991)

The Department of Defense health care costs have been escalating rapidly, particularly in the Civilian Health and Medical Program of the Uniformed Services, where costs increased from $1.4 billion in fiscal year 1985 to an estimated $3.6 billion in fiscal year 1991. In June 1990, DOD unveiled a plan, to be implemented over three years, for containing health care costs and improving beneficiaries' access to high-quality care. Coordinated Care, the plan's centerpiece, will essentially transform military health care into a system of managed care similar to health maintenance organizations. Building on earlier testimony before the Congress (GAO/T-HRD-91-14), this report concludes that DOD has made significant advances in moving to a managed health care system, particularly in light of the magnitude and complexity of the undertaking. However, the effort is behind schedule because many complex organizational details and some policies still need to be developed and decided upon. For example, it is unclear exactly what will be expected of military hospital commanders or what additional resources will be needed to implement the program. One important issue raised by GAO in its March testimony—the need to provide for uniform benefits and cost sharing—is not addressed in the current Coordinated Care program. Enrolled beneficiaries who are able to get their medical care at a military hospital will pay less than $10 a day for inpatient service, while those who must use civilian providers will pay a large part of the bill, usually 25 percent.

Medical ADP Systems: Composite Health Care System Is Not Ready to Be Deployed (GAO/IMTEC-92-54, May 20, 1992)

Development problems with the Defense Department's plan to automate medical records at hundreds of military facilities worldwide could be jeopardizing patient safety as a result of doctors providing improper care, such as prescriptions, lab work, or radiation therapy, on the basis of incomplete information. GAO concludes that the Composite Health Care System, which is intended to improve the quality of DOD health care by integrating data used to manage and treat patients, is not ready to be deployed. Two critical system development and operational problems

remain unresolved—multiple patient records and archiving of patient records. Clinical users often face slow response times, and limited progress has been made in developing an efficient way to enter doctors' inpatient orders. In addition, the scope and quality of system testing have been inadequate, and test results are inconclusive. Until DOD corrects these deficiencies, operational problems will persist and patient well-being may be threatened. Cost estimates for the system now exceed the $1.6 billion congressional cost cap by $400 million. Given its importance to U.S. servicemen and women, the system must meet development requirements to establish its safety and effectiveness and to ascertain that it is the most reasonable alternative for delivering needed medical support.

VA Health Care: Alternative Health Insurance Reduces Demand for VA Care (GAO/HRD-92-79, June 30, 1992)

Demand for inpatient services offered by the Department of Veterans Affairs (VA) could drop by about 18 percent if employers nationwide were required to either provide health insurance for their workers or pay a tax that would be used to obtain coverage. Similarly, demand for VA outpatient services could drop by about 9 percent. Demand for VA-sponsored nursing home care, however, would be largely unaffected because most reform proposals provide limited long-term care coverage. Under a nationwide universal health plan, the impact could be even greater, with demand for VA inpatient care plummeting by about 47 percent. Likewise, use of VA outpatient care could drop by about 41 percent. The actual decrease, including the impact on nursing home usage, could vary significantly depending on the type of universal coverage program adopted. Although many veterans would continue to seek VA treatment, the magnitude of the likely decrease in demand for VA-sponsored health care—should either employer mandates or universal coverage be enacted—suggests that the VA health system should be included in any debate on American health care reform.

VA Health Care: Compliance with Joint Commission Accreditation Requirements Is Improving (GAO/HRD-92-19, Dec. 13, 1991)

In April 1990, the Joint Commission on Accreditation on Healthcare Organizations told the Department of Veterans Affairs that VA medical centers did significantly worse than non-VA hospitals in accreditation surveys done from 1987 to 1989. These surveys also showed that medical centers failed many key quality assurance elements more often than their non-VA counterparts. GAO found that VA medical centers surveyed in 1990 did substantially better than those surveyed in 1989. In addition, their overall compliance scores were close to those received by non-VA hospitals in 1990. Also, VA medical centers scored substantially higher on many key quality assurance elements that constitute the overall scores. This was a direct result of efforts by the VA central office, regional offices, and individual medical centers to ensure that medical centers were following Commission requirements and properly documenting their quality assurance activities.

VA Health Care: Copayment Exemption Procedures Should Be Improved (GAO/HRD-92-77, June 24, 1992)

The Department of Veterans Affairs is supposed to collect a fee, or a copayment, whenever it provides health care to veterans with incomes above a certain level. Vietnam veterans, however, are exempt from this requirement when being treated for medical conditions possibly related to Agent Orange exposure. The six medical centers GAO visited are not adequately evaluating the copayment status of Vietnam veterans claiming exposure to Agent Orange. This situation may be resulting in lost copayment revenues and unequal treatment of Vietnam veterans. Five of the centers routinely exempt all veterans who claim exposure without determining the validity of such claims. The other center routinely requires all veterans who claim exposure to comply with the copayment requirements, potentially depriving them of exemptions to which they are entitled. GAO estimates that the 159 centers could have collected as much as $2 million more in copayments in 1989 had physicians determined that treated conditions were unrelated to Agent Orange exposure.

VA Health Care: Delays in Awarding Major Construction Contracts (GAO/HRD-92-111, June 11, 1992)

The Department of Veterans Affairs (VA) fiscal year 1991 appropriation included funding for 16 major construction projects, each estimated to cost $3 million or more. The law mandates that working drawings contracts and construction contracts be awarded by certain deadlines. In a March 1992 letter to the Congress, VA pointed out 14 projects in which working drawings or construction contracts had not been awarded by the required deadlines. GAO does not believe that the contracting

delays for the 14 projects constitute an impoundment of budget authority under the Impoundment Control Act. VA's actions, in GAO's view, show no intent to refrain from using the funds. The reasons most often cited by VA for the delays were (1) changes in the projects' scope or design, (2) receipt of bids exceeding the funds available, and (3) the fact that projects were funded before preliminary design work was completed. VA has awarded or expects to award contracts for 7 of the 14 projects by September 30, 1992.

VA Health Care For Women: Despite Progress, Improvements Needed (GAO/HRD-92-23, Jan. 23, 1992)

The Department of Veterans Affairs has made significant progress since 1982—when GAO last reported on this issue (see GAO/HRD-82-98)—in ensuring that female veterans receive the same access to health care as male veterans. The increased emphasis on identifying and correcting problems concerning care for women veterans followed both the creation of an Advisory Committee on Women Veterans at the VA Central Office and the appointment of a women veterans coordinator at each medical center. Yet problems remain. Physical examinations for women veterans, including cancer screenings, remain sporadic. VA medical centers are inadequately monitoring their in-house mammography programs to ensure compliance with quality standards. Center procedures are inadequate to ensure that patient privacy limitations affecting women patients are identified and corrected during facility renovations. VA medical centers could improve compliance with physical examination requirements if the VA Central Office ensured that information about best practices is disseminated and, where appropriate, implemented throughout the system.

VA Health Care: Inadequate Controls Over Scarce Medical Specialist Contracts (GAO/HRD-92-114, July 29, 1992)

More than 100 Department of Veterans Affairs medical centers contract with outside medical specialists, mainly for radiology and anesthesiology services. Contracting costs have mushroomed from $17 million in fiscal year 1985 to more than $80 million in fiscal year 1991. The VA Inspector General, citing inadequate contracting procedures as the cause, reported in 1987 that the medical centers were paying millions of dollars for services that either were unneeded or had never been delivered. VA needs to strengthen its oversight of medical specialist contracts. Due to a lack of data and evaluation criteria for contract proposals, however, it cannot identify medical centers with contracting problems. VA recognizes that major weaknesses persist in contracting for medical specialists and expressed a commitment to making necessary improvements.

GAO summarized this report in testimony before the Congress; see *VA Health Care: Inadequate Controls Over Scarce Medical Specialist Contracts* (GAO/T-HRD-92-50, Aug. 5, 1992), by David P. Baine, Director of Federal Health Care Delivery Issues, before the Subcommittee on Oversight and Investigations, House Committee on Veterans' Affairs.

VA Health Care: Modernizing VA's Mail-Service Pharmacies Should Save Millions of Dollars (GAO/HRD-92-30, Jan. 22, 1992)

The Department of Veterans Affairs could save millions of dollars by modernizing its mail-service pharmacies. Currently, VA runs too many mail-service pharmacies, which rely on labor-intensive processing of veterans' prescriptions. Also, because VA's pharmacies fill prescriptions in small quantities that are uneconomical, they incur unnecessary handling costs. VA recently began studying ways to change the basic structure of its mail-service pharmacies. The VA study, however, lacks an assessment of optimal prescription-dispensing quantities. VA will be unable to implement a systemwide modernization plan that maximizes cost savings unless it dispenses prescription medications in economical amounts.

VA Health Care: The Quality of Care Provided by Some VA Psychiatric Hospitals is Inadequate (GAO/HRD-92-17, Apr. 22, 1992)

None of the four Department of Veterans Affairs (VA) psychiatric hospitals GAO visited is effectively collecting and using quality assurance data on a consistent basis to identify and resolve quality-of-care problems in the psychiatric and medical care that patients are receiving. As a result, questionable psychiatric practices may go unnoticed, and medical procedures or practices that are known to have contributed to deaths or medical complications may continue. VA and non-VA hospital systems GAO visited, both psychiatric and acute medical/surgical, differ little in their approach to identifying quality-of-care problems. The quality assurance mechanisms each uses to make sure that quality-of-care standards are met are similar because

most use the Joint Commission on Accreditation of Health Care Organizations as its primary external review group. Further, many of the problems discovered in VA hospitals have also been found in non-VA hospitals.

VA Health Care: Use of Private Providers Should Be Better Controlled (GAO/HRD-92-109, Sept. 28, 1992)

The Department of Veterans Affairs continues to grapple with soaring medical costs. In fiscal year 1990, the agency spent about $112 million for outpatient medical care purchased from private health care providers on a fee-for-service basis. GAO found that VA is not adequately controlling medical centers' purchases of private outpatient medical care for veterans. Centers may turn to private providers only if the needed care is unavailable at the VA center or private providers are less expensive due to geography. VA, however, has not issued clear guidance to medical centers on how this requirement should be implemented. As a result, the cost-effectiveness of private care has not been evaluated, and centers may be needlessly buying millions of dollars of medical care from private providers when the care could be more economically delivered in VA facilities.

VA Health Care: VA Did Not Thoroughly Investigate All Allegations by the Froelich Trust Group (GAO/HRD-92-141, Sept. 4, 1992)

In an April 1991 letter to the Department of Veterans Affairs, an anonymous group of veterans, known as the Froelich Group, made a series of allegations about the Veterans Health Administration's (VHA) medical information resources management. Included were accusations that (1) software contained inaccurate patient records and (2) staff submitted fraudulent time and attendance reports and abused government funds. VHA's Medical Inspector did not thoroughly address the Froelich allegations about inaccurate medical data, including the effect of VA's software integration practices on the accuracy of its automated databases. The scope of the Inspector General's investigation into inaccurate medical data was too narrow. The review of software integration practices merely described VA's existing processes, and the Medical Inspector did not follow up on the large number of incomplete paper medical records identified during his review. VHA did substantiate several of the Froelich Group's claims, including allegations that the Decentralized Hospital Computer Program is slow and not user friendly and that its order entry/results reporting software does not follow physician logic. VA's Inspector General thoroughly investigated allegations about employee malfeasance, including a charge that the director of one center verbally abused employees. This allegation was substantiated when more than half of the staff said that they either had seen or had been subject to verbal abuse; the rest of the allegations could not be substantiated.

VA Health Care: VA Plans Will Delay Establishment of Hawaii Medical Center (GAO/HRD-92-41, Feb. 25, 1992)

The Department of Veterans Affairs (VA) has no hospital in Hawaii, and because of this the acute care needs of veterans have traditionally been met through a VA sharing agreement with Tripler Army Medical Center and contracts with community hospitals. VA has plans on the drawing board for a medical center in Hawaii. With respect to the planned medical center, this report discusses whether (1) VA could increase its presence in Hawaii and provide acute and long-term care services to the state's veterans sooner than currently planned, (2) VA has accurately projected its acute care bed needs in light of the Hawaii health insurance mandates, and (3) excess bed capacity exists at Tripler Army Medical Center that could be used to meet those needs.

VA Health Care: Verifying Veterans' Reported Income Could Generate Millions in Copayment Revenues (GAO/HRD-92-159, Sept. 15, 1992)

Each year, the Department of Veterans Affairs provides medical care to about one million veterans whose disabilities are unrelated to military service. Among these veterans, those classified as having "higher incomes" must copay for any treatment they receive. GAO found that VA may have incorrectly determined the copayment status of more than 100,000 of these veterans in 1990. Although tax records revealed that these veterans had incomes above the threshold levels, VA relied solely on income reported by veterans to determine their copayment status. Had VA verified those amounts with other sources, it could have billed as much as $27 million for the health care it provided that year. VA cited data base and staffing limitations as the main barriers to using tax records. In addition, VA may have lost as much as $120 million in copayment revenues because it could not implement an income-verification system before its authority to use tax records expired in September 1992. Copayment losses in 1991 and 1992 may greatly exceed the estimated 1990 losses

because of significantly lower income thresholds and higher copayment rates in those years. Despite this wasted opportunity to verify veterans' incomes, the Congress should extend VA's authority to use tax records.

VA Life Insurance: Administrative Costs for Three Programs Should Be Paid From Excess Funds (GAO/HRD-92-42, Mar. 10, 1992)

The government now spends more than $27 million annually on the administrative costs of three life insurance programs run by the Department of Veterans Affairs. Yet GAO found that these three long-standing insurance programs for U.S. veterans, which pay substantial dividends to policyholders, could comfortably pay their own administrative costs without risk of insolvency or increased premiums and with little impact on policyholder dividends. In GAO's view, because policyholders are not entitled to dividends by law or contract and they would experience only a slight dividend cut, it would be neither illegal nor unfair to have administrative costs paid out of excess program income. Because the law now requires the government to pay administrative costs, GAO supports legislation that would shift program administration costs from the federal government to the program.

VA Life Insurance: Premiums and Program Reserves Need More Timely Adjustments (GAO/HRD-92-71, July 20, 1992)

The Servicemen's Group Life Insurance Program (SGLI) is the largest of eight insurance programs run by the Department of Veterans Affairs (VA); SGLI is administered by Prudential Insurance Company of America, under contract with the VA. SGLI's operating reserves totaled $165 million as of June 1991, and, according to GAO, needed to be increased by about $85 million as a result of recent legislation that doubled maximum coverage from $50,000 to $100,000 for each insured. At the same time, GAO believed that the program's $76 million in contingency reserves were about $51 million more than needed. GAO also thought that reserves in the $191 million revolving fund were too high. GAO found that military personnel covered by SGLI were overcharged premiums throughout the 1980's, and adjustments are needed. GAO made recommendations to the Secretary of Veterans Affairs to achieve the adjustments GAO feels would improve the financial position of SGLI. The Secretary did not concur with GAO's recommendations.

Veterans' Benefits: Millions in Savings Possible From VA's Matching Program With IRS and SSA (GAO/HRD-92-37, Dec. 23, 1991)

The Department of Veterans Affairs administers $30 billion in benefits and health care programs for veterans and their dependents. Eligibility for benefits and the level of benefits paid are often income dependent. GAO estimates that in 1984 VA may have made overpayments exceeding $157 million because it lacked access to tax data that could have verified income reported by pension recipients. VA has been granted access—until September 1992—to Internal Revenue Service (IRS) and Social Security Administration earnings records to verify the income reported by beneficiaries in the following four programs: (1) needs-based pension program, (2) parents' dependency and indemnity compensation program, (3) unemployability compensation program, and (4) medical care. VA's first computer match of reported income with IRS data on unearned income (such as dividends and interest) for tax year 1989 revealed that nearly $340 million more in unearned income was reported to IRS than to VA by the same beneficiaries that year. VA officials also expect additional savings to result from matches with SSA earnings data. But VA needs to verify the income of its health care recipients in order to receive the full benefit from the matching program. While VA has tried to safeguard IRS and SSA data and protect the due process rights of its beneficiaries, the effectiveness of these measures should be reviewed periodically.

Vocational Rehabilitation: Better VA Management Needed to Help Disabled Veterans Find Jobs (GAO/HRD-92-100, Sept. 4, 1992)

Millions of veterans have disabilities resulting from military service, and some need help in finding and keeping jobs. The Department of Veterans Affairs' rehabilitation program traditionally stressed job training rather than job placement. The Congress overhauled the program in 1980 and made suitable employment for veterans the main objective. In practice, however, VA acted on this change only recently, and so far the agency has received little help from either the Department of Labor or state agencies in finding jobs for veterans. Of the more than 200,000 veterans enrolled in the program between 1983 and 1991, 71 percent dropped out. The significance of this trend is unclear because VA has not collected and analyzed meaningful data. Furthermore, VA standards for measuring service to veterans do not appear to challenge VA employees to provide better service. GAO believes that

benchmarking performance, rather than setting rigid standards, would allow VA managers to continually improve services to veterans and measure progress toward achieving program objectives.

Vocational Rehabilitation: VA Needs to Emphasize Serving Veterans With Serious Employment Handicaps (GAO/HRD-92-133, Sept. 28, 1992)

Veterans with serious employment handicaps often have a hard time obtaining and keeping suitable jobs. Yet the Department of Veterans Affairs' vocational rehabilitation program makes no special effort to help such veterans. For example, it mails them the same information package that all veterans receive and schedules appointments for veterans on a first-come, first-served basis, without considering handicap. VA's productivity standards for its employees consider only the volume of cases handled and do not take into account the special effort often required in working with veterans with serious employment handicaps. If VA focused its outreach on veterans with serious handicaps, provided priority in scheduling appointments, and recognized in its productivity standards the additional effort required to serve these veterans, the program could serve more veterans with serious employment handicaps. Fewer veterans with lower disability ratings may be served, however, if the same level of resources is maintained.

OTHER

Formula Programs: Adjusted Census Data Would Redistribute Small Percentage of Funds to States (GAO/GGD-92-12, Nov. 7, 1991)

A total of 100 Federal programs providing grants at the state and local levels use population-related data in formulas that allocate all or part of program grant money. While these programs had total estimated obligations of about $116 billion in fiscal year 1991, the amount of funding influenced by population data was substantially less than that because some programs allocated only a small portion of their total grants according to population data. Of the 100 programs, 30 use data elements for which the decennial census is the only source of information. While hard to predict precisely, the general effect of using adjusted 1990 census population for Federal funding purposes would likely be small as a percentage of total funding.

Using 1990 adjusted population data in place of the decennial census figures, GAO simulated allocations for three major Federal programs—Social Services Block Grant, certain Federal Aid-Highway Programs in which population is a factor, and Medicaid. GAO found that the use of adjusted data would redistribute less than 0.5 percent of total funding. Some individual States, however, would incur estimated changes of more than $1 million in their allocations; the effect of such differences becomes more substantial when applied over an entire decade.

Redistribution of funds to localities could have a greater impact. Because of the time involved to complete the necessary methodological research, the Bureau believes that any intercensal population estimates incorporating a correction for census undercoverage could not be made available before mid-1992 or early 1993.

GAO summarized this report in testimony before the Congress; see *Potential Impact of Using Adjusted Census Counts for Federal Formula Programs* (GAO/T-GGD-92-5, Nov. 13, 1991), by L. Nye Stevens, Director of Government Business Operations Issues, before the Subcommittee on Government Information and Regulation, Senate Committee on Governmental Affairs.

Urban Poor: Tenant Income Misreporting Deprives Other Families of HUD-Subsidized Housing (GAO/HRD-92-60, July 17, 1992)

A computer match of IRS tax data with the income reported to local authorities by 175,000 households to establish their eligibility and rent payments for federally subsidized housing found 21 percent of the households may have under reported their incomes by as much as $138 million. The Department of Housing and Urban Development (HUD) provides more than $13 billion in housing subsidies to 4.6 million needy families, but millions of more needy families may be going without decent housing because HUD lacks an accurate, centralized system to verify eligibility and household income data for families living in subsidized units. The income underreporting uncovered by GAO resulted in excess Federal subsidies of $41 million for 1989 alone. A centralized income and eligibility verification system could help HUD ensure that subsidized households are paying appropriate rents and that needy, very low-income families have access to subsidized housing.

Welfare Programs: Ineffective Federal Oversight Permits Costly Automated System Problems (GAO/IMTEC-92-29, May 27, 1992)

Three of the Federal Government's main welfare programs—Aid to Families With Dependent Children, Medicaid, and Food Stamps—provided more than $92 billion in benefits in 1990. These programs rely heavily on State-run computer systems to determine participants' eligibility and the amount of assistance they should receive. The Federal Government estimates that during the 1980's, it gave States close to $1 billion to develop and run these systems. Yet monitoring of States' automation efforts by the Department of Health and Human Services and the U.S. Department of Agriculture (USDA) have fallen short, allowing millions of dollars to be spent on systems that either do not work or do not meet requirements. In addition, poor coordination between HHS and USDA has sometimes resulted in contradictory directions to states. Despite explicit federal guidance, HHS and USDA have also failed to determine whether installed automated systems are working as intended and are yielding improvements. At this point, the Federal Government has no idea whether administrative costs and mistakes have been reduced because HHS and USDA have not measured automation's impact on welfare programs.

1990 Census: Limitations in Methods and Procedures to Include the Homeless (GAO/GGD-92-1, Dec. 30, 1991)

This report focuses on the Census Bureau's Shelter and Street Night (S-Night) Operation, which was meant to include the homeless population in the census. GAO concludes that the results of S-Night cannot be used to construct a count of the Nation's homeless at any level of geography because S-Night was not designed to capture all of the Nation's homeless population. In addition, the chosen method of enumerating selected shelter and street locations at night resulted in an unknown number of the hidden homeless being missed and a lack of assurance that those counted were homeless and would not also be counted during other census operations. These methodological limitations, combined with the operational problems the Bureau experienced with the street count, resulted in S-Night street data that have limited value in meeting needs for information on the number of homeless and their characteristics.

APPENDIX III—FISCAL YEAR 1992 TESTIMONIES RELATING TO ISSUES AFFECTING OLDER AMERICANS

GAO testified 49 times before congressional committees during fiscal year 1992 on issues relating to older Americans. Of the testimonies, 2 were on employment, 26 were on health, 3 were on housing, 7 were on income security, 3 were on social services, 7 were on veterans issues, and 1 on other issues.

EMPLOYMENT

The Changing Workforce: Demographic Issues Facing Employers (GAO/T-GGD-92-61, July 29, 1992)

The civilian labor force has changed dramatically in recent decades and is expected to change even more in the future. The most striking demographic change has been the wholesale entry of women into the workforce, particularly married women with children. Two other major demographic trends are the growing numbers of racial and ethnic minorities in the workforce and the greying of the labor force, driven largely by the aging of the baby boomers. In response, more and more employers are offering (1) child care, flexible work schedules, and other benefits to help employees balance work and family responsibilities; (2) diversity training; and (3) phased retirement or other strategies to utilize the skills of retirees. This testimony focuses on a series of recent GAO reports describing these changes to the workforce and programs developed by employers—including the Federal Government—in response to these changes.

Federal Affirmative Action: Status of Women and Minority Representation in the Federal Workforce (GAO/T-GGD-92-2, Oct. 23, 1991)

A basic personnel policy, set out by law, is to create a competent, honest, and productive Federal workforce that reflects the Nation's diverse population. While improvements have occurred, the Federal civilian workforce still does not reflect the Nation's diversity; white women and Hispanics in the Federal workforce continue to lag behind their representation in the Nation's civilian workforce. This testimony focuses on the representation status of women and minorities in the Federal workforce, particularly at the upper grade levels and in jobs that typically lead to those grades. GAO also discusses the need (1) to improve the statistical criteria used to

measure women and minority representation and (2) for more emphasis on collecting and/or analyzing recruiting, hiring, training and development, promotion, and separation data to better identify barriers to women and minorities.

HEALTH

Access to Health Insurance: State Efforts to Assist Small Businesses (GAO/T-HRD-92-40, June 9, 1992)

Most States have proposed or already implemented programs to expand small businesses' access to health insurance coverage for their workers. Many of these initiatives have been adopted within the past 2 years, but early indications are that they have led to only modest gains in the number of firms offering health insurance because costs have not been reduced enough to induce small firms to offer it.

Access to Health Insurance: States Attempt to Correct Problems in Small Business Health Insurance Market (GAO/T-HRD-92-30, May 14, 1992)

GAO discussed State efforts to improve the availability and affordability of health insurance for small businesses. GAO noted that: (1) 43 States have initiated one or more insurance regulatory reforms aimed at improving access to affordable health insurance for small firms and their employees; (2) nearly half of the States have passed legislation reducing or eliminating mandated benefits and now permit insurance companies to offer lower bare bones cost health insurance policies to small firms; (3) insurers in most of those States have offered plans to the small group market with premiums up to 40 percent lower than existing small group policies; (4) some States have also tried to ease the financial burden confronting small firms in the insurance market by subsidizing insurance premiums through direct and indirect subsidies, including tax credits and premium tax waivers that allow employers to provide and for employees to purchase health insurance; (5) some States use such risk-pooling mechanisms as high-risk pools, reinsurance pools, and small employer pools to address small firms' inability to spread risks across a large number of employees and exert buying power in the health services market; and (6) although State initiatives have only been introduced within the past 2 years, early indications show that they have led to only modest gains in the number of firms offering health insurance.

Breast Cancer: Progress to Date and Directions for the Future (GAO/T-PEMD-92-4, Dec. 11, 1991)

GAO discussed progress in breast cancer prevention and treatment, focusing on: (1) changes in medical interventions, (2) requirements to improve survival rates, (3) research needed to help prevent breast cancer, and (4) the National Institutes of Health's (NIH) financial support for research on breast cancer compared with other support for research on other conditions. GAO noted that (1) there has been no progress in preventing breast cancer, (2) changes in medical intervention have led to a stabilization of breast cancer mortality rates, (3) mammography offers the only evidence of improving survival rates, (4) efforts to prevent breast cancer have little chance of success until factors that cause the disease are understood, (5) NIH research expenditures for breast cancer are equivalent or greater to other research conditions for serious conditions with the exception of acquired immune deficiency syndrome, and (6) earlier detection and more appropriate surgery have increased the likelihood and quality of survival.

Diabetes: Status of the Disease Among American Indians, Blacks, and Hispanics (GAO/T-PEMD-92-7, Apr. 6, 1992)

While data are limited on the incidence of diabetes among minorities, the disease seems to be more prevalent among American Indians, blacks, and Hispanics than among whites. Certain environmental and lifestyle factors appear to trigger diabetes in genetically susceptible individuals, although it is unclear whether the natural history of the disease is the same or different across different population groups—a major shortcoming in existing research. Slightly more than half of all funds for diabetes research are targeted to minorities, but only a tiny fraction of all diabetes funding goes to studying prevention/behavorial and clinical research. Further, the National Institutes of Health data base cannot be used to determine the actual level of resources devoted to minority diabetes, and NIH makes no effort to collect information on the race of people donating blood for basic research.

Elderly Americans: Health, Housing, and Nutrition Gaps Between the Poor and Non-poor (GAO/T-PEMD-92-10, June 24, 1992)

GAO discussed issues involving the elderly poor and near-poor population, focusing on: (1) the size and characteristics of the population; and (2) the relationship between poverty and various aspects of health care, housing, and nutrition. GAO noted that in 1990 the elderly poor and near-poor: (1) totalled 19 percent of the elderly population, or 5.7 million persons, excluding homeless and borderline poverty level elderly; (2) tended to be elderly women, minorities, and persons over 75 years of age; (3) relied on Social Security benefits as their major source of income; (4) received 95.7 percent of health insurance coverage through Medicare, but limitations and uncovered costs of the Medicare system account for major expense to elderly poor; (5) experienced a higher degree of negative health status; (6) renters benefit from public housing, section 8 certificates and vouchers, and section 202 housing; (7) nutritional intake is inadequate and data are limited; and (8) enrollment in Government assistance programs is low.

Elderly Americans: Nutrition Information Is Limited and Guidelines Are Lacking (GAO/T-PEMD-92-11, July 30, 1992)

Most agree that the elderly are at high risk for malnutrition. Yet the Federal Government's national nutrition surveys are limited in many ways. At a minimum, their scope must be widened to include more complete data on the elderly and their eating habits. Furthermore, no adequate guidelines exist describing the nutritional needs of the elderly. Available data on people over 50 suggest that the recommended dietary allowances for such individuals should not be based on age alone but rather on a combination of factors, including level of activity, presence of chronic disease, and general health status. Improved nutrition data and nutritional guidelines are needed before definite conclusions can be drawn about the actual nutritional status of the elderly.

Federal Health Benefits Program: Stronger Controls Needed to Reduce Administrative Costs (GAO/T-GGD-92-20, Mar. 11, 1992)

GAO testified that the administrative costs of the fee-for-service portion of the Federal Employees Health Benefits Program are higher than the costs for other large health benefits programs, mainly because the carriers are not given enough incentive to cut their operational expenses. GAO estimates that potential annual savings could range from at least $35 million in the short term, if the Office of Personnel Management improves its controls over the operational expenses of fee-for-service plans, to as much as $200 million through legislative reforms that would provide a more uniform benefits structure and change the way contractors are chosen and paid.

Health Care Spending Control: The Experience of France, Germany, and Japan (GAO/T-HRD-92-12, Nov. 19, 1991)

GAO discussed the health care systems in France, Germany, and Japan. GAO noted that (1) France, Germany, and Japan provide universal access to health insurance while spending less on health care than the United States; (2) under the U.S. and the three countries' health care systems, multiple payers provide health insurance, people typically get health insurance for themselves and their dependents at their place of employment, people can choose their own physician on a fee-for-service basis, and both private and public hospitals deliver inpatient care; (3) health care system regulations in France, Germany, and Japan guarantee access to health insurance to all residents, standardize insurers' payments to physicians and hospitals, and control increases in health care spending; (4) the three countries use many insurers to achieve universal health care coverage, standardize rates for reimbursing providers without the government setting rates unilaterally, and moderate increases in health spending by putting entire health care sectors on a budget; and (5) budget controls neither relieve all spending pressures nor ensure quality or efficiency.

Health Insurance: More Resources Needed to Combat Fraud and Abuse (GAO/T-HRD-92-49, July 28, 1992)

Only a fraction of health care fraud and abuse is ever detected and prosecuted. Those cases, however, have involved substantial sums. Due to a lack of staff and money, effective investigation and pursuit of health care fraud has been impossible, allowing dishonest health care providers to stay in business. An essential health care goal must be to improve insurers' access to legal and punitive remedies to fraud and abuse. Yet more resources alone will not successfully overcome fraud and abuse. Structural issues like limitations on information sharing among insurers and

incompatible data systems allow unscrupulous providers to move from one insurer to the next. GAO believes that the Congress should convene a national health care fraud commission composed of private and public payers, providers, and law enforcement agencies. In GAO's view, such a commission would be best able to weigh possible trade-offs, such as greater information sharing among insurers versus concerns about privacy and antitrust issues, greater regulation of provider ownership arrangements versus concerns about restraining competition, and investment of resources in health care fraud versus the devotion of resources to other criminal investigations.

Health Insurance: Vulnerable Payers Lose Billions to Fraud and Abuse (GAO/T-HRD-92-29, May 7, 1992)

GAO discussed how fraud and abuse besets public and private health insurers. GAO noted that health insurance system vulnerabilities that allow unscrupulous health care providers to cheat health insurance companies and programs out of an estimated 10 percent of total health care spending each year include (1) insurers who operate independently with limited ability to collaborate on efforts to confront fraudulent providers, (2) growing financial ties between health care facilities and the practitioners who control referrals to those facilities, and (3) the high cost of pursuing fraud and abuse. GAO also noted that (1) health insurance fraud and abuse practices include overcharging for services, charging for services not rendered, accepting bribes for referring patients, and rendering inappropriate or unnecessary services; (2) insurers have problems detecting and pursuing fraud and abuse because of the difficulty in discerning wrongful acts amidst the multiple activities that take place during claims processing, privacy concerns that limit collaboration among industry members, and the lack of consensus concerning appropriate regulation of new provider types and financial arrangements; and (3) increased coordination of public and private insurers' efforts would facilitate the pursuit of health care fraud and abuse.

Long-Term Care Insurance: Actions Needed to Reduce Risks to Consumers (GAO/T-HRD-92-44, June 23, 1992)

While the National Association of Insurance Commissioners (NAIC) has developed model standards for selling long-term care insurance policies, consumers are still vulnerable for several reasons. First, many States and insurance companies have not adopted all NAIC standards. Second, several features of long-term care insurance with important consequences for consumers are poorly addressed by the standards. Third, low-income individuals have purchased policies even though such policies are expensive and the people may already be covered by a program like Medicaid. Companies that GAO reviewed do little to prevent the sale of this insurance to low-income individuals. GAO believes that additional standards are necessary. If States do not adopt the NAIC standards, the Congress may want to pass legislation setting minimum Federal standards for long-term care insurance.

Long-Term Care Insurance: Better Controls Needed to Protect Consumers (GAO/T-HRD-92-31, May 20, 1992)

Although National Association of Insurance Commissioner standards have expanded, consumers are still vulnerable to considerable risks in buying long-term care insurance. Consumers are at risk for two main reasons. First, many States have not adopted key NAIC standards. Second, the NAIC standards themselves do not sufficiently address several features of long-term care insurance with important implications for consumers. For example, policy language on matters like eligibility criteria is often vague and inconsistent across policies, making it hard to compare policies and judge which provisions can reduce the likelihood that a policyholder will receive benefits. Consumers also face considerable financial risks, such as price hikes that could make if difficult for them to retain their policies. In addition to problems with insurance policies and standards, GAO's work at eight insurance companies revealed that, except for Medicaid recipients, the companies do little to prevent the sale of long-term care insurance to people who cannot afford it.

Long-Term Care Insurance: Consumers Lack Protection in a Developing Market (GAO/T-HRD-92-5, Oct. 24, 1991)

The model standards promulgated by the National Association of Insurance Commissioners for long-term care insurance provide greater consumer protection than existed before 1986, but two key problems remain. First, State standards have been improved, but many States have not adopted key NAIC standards, including those developed between 1986 and 1988. Insurers have adopted NAIC standards more quickly than States have but have not incorporated more recent NAIC standards,

such as those for inflation protection, into their policies. Second, the model standards do not sufficiently address several significant areas. Terms and definitions are not uniform across policies for long-term care, making it hard or impossible to compare policies and judge which policy provisions might prevent a policyholder from receiving benefits. Pricing is not a good indicator of value—premiums for policies that offer similar benefits may vary as much as 150 percent. In addition, setting premium prices in a new market without experience data requires periodic adjustments that could make long-term care policies unaffordable for some people. By letting their policies lapse, however, policyholders almost always lose their entire investment in premiums. Further, many agents earn high first-year sales commissions, and consumers are vulnerable to agents who push unnecessary policies for the sake of getting commissions.

Medicaid: Factors to Consider in Expanding Managed Care Programs (GAO/T-HRD-92-26, Apr. 10, 1992)

"Managed care," widely used in private-sector health care, refers to a health care delivery system with a single point of entry: a primary physician typically provides basic care and decides when a referral to a specialist or admission to a hospital is necessary. GAO testified that managed care in State Medicaid programs could improve access to quality health care. Because of the financial incentives of such programs and the vulnerability of Medicaid recipients, however, GAO cautions that safeguards must be instituted to adequately protect patients. These safeguards include a quality assurance system that requires client satisfaction and disenrollment surveys; a grievance procedure; and an outside, independent review of medical records. Further, states need to monitor (1) the financial arrangements between the contracting plan and its providers to spot excessive incentives to deny necessary services, (2) utilization data to determine if appropriate levels of service are being delivered, and (3) subcontractors in the same manner as contractors because the same problems can arise. Finally, effective State and Federal oversight is needed along with prompt corrective actions when problems are discovered.

Medicaid: Factors to Consider in Managed Care Programs (GAO/T-HRD-92-43, June 29, 1992)

GAO discussed the role of managed care in State Medicaid programs. GAO noted that (1) adequate safeguards and oversight are crucial to the success of managed care programs; (2) it has previously identified problems with access to care, quality of services, and oversight of providers' financial reporting and solvency; (3) the Oregon managed care program does not place excessive financial risk on providers, because Oregon has safeguards in place to prevent inappropriate reductions in service delivery or quality; and (4) before expanding its program, Oregon should meet Medicaid ownership disclosure requirements, from which it is currently exempt, and improve its monitoring of providers' financial solvency.

Medicaid Prescription Drug Diversion: A Major Problem, But State Approaches Offer Some Promise (GAO/T-HRD-92-48, July 29, 1992)

State Medicaid agencies have become more aggressive in cracking down on the pervasive problem of fraudulent reselling of prescription drugs. Typically, "pill mills," which can be doctors' offices, clinics, or pharmacies, provide medically unnecessary prescriptions to Medicaid recipients, who then sell the drugs to a pharmacist or other intermediary for cash or merchandise. States like New York have adopted several promising approaches, including tighter controls on provider enrollment, electronic verification of claims, and earlier and more sophisticated analysis of provider and recipient profiles. Yet new schemes that elude detection are appearing constantly. Other steps that some States are taking include (1) enacting State laws making Medicaid fraud a felony, (2) strengthening their law enforcement efforts to apprehend responsible parties, (3) providing greater penalties for convicted providers, and (4) intensifying efforts to recover losses by penetrating the corporate veil and through practices, such as requiring performance bond postings and freezing assets.

Medical Technology: Implementing the Good Manufacturing Practices Regulation (GAO/T-PEMD-92-6, Mar. 25, 1992)

GAO discussed the Food and Drug Administration's (FDA) Good Manufacturing Practices (GMP) Compliance Program for medical devices. GAO noted that (1) in order to prevent the production and distribution of unsafe and ineffective medical devices, the GMP Compliance Program assesses manufacturers' implementation of the quality assurance requirements; (2) FDA continues to develop more stringent GMP quality assurance criteria and is working to harmonize GMP requirements

with international quality assurance standards; (3) between fiscal years 1987 and 1989, the total number of device GMP inspections and the number of qualified inspections steadily declined, primarily due to the FDA prioritized inspection policy; (4) between fiscal years 1987 and 1990, FDA untimely inspected one-third of the 323 manufacturers that initiated the first recall of a device; (5) even when FDA completes inspections on time, the inspections do not always identify or target GMP violations; (6) FDA recommended and reported compliance action on only about one-half of identified GMP compliance violations; (7) about one-half of the manufacturers that received two or more GMP compliance violations notices did not correct the violations from one inspection to the next; (8) inspectors' investigative capability is limited by FDA assignment policies and inadequate training on device technology; and (9) information on both medical device manufacturers and their devices is unreliable and incomplete.

Medicare: Contractor Oversight and Funding Need Improvement (GAO/T-HRD-92-32, May 21, 1992)

Fraud, waste, and abuse are contributing to the health care cost spiral confronting the United States. Medicare faces program losses because of exploitation by unscrupulous providers, erroneous payments, and excessive reimbursement rates. While the Health Care Financing Administration (HCFA) has generally tried to remedy identified weaknesses, the Medicare program remains vulnerable to unwarranted losses. Unless contractors have clear incentives to manage program dollars efficiently and effectively, it is unlikely that they will take the initiative to perform resource-intensive safeguard activities on their own—from investigating beneficiary complaints to reducing backlogs of identified overpayments. Contractors need some assurance that funding for safeguard activities will be stable and adequate so that they can hire and train necessary staff. Funding for these activities, however, has not been stable, especially when viewed in light of increased claims volume. Moreover, recent program changes require more resources from contractors. Consequently, GAO supports modifying the budget process to enable adequate and stable funding for Medicare program administration. GAO also believes that HCFA must be more aggressive in holding contractors accountable for their performance in program administration. To monitor and direct contractor actions, HCFA may need to develop better information systems, more focused performance measures, and stronger contractor guidance.

Medicare: HCFA Needs to Take Stronger Actions Against HMOs Violating Federal Standards (GAO/T-HRD-92-11, Nov. 15, 1991)

GAO discussed the Health Care Financing Administration's efforts to address violations of Medicare requirements by the largest health maintenance organization (HMO) Medicare contractor. GAO noted that (1) the contractor's Medicare requirements violations involved marketing, claims payment, processing of beneficiary appeals, and implementation of an internal quality assurance system; (2) in fiscal year 1989, HCFA cited the contractor for violating Medicare standards to provide members with current information on the plan's rules, benefits, and costs; (3) over the last 3 years, HCFA found that the contractor inappropriately denied or delayed payment of claims for emergency services and urgently needed services outside the plan's service area; (4) HCFA found that the contractor did not always treat beneficiary appeals for claims as Medicare appeals; (5) the contractor violated quality assurance by not collecting enough ambulatory care data to systematically identify individual physicians with patterns of underservice to Medicare enrollees; and (6) HCFA has been reluctant to use its authority to impose sanctions on the HMOs that fail to comply with Medicare requirements because final regulations have not been issued. GAO believes that to become more effective in addressing violations, HCFA needs to (1) adopt policies for determining the circumstances that warrant intermediate sanctions and (2) develop a standard for the HMOs that would specify an acceptable performance rate for paying claims.

Medicare: Improper Handling of Beneficiary Complaints of Provider Fraud and Abuse (GAO/T-HRD-92-2, Oct. 2, 1991)

GAO discussed Medicare's responsiveness to beneficiary complaints of provider fraud and abuse, focusing on (1) weaknesses in Medicare carriers' fraud and abuse detection efforts and (2) the Health Care Financing Administration's oversight of those carrier operations. GAO noted that (1) carriers often told beneficiaries to submit their complaints in writing or to resolve them with providers, even though the beneficiary described the complaint in detail over the telephone; (2) 15 of the 155 cases examined included substantial indications of potential fraud and abuse in that the provider had 2 or more similar, substantiated complaints within the last 2

years, or the current complaint, on its own, strongly suggested fraudulent or abusive behavior; (3) HCFA has not developed instructions for carrier staff who initially receive beneficiary complaints on how to identify and refer those complaints for investigation; (4) annual HCFA evaluations of carrier fraud and abuse detection efforts were inadequate for the five carriers reviewed; (5) carrier officials complained that they lacked sufficient resources to thoroughly investigate all complaints of provider fraud and abuse; and (6) budget reductions in the program safeguard area are undermining fraud and abuse detection activities and resulting in large program losses, but HCFA officials believe that funds for carrier personnel who answer these complaints will be reallocated within the fiscal year 1992 budget.

Medicare: Shared Systems Policy Inadequately Planned and Implemented (GAO/T-IMTEC-92-11, Mar. 18, 1992)

GAO commented on the Health Care Financing Administration's plans to implement the shared systems policy, an initiative to encourage contractors to share automatic data processing (ADP) systems. GAO noted that (1) despite the need for early planning, HCFA did not develop a list of minimum automation requirements for Medicare; (2) HCFA failure to perform system evaluations to assist contractors in identifying the most appropriate systems for sharing resulted in costly claims-processing problems; (3) HCFA focused primarily on administrative savings and ignored the effect that ADP systems would have on Medicare claims-processing effectiveness; and (4) HCFA did not define a long-term automation strategy to determine how best to process Medicare claims given current technology. GAO believes that HCFA should suspend further implementation of its shared policy until it addresses the identified deficiencies.

Nonprescription Drugs: Over the Counter and Underemphasized (GAO/T-PEMD-92-5, Apr. 8, 1992) and Over the Counter Drugs: Gaps and Potential Vulnerabilities in the Regulatory System (GAO/T-PEMD-92-8, Apr. 28, 1992)

While over-the-counter drugs are a common part of daily life, not all such drugs that reach the marketplace are safe or effective. GAO testified that (1) unlike prescription drugs, many over-the-counter drugs have not been proven safe or effective before being made publicly available; (2) the Food and Drug Administration has statutory authority to inspect records and documents of prescription drug manufacturers, but not those of over-the-counter manufacturers; and (3) FDA collects less postmarketing surveillance information and conducts less product performance analysis for over-the-counter drugs than for prescription drugs.

Screening Mammography: Quality Standards Are Needed in a Developing Market (GAO/T-HRD-92-3, Oct. 24, 1991)

GAO testified that many of the screening mammography providers it surveyed in an earlier report (GAO/HRD-90-32) lacked quality assurance programs to ensure that women receive safe and accurate mammograms. The Congress has been concerned that a new Medicare screening mammography benefit with a limit on provider charges might create "mammography mills" providing substandard care. Yet GAO discovered that high volume was associated with greater compliance with quality standards and that price was not indicative of the extent of quality control. GAO testified that strong federal standards are needed to ensure the quality of screening mammography.

Significant Reductions in Corporate Retiree Health Liabilities Projected If Medicare Eligibility Age Lowered to 60 (GAO/T-HRD-92-7, Nov. 5, 1991)

About 9 million retirees in the private sector rely on health benefits provided by companies. In the face of an aging workforce and spiraling health care costs, however, companies are becoming increasingly concerned about the expense of providing retiree health benefits. Furthermore, a new accounting rule will hit some companies hard by forcing them to acknowledge substantial unfunded retiree health liabilities. Several legislative proposals before Congress would lower the age of Medicare eligibility from 65 to 60. Such a measure would provide several benefits to both retirees and companies. It would (1) increase the security of retiree health benefits for early retirees (those who retire before age 65) by making Medicare the primary insurer; (2) make health insurance available to more retirees by extending Medicare coverage to early retirees of companies that do not now offer retiree health benefits; (3) substantially reduce companies' pay-as-you-go costs, accrued liabilities, and prefunding costs for retiree health benefits; and (4) spread the retiree health care burden among companies by helping those with older workforces and high retiree health costs become more competitive, both domestically and internationally, with companies with younger workforces. Lowering the age of Medicare eligibility would dra-

matically reduce companies' health costs for early retirees because Medicare would pay a substantial portion of these retirees' costs. Yet such a change in eligibility age would also entail a substantial expansion of Medicare program costs, which would be borne in part by all employers and their employees through higher taxes.

Women's Health Information: HHS Lacks an Overall Strategy (GAO/T-HRD-92-51, Aug. 5, 1992)

Although responsible for providing health information to the public, the Department of Health and Human Services (HHS) lacks an overall strategy for delivering such information to women. GAO focused on six conditions that are of particular concern to women who are middle age and older—heart disease, breast cancer, osteoporosis, menopause, hormone replacement therapy, and urinary incontinence—and discovered that HHS has no plans for ensuring that the most needed and useful information reaches the public. Instead, information campaigns are left to the discretion of HHS's Public Health Service agencies, which operate largely independently of each other. Even when information for the public is produced and distributed, it is not always easily accessible. In contacting local Public Health Service offices, GAO obtained requested information or a referral phone number only about half the time. Moreover, HHS does not routinely evaluate the usefulness of the information produced and has no way of knowing whether it is being targeted to the women who need it most.

HOUSING

Mortgage Credit Enhancements: Options for FHA in Meeting the Need for Affordable Multifamily Housing (GAO/T-RCED-92-52, Apr. 3, 1992)

Mortgage credit enhancements—financing arrangements to ensure loan repayments by builders of multifamily rental properties—are among a broad range of mechanisms that the Federal Housing Administration (FHA) can use to expand the supply of affordable housing for lower-income tenants. If such enhancements are employed, they must be cost effective in achieving the desired result. Yet ensuring cost effectiveness depends on having accurate data on the costs and risks involved, and information on the performance characteristics of affordable multifamily housing loans is currently nonexistent. GAO suggests that Fannie Mae, Freddie Mac, and FHA—because they now hold large portfolios of multifamily mortgages or insure such mortgages and are also experienced in maintaining relevant large data bases—would be good candidates for developing such information. Further, the bank regulatory agencies, the Federal Housing Finance Board, the Bureau of Economic Analysis, and various professional organizations representing mortgage originators could lend valuable insight in developing a national affordable housing data base.

Public Housing: Issues in Housing the Nonelderly Mentally Disabled With the Elderly (GAO/T-RCED-92-44, Mar. 27, 1992)

GAO testified that nonelderly mentally disabled people occupied about 9 percent of the public housing units for the elderly in 1990. Almost one-third of these households reportedly caused moderate or serious problems due to alcohol abuse or excessive noise and the presence of disruptive visitors. These situations result in problems for the public housing agency (PHA) management and in conflicts with elderly tenants. Under Federal antidiscrimination laws, people with mental disabilities may not be lawfully excluded from or segregated in public housing for the elderly under the conventional public housing program. Various proposals have been put forth to address this situation, ranging from offering several housing options to mentally disabled persons to requiring that the Department of Housing and Urban Development (HUD) provide more detailed guidance to PHAs on how to determine whether nonelderly mentally disabled applicants will make suitable tenants. As it weighs these proposals, the Congress will have to consider the effect of antidiscrimination laws, the expected behavior of nonelderly mentally disabled people in different housing settings, and the availability of funds for providing alternative forms of subsidized housing and mental health services.

Supportive Housing: HUD Is Not Assessing the Needs of Elderly Residents (GAO/T-PEMD-92-12, Aug. 12, 1992)

How well does the Department of Housing and Urban Development assess the need for (1) supportive services for elderly residents in section 202 housing and (2) modernization and retrofitting of section 202 buildings? HUD neither collects data nor has a methodology for assessing the needs of section 202 housing residents. HUD contends that supportive services in section 202 housing are the responsibility of the Department of Health and Human Services. Given that a section 202 build-

ing's physical structure and its service component are fundamentally linked to the concept of supportive housing, some coordination between the two agencies on this issue might have been expected. This does not appear to have been the case; a draft memorandum of understanding between HUD and HHS has been around for years but has never been signed. Information on resident frailty and the need for building modernization and retrofitting can be used to target projects most deserving of available funding. Information on resident frailty can also be used to determine the features that residents need in their buildings. Currently, HUD neither collects nor ensures that project sponsors collect data on these subjects. Although HUD periodically inspects the physical condition of 202 projects and rates building managers, limited staff and travel budgets mean that HUD cannot perform inspections annually. When inspections are done, no assessment is made of a facility's retrofitting requirements.

Income Security

Comments on the Social Security Notch Issue (GAO/T-HRD-92-46, July 23, 1992)

The Social Security "notch" refers to a perceived inequity in benefits for people born between 1917 and 1921, due to a change in benefit computation introduced in 1977 amendments to the Social Security Act. GAO testified that notch babies generally collect more benefits than most coming before or after them, and the perception that they receive less is based on a comparison with a group that got an unintended windfall from the system as a result of a flawed benefit formula. GAO believes that a "fix" is not warranted and that proposed legislation to address the notch issue should not be pursued.

Financial Condition of the Pension Benefit Guaranty Corporation (GAO/T-HRD-92-52, Aug. 11, 1992)

The Pension Benefit Guaranty Corporation's (PBGC) deficit has been spiraling upward in recent years and is expected to rise even further as underfunded pension plans insured by PBGC terminate in the future. PBGC's cash flow can handle current benefit payments, but this situation may not last. GAO urges serious discussion on ways to improve funding in underfunded plans to reduce the risk to PBGC from future terminations. Although the administration has put forth several proposals for reducing future claims against PBGC, none of them would reduce PBGC's existing deficit. GAO supports the goals of many of these proposals, but believes that more study should be given to how they may affect plan participants, plan sponsors, the adequacy of plan funding, and Federal revenues. Other ways of cutting PBGC's potential claims and current deficit should be examined, such as improving funding in flat benefit plans, making greater use of PBGC's existing termination authority, and restructuring PBGC premiums to better reflect potential risks. PBGC is also burdened by significant internal operations problems.

Improving the Financial Condition of the Pension Benefit Guaranty Corporation (GAO/T-HRD-92-60, Sept. 25, 1992)

The Pension Benefit Guaranty Corporation's huge deficit has ballooned significantly in recent years and is expected to grow even larger. Fueling this deficit are underfunded pension plans that continue to terminate. At present, PBGC has enough cash flow to pay its current benefit obligations, but this may not always be the case. Now is the time for serious deliberations on how to improve funding in underfunded plans to cut PBGC's risk from future terminations. Pending legislation to improve funding in underfunded plans could significantly reduce PBGC's deficit over the long run . Underfunded plans not only threaten PBGC, they also pose a risk to plan participants because PBGC does not guarantee all pension benefits and, therefore some participants may lose benefits upon plan termination. PBGC has been burdened not only by its current deficit and looming potential claims, but also by significant internal operations problems. GAO has never been able to give an opinion of PBGC's financial statements because of these serious internal control and systems weaknesses. These problems suggest that PBGC needs to put more emphasis on its operations.

Pension Plans: Benefits Lost When Plans Terminate (GAO/T-HRD-92-58, Sept. 24, 1992)

Some pension plan participants lose benefits and the ability to qualify for potential future benefits when plans terminate, especially if the plans are underfunded. Despite Federal insurance protection, participants in underfunded plans risk losing promised benefits. This testimony discusses the types of benefits participants lose and why.

Social Security Disability: Growing Funding and Administrative Problems (GAO/T-HRD-92-28, Apr. 27, 1992)

The Social Security fund that provides benefits to those who are too disabled to work is projected to run out of money by 1997 as the rate of successful claimants increases and movement off the rolls slows, partly because budget constraints have virtually eliminated screening for beneficiaries who no longer meet disability standards. The length of delays by State Disability Determination Services in processing applications for disability benefits is expected to reach 7 months in 1993. Appeals of disability determinations already take 7 months. This testimony highlights some of the underlying factors, such as rising disability application rates as a result of the recession, that have affected the trust fund situation. GAO also discusses problems with program administration.

Social Security: Racial Difference in Disability Decisions (GAO/T-HRD-92-41, Sept. 22, 1992)

In the Social Security Disability Insurance and Supplemental Security Income (SSI) programs, the percentage of black applicants allowed disability benefits is lower than the percentage of white applicants. GAO analyzed applicants for benefits under the two programs and found that except for young SSI applicants, 80 percent of the racial differences in allowance rates at the initial decision level could be explained by factors other than race. Blacks had lower allowance rates mainly because they applied more often with less severe impairments and they had demographic characteristics associated with lower allowance rates, regardless of race. In the appeals decisions of administrative law judges, however, the racial differences were both larger and harder to explain than at the initial decision level. Despite the lower allowance rate among blacks applying for benefits, the only subgroup in which blacks actually may be receiving benefits at lower rates than whites is severely disabled people aged 18 to 24. Otherwise, blacks received benefits at rates equal to or higher than those of whites. GAO recommends that the Social Security Administration (SSA) further investigate the reasons for the racial differences in the initial decisions for young SSI applicants, as well as for all administrative law judge decisions. GAO also suggests that SSA review the evaluation of cases involving impairments, such as mental problems and respiratory orders, that showed relatively large racial differences in allowance rates.

Women's Pensions: Recent Legislation Generally Improved Pension Entitlement and Increased Benefits (GAO/T-HRD-92-20, Mar. 26, 1992)

This testimony focuses on how recent changes to the private pension rules have improved pension entitlement and benefits for working women and widows. GAO discusses (1) the impact of the vesting and distribution provisions under the Tax Reform Act of 1986, (2) widow's receipt of survivor pension income and the act's impact on their access to benefits, (3) the role of the private pension system in improving the economic condition of poor widows, and (4) recent Internal Revenue Service efforts to improve the effectiveness of pension documents important to the wives of private pensioners.

Social Services

Administration on Aging: Autonomy Has Increased but Harmonization of Mission and Resources Is Still Needed (GAO/T-PEMD-92-9, June 11, 1992)

GAO discussed the Administration on Aging (AOA), focusing on how a reorganization of the Department of Health and Human Services affected AOA. GAO noted that (1) HHS added personnel to AOA so that AOA could perform administrative functions that another HHS office previously performed; (2) the reorganization solidified the congressionally mandated direct reporting relationship between the Commissioner of AOA and the Secretary of Health and Human Services; (3) AOA has made progress in improving its ability to carry out its mission at headquarters, but suffered administrative, personnel, and funding problems in its regional offices; (4) the AOA methodology for gathering program participation data is flawed, and AOA has not adequately addressed the problem; (5) State and local agencies lack the necessary resources to target groups of elderly persons for AOA services, as the Older Americans Act requires; (6) AOA has not yet identified all states with critical needs for technical assistance; and (7) AOA intends to meet requirements that it collect data on utilization rates for board and care homes and on the impact of its ombudsman program.

Board and Care Homes: Medication Mishandling Places Elderly at Risk (GAO/T-HRD-92-16, Mar. 13, 1992)

GAO discussed the misuse and mismanagement of residents' medication in board and care homes for the elderly, focusing on whether (1) board and care staff were knowledgeable about the proper handling of medication; (2) staff followed proper procedures for storing, supervising and assisting residents with taking medications; and (3) residents received appropriate medications. GAO noted that (1) staff received little medication training, and frequently violated medication handling requirements; (2) State inspection procedures may not identify medication violations; (3) board and care home staff do not always maintain adequate medication records; and (4) in the homes visited, resident records included sufficient medical information to indicate that medications were appropriately prescribed for 20 of the 35 residents in its sample. GAO also noted that (1) residents in homes that were in States that were more regulated were in less risk of medication errors than residents in States with less regulation; and (2) the Department of Health and Human Services should help States address medication handling issues and develop medication training programs.

Public/Private Elder Care Partnerships: Balancing Benefit and Risk (GAO/T-HRD-92-45, July 9, 1992)

GAO discussed the public benefit and risk when corporations buy elder care services from area agencies on aging for company employees that care for elderly persons. GAO noted that (1) private partnerships offer the benefit of the infusion of private funds into an oversubscribed system of public services and a risk of possible neglect of activities to achieve the public mission under the Older Americans Act; (2) in 1990, the Administration on Aging asked State agencies to develop policies that would encourage corporate elder care among area agencies on aging while preserving the public mission; (3) all States developed policies on corporate elder care, although eight policies are not final; (4) 45 States and the District of Columbia permit agencies to enter into corporate elder care contracts and most encourage agencies to pursue these arrangements, but the 5 remaining States have policies stating they will not enter into elder care contracts with corporations; (5) in 41 States and the District of Columbia, State elder care policies fall short of protecting the public-mission responsibilities of area agencies on aging; and (6) State policies often did not address the need to target services to individuals with the greatest economic or social need.

VETERANS-DOD

Health Care: Demonstration Project Concerning Future Structure of Veterans' Health Program (GAO/T-HRD-92-53, Aug. 11, 1992)

Under various health care reform proposals, including employer-mandated and universal health insurance, demand for Department of Veterans Affairs (VA) inpatient care could drop dramatically. The Congress, concerned about the resulting excess capacity at VA facilities, is considering legislation—H.R. 5263—that would authorize up to seven VA facilities with excess capacity to treat the Medicare-eligible dependents and survivors of military retirees. Medicare-eligible veterans now being denied care at facilities would also be able to participate in the demonstration project. The facilities would be allowed to obtain and retain reimbursements for covered services provided to program participants by Medicare. GAO agrees with the demonstration project's objective of testing the cost-effectiveness of such interagency sharing, but GAO believes that VA should proceed cautiously to ensure that the project's goals can be achieved.

Health Care: The Quality of Care Provided by Some VA Psychiatric Hospitals Is Inadequate (GAO/T-HRD-92-37, June 3, 1992)

None of the Department of Veterans Affairs' four psychiatric hospitals GAO visited is effectively collecting and using quality assurance data on a consistent basis to identify and resolve quality-of-care problems. As a result, counterproductive or ineffective psychiatric practices may go unnoticed and dangerous medical procedures may continue unchecked. The results of GAO's work are consistent with its findings at other VA hospitals. VA and non-VA hospital systems GAO visited—both psychiatric and acute medical/surgical—differ little in how they identify quality-of-care problems. The quality assurance mechanisms each uses to ensure that quality-of-care standards are met are similar because most use the Joint Commission on Accreditation of Healthcare Organizations as their primary external review organiza-

tion. Further, many of the problems found in VA hospitals have also been seen in non-VA hospitals.

Health Care: VA's Implementation of the Nurse Pay Act of 1990 (GAO/T-HRD-92-35, June 3, 1992)

The Department of Veterans Affairs employs more than 39,000 nurses and nurse anesthetists who are paid according to the results of local salary surveys. GAO testified that VA is basing its nurses' salaries, which amount to more than $2 billion annually, on data that are gathered through questionable methods and are inadequately verified. GAO recommends that VA report its administration of the locality pay system to the Office of Management and Budget as a material internal control weakness. VA should also promptly develop a plan for correcting the deficiencies and establish a timetable for completing the corrective actions.

VA Health Care: Efforts To Improve Pharmacies' Controls Over Addictive Drugs (GAO/T-HRD-92-38, June 10, 1992)

More than 200 of the Department of Veterans Affairs pharmacies routinely dispense large amounts of prescription drugs—narcotics, depressants, and stimulants—with a strong potential for abuse and addiction. Large quantities of these drugs have been stolen in recent years because of inadequate controls at VA pharmacies. Since GAO reported on this problem in June 1991, VA has greatly improved controls over bulk supplies of addictive drugs stored in its pharmacies. These controls should make it harder to steal drugs from bulk supplies undetected, but VA's new controls over addictive drugs in dispensing areas have been less effective. Progress has been slowed by pharmacy managers' varying interpretations of VA's new policies, as well as reluctance to spend money to improve drug security. VA is working hard to upgrade controls over these supplies, but it will be months before all pharmacies are adequately controlling how supplies are dispensed. VA's inclusion of its addictive drug controls as material weaknesses in the 1991 Federal Managers' Financial Integrity Act Report should help ensure that VA's actions will succeed and help eliminate weaknesses in those controls.

VA Health Care for Women: Despite Progress, Improvements Needed (GAO/T-HRD-92-42, June 19, 1992)

During the past decade, the Department of Veterans Affairs has made significant progress in ensuring that female veterans have the same access to health care as do male veterans. Problems remain, however. Physical examinations, including cancer screening for women veterans, remain sporadic. VA medical centers are not adequately monitoring their in-house mammography programs for adherence to quality standards. VA medical centers have inadequate procedures to help ensure that privacy limitations affecting women patients are identified and corrected during facility renovations. VA agrees with GAO's findings and has cited specific actions it plans to take to improve services for women veterans.

VA Health Care for Women: Despite Progress, Improvements Needed (GAO/T-HRD-92-33, July 2, 1992)

The Department of Veterans Affairs has made significant progress during the past decade toward ensuring that veterans of both sexes have equal access to health care. Three problems remain, however. First, physical examinations, including cancer screenings for women veterans, continue to be sporadic. Second, VA medical centers are not adequately monitoring the quality of their in-house mammography programs. Third, inadequate accommodations for female patients—such as a lack of private rooms or toilets—may go unnoticed during VA medical center renovations due to inadequate procedures. GAO recommends that VA medical centers correct problems in providing complete physical examinations by disseminating information on successful practices and implementing them systemwide. VA agrees with GAO's findings and has taken steps to improve services for women veterans.

VA Health Care: Inadequate Controls Over Scarce Medical Specialist Contracts (GAO/T-HRD-92-50, Aug. 5, 1992)

GAO discussed the status of the Department of Veterans Affairs' efforts to strengthen its management controls over contracts for medical specialists. GAO noted that (1) VA still lacks management controls to ensure that medical centers are avoiding contracting problems, (2) VA needs to provide better staffing guidelines for medical centers and utilize reviewers to develop and evaluate contract proposals, (3) few VA centers provide adequate support and data required for the use of contract specialists and contract review, and (4) VA fails to provide follow-up procedures to ensure that required contract modifications are completed.

OTHER

Potential Impact of Using Adjusted Census Counts for Federal Formula Programs (GAO/T-GGD-92-5, Nov. 13, 1991)

GAO discussed the potential impact of using adjusted census counts for Federal funding allocations. GAO noted that (1) 100 Federal programs providing grants at the State and local levels use population-related data to allocate funds; (2) because some programs allocated only a portion of their total grants through formulas that included population data elements, the amount of funding influenced by population data was less than the estimated $116 billion in obligations for fiscal year 1991; (3) 30 of the 100 programs used data elements in their formulas for which the decennial census was the only source of information; (4) the effect of using adjusted fiscal year 1990 census population data for Federal funding would be relatively small, since many factors affect the level of funding, including the type of population data used, whether nonpopulation data were used, and whether other formula provisions set minimum or maximum allocations; (5) simulated allocations for three Federal programs indicated that using adjusted data as the basis for allocations would redistribute less than half of a percent of total funding to States; (6) some individual States could incur estimated changes of over $1 million in their allocations, by using the adjusted data; and (7) any intercensal population estimates incorporating a correction for census net undercount will not be available before mid-1992 or early fiscal year 1993.

APPENDIX IV—ONGOING GAO WORK AS OF SEPTEMBER 30, 1992, RELATING TO ISSUES AFFECTING OLDER AMERICANS

At the end of fiscal year 1992, GAO had 128 ongoing assignments that affected older Americans. Of these, 60 were on health, 7 on housing, 20 on income security, 6 on social services, and 35 on veterans-DOD issues.

HEALTH

Access to and Quality of Care Provided to Health Pass Medicaid Beneficiaries
Alternatives for Improving the Distribution of Medicaid Funds
An Evaluation of Medicare Part B Claims Processing System
Are HCFA's Plans to Monitor Organizations With Deemed Status Adequate to Assure Medicare Requirements Are Met?
Canadian Drug Price Regulation
Case Management of Long-Term Care for the Elderly
Changes in Drug Prices
Chicago Medicaid HMOs
Conditions Affecting Utilization of Emergency Departments
Comparison of U.S./European Prescription Drug Prices
Costs and Services of End Stage Renal Disease Facilities
Effect of Long Hours on the Quality of Care Provided by Resident Physicians
Effect of Malpractice Costs on Medicare/Medicaid
Equity of and Access to Indian Health Service's Services
European Drug Price Regulation: Lessons for the U.S.
Evaluation of Long-Term Care Insurance Lapse Rates
Evaluation of the Effect of External Utilization Management Firms' Decisions on the Quality of Health Care
FDA's Regulation of Hospital Quality Disinfectants and Specific Actions Against Sporicidin International
Federal Efforts to Collect Immunization Data
Geographic Adjustment to Durable Medical Equipment Fee Schedules
Government Response to Tuberculosis Problem
Has HCFA Adequately Evaluated JCAHO's Ability to Assure That Home Health Care Agencies Are Meeting Medicare Requirements?
Has HCFA Justified Its Acquisition of a Single Medicare Claims Processing System and Adopted a Prudent Acquisition Strategy?
Health Care in Rochester, NY: Lessons for the Nation
Health Center Malpractice Costs
HCFA's Physician Geographic Cost Adjustment Analysis
Health Insurance Products Sold to the Elderly
How Is HCFA Determining That State Medicaid Management Information Systems Are Providing Reliable Data?
How Should the U.S. Reform Its Medical Malpractice System?
Impact of Medicare Secondary Payer Extension for End Stage Renal Disease

Implementation Issues Associated With Health Care Reform
Improving Medicare Hospital Cost Reporting Systems
International Medical Malpractice
International Systems of Financing Long-Term Care
Medicaid Managed Care
Medicaid Pill Mill Deterrence
Incentives and Disincentives for Physicians to Pursue Careers in Primary Care
Medicare Contractor Management Review
MedicareMammography Payments in Low Volume Settings
Medicare Postpayment Review Methodologies
Medicare Vulnerability Status Report
Patent Extension of Lodine
Physician Ownership of Diagnostic Facilities
Peer Review Organization Ambulatory Surgery Review
Professional Fees for Durable Medical Equipment Staff
Purchasing and Billing Practices for Outpatient Prescription Drugs Covered by Medicaid
Retiree Health Benefits
Review of Medicaid Transfer of Asset Policies
Review of the Medicaid Program's Eligibility Policies and Operations
Role of Medicaid in State Long-Term Care Programs
Rural Health Care Policy
State Regulation of Private Health Insurance
Study of the Blue Cross/Blue Shield System
Survey of Medicare's Flexibility Carriers
Survey of Organ Transplantation
Synthesis of GAO Drug Treatment Work
Tax Exempt Hospital Joint Ventures With Physicians
The District of Columbia's Medicaid Eligibility System
The Qualified Medicare Beneficiary Program
Use of Managed Care to Control Health Spending

HOUSING

Adequacy of HUD's Implementation of Fair Market Rents
Alternatives to Public Housing
An Evaluation of Supportive Service Housing Programs for the Elderly
Analysis of Options for Enhancing Mortgage Credit
Assessment of How Well Section 8 Vouchers Are Serving the Elderly
Assessment of Need for Additional Resources for Section 8 Rent Subsidies
Uses of McKinney Act Funding in Fiscal Year 1991

INCOME SECURITY

Action Needed to Improve the Management of SSA
Annuitants From Pension Plan Terminations
Are SSA's Actions on Beneficiaries' Requests for Services Timely?
Department of Labor's Enforcement of the Employee Retirement Income Security Act of 1974
Evaluation of the District of Columbia's Pension Plan Unfunded Liability
Financial Audit of the Pension Benefit Guaranty Corporation—Fiscal Year 1992
High Risk Area 4: Impact on PBGC of Proposed Pension Restoration Act
IRS Refund Information Could Permit SSA to Credit Some Currently Uncredited Earnings to the Correct Accounts
Labor and IRS Actions on ERISA Violations Reported by Pension Plans
Magnetic Wage Reporting Problems
Pension Benefit Guaranty Corporation Exposure to Underfunded Pension Plans
Reliability and Validity of SSA's Quality Assurance Mechanisms for the Disability Insurance Program
Review of IRS Controls for Taxation of Social Security Benefits
SSA's Disability Program—Claim Backlogs, Increased Processing Times, and Trust Fund Shortage
SSA Disability Trends in Decision Making
State and Local Government Pension Funding During Fiscal Stress
Survey of the Effects of Lump-Sum Retirement on Agencies
Tax Counseling for the Elderly Program
Tax Policy: Tax Treatment of Long-Term Care Insurance
What Are the Busy Signal Rates at Local SSA Field Offices?

SOCIAL SERVICES

An Evaluation of Administration on Aging's National Elder Care Campaign
Corporate Elder Care Policies
Government Elder Care Programs for Employees
Long Term Care Social Services Innovations
Older American's Act Formula Could be Distributed More Equitably
Public-Private Partnerships Under the Older Americans Acts

VA-DOD

Are Veterans' Services in American Samoa Adequate?
Assessment of Health Care Services Available to Veterans at VA Medical Centers
Assessment of VA's Income Verification Procedures
Assessment of Waiting Times for Veterans Using VA Medical Centers
Comparison of Benefits Provided to Disabled Veterans in the U.S. and Foreign Countries
Delays in Awarding VA Construction Contracts as of September 30, 1992
DOD Compliance with Congressionally Mandated Military Medical Personnel Staffing Levels
Does VA Have Adequate Plans to Provide Care to Veterans Affected by the Closure of the Martinez Medical Center?
Downsizing the Military: Assisting New Veterans
Effects of the Implementation of the Nurses Pay Act on Recruitment and Retention of Nurses
Evaluation of the Impact of GAO Recommendations on VA's Quality Assurance Program
Federal Expenditures for Veterans' Health Care
Health Care Services Contracting in the Military
Hiring of Minority-Owned Businesses to Construct Detroit Veterans Hospital
Management of VA: Human Resources Management Vital to Success of the Secretary's Strategic Management Process
Military Personnel Retiring on Disability Who Are Eligible for Normal Retirement
Quality of Care in VA's Salem, Virginia Medical Center
Recovery of VA Nursing Home Costs from Veterans' Estates
Review of DOD's Management of Mental Health
Review of DOD's Mental Health Demonstration Project in Virginia
Review of VA Management of Construction Programs
Review of VA Medical Centers' Management of Scarce Medical Specialist Contracts
Review of VA Site Selection for East Central Florida Medical Center
Review of VA's Policies and Procedures for Detecting and Locating Missing Patients
Review of Veteran's Federal Health Care Benefits
Secretarial-Level Oversight of VA Programs and Administrative Activities
Survey of Case Managed Home Care Services Under CHAMPUS
Survey of CHAMPUS Adoption of the Resource Based Relative Value Scale Payment Methodology for Physicians and Other Providers
Survey of Licensing Issues Relating to U.S. Graduates of Foreign Medical Schools
Survey of Psychiatric Hospital Alleged Fraud and Abuse
VA and Affiliated Schools Sharing of Medical Resources
VA Program From Veterans in the Philippines
VA Reimbursement of Medical Centers' Medical Care Cost Recovery Activities
VA's Procedures for Protecting Workers and Patients From Tuberculosis Exposure
What Happens to Veterans When VA Denies Outpatient Care?

APPENDIX V—RELATED GAO PUBLICATIONS AFFECTING OLDER AMERICANS

During fiscal year 1992, GAO issued four publications relating to older Americans.

Aging Issues: Related GAO Reports and Activities in Fiscal Year 1991 (GAO/HRD-92-57, Dec. 17, 1991).

Today, about 32 million Americans are age 65 or older. By the year 2000, that number will swell to more than 52 million, and almost 7 million will be age 85 or older. Although most of the Nation's elderly are healthy and independent, a growing number need help to maintain their independence and avoid institutionalization. This changing demography will continue to challenge both Government and the private sector in the 1990s and beyond. This report is a compilation of GAO's

fiscal year 1991 reports and testimony as well as ongoing work on older Americans. Topics covered include health, housing, income security, social services, and veterans affairs.

Health Reports: June 1990 through June 1992 (GAO/HRD-92-126, June 1992)

This publication is a list of titles of GAO reports and testimony issued during the last 2 years on health topics, ranging from drug abuse to health insurance to long-term care for the elderly. Summaries of some recently issued GAO reports and testimony are included along with an order form to request documents.

Housing and Community Development Products: 1990-91 (GAO/RCED-92-111, Mar. 1992)

This publication summarizes GAO reports and testimonies on housing and community development issues, such as prevention of homelessness and revitalization of blighted urban areas. Grouped under seven categories—home ownership assistance, rental and public housing, homelessness, community development, small and minority business, disaster assistance, and related topics—these abstracts profile GAO's work in this area during 1991. Order forms are provided to obtain specific reports or testimony.

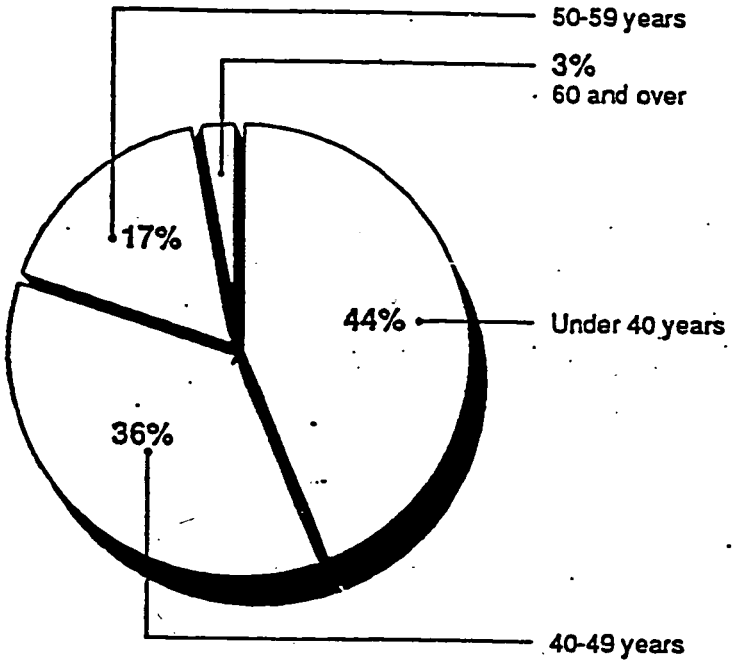
Income Security: Reports Issued From FY 1988 Through June 1992 (GAO/HRD-92-122, July 1992)

The $500 billion spent each year on income security programs, such as Social Security and welfare, account for more than 60 percent of the domestic Federal budget. This document lists all GAO reports issued between fiscal year 1988 and June 1992 on income security issues. Reports issued in 1992 are accompanied by summaries, while earlier reports are listed by title according to various subject areas, from "Financing Retirement Programs" to "Breaking the Poverty Cycle."

APPENDIX VI—GAO ACTIVITIES REGARDING OLDER WORKERS

GAO appointed 438 persons to permanent and temporary positions during fiscal year 1992, of whom 62 (14 percent) were age 40 and older. Of GAO's total workforce of 5,549 on September 30, 1992, 56 percent were age 40 and older. Figure 1 displays GAO's workforce by four age groups.

Figure 1: GAO Personnel, by Age (Sept. 30, 1992)



GAO employment policies prohibit discrimination based on age. GAO's Civil Rights Office continues to (1) provide information and advice and (2) process complaints involving allegations of age discrimination.

GAO continues to provide individual counseling and preretirement seminars to employees nearing retirement. The counseling and seminars are intended to assist employees in:

calculating retirement income available through Civil Service and Social Security systems and understanding options involving age, grade, and years of service;

understanding health insurance and survivor benefit plans;

acquiring information helpful in planning a realistic budget based on income, tax obligations, and benefits, and making decisions concerning legal matters;

gaining insight and perspectives concerning adjustments to retirement;

increasing awareness of community resources that deal with preretirement planning, second career opportunities, and financial planning; and

increasing awareness of lifestyle options available during the transition from work to retirement.

APPENDIX VII—MAJOR CONTRIBUTORS TO THIS REPORT

Cynthia A. Bascetta, Assistant Director, (202) 512-7220
James C. Musselwhite, Advisor
Benjamin C. Ross, Evaluator-in-Charge

ITEM 22. LEGAL SERVICES CORPORATION

DECEMBER 16, 1992.

DEAR SENATOR PRYOR: Thank you for your letter of November 3, 1992. As always, the Legal Services Corporation (LSC) is pleased to contribute to the Senate Special Committee on Aging's annual report, *Developments in Aging*. Enclosed is information pertaining to activities undertaken by LSC-funded programs on behalf of older Americans.

LSC, through its regularly-funded grantees, and some law school civil clinical grantees, provides a variety of legal services to the elderly poor. The enclosed information describes the services provided by each of these grantees.

I hope that this information is useful in the Committee's 1993 final report. We look forward to receiving a copy of the report.

If you have any questions, or need any further information, please contact Kenneth Boehm, Assistant to the President, at (202) 336-8891.

Very truly yours,

JOHN P. O'HARA,
President.

Enclosures.

LEGAL SERVICES CORPORATION ADDRESSING OLDER AMERICANS' LEGAL NEEDS

The Legal Services Corporation (LSC) was created by Congress in 1974, to provide legal assistance to indigent persons in civil matters. LSC annually awards grants to 321 legal services programs in each of the 50 states, the District of Columbia, the Virgin Islands, Puerto Rico, the Federated States of Micronesia, Republic of the Marshall Islands, Northern Mariana Islands, Republic of Palau, and Guam. These programs employ advocates (attorneys and paralegals) to provide legal assistance to the poor. Each legal services program follows certain guidelines as to the types of cases it accepts and the financial eligibility of possible clients.

For fiscal year 1992, Congress appropriated $350 million to LSC. The offices of the regularly-funded LSC grantees are staffed by over 6,400 advocates. Based on preliminary figures, during calendar year 1991, these legal services advocates closed approximately 1.5 million cases; approximately 11 percent of these cases involved service provision to clients over age 60.

While LSC remains the source of the greatest percentage of funding for most of these legal services programs, other public and private funding sources contributed significant resources. These additional income sources provided over $200 million to LSC grantees during 1991. Of this amount, over $12 million was provided by the Federal Government, through the Older Americans Act, for services to senior citizens. Funding from other public and private sources continues to increase each year, with Interest on Lawyers' Trust Accounts (IOLTA) funding leading the way in growth, providing over $70 million to these legal services programs. IOLTA funding, however, is not specifically earmarked for services to the elderly.

Three of LSC's regular grantees, the National Senior Citizens Law Center, Legal Counsel for the Elderly, and Legal Services for New York City, through its State support provider, Legal Services for the Elderly, focus on legal assistance for older Americans. In addition, some of the law school clinics awarded one-time grants, through the annual Law School Civil Clinical Program grant competition, concentrate on legal services to older Americans.

National Senior Citizens Law Center

Main Office: 1052 West 6th Street-Suite 700, Los Angeles, California 90017 (213) 482-3550.

Branch Office: 1815 H Street, Northwest-Suite 700, Washington, D.C. 20006 (202) 887-5280.

The National Senior Citizens Law Center (NSCLC), a national support center, was awarded a $658,919 LSC grant in fiscal year 1992. Under the terms of its grant, the NSCLC provides a variety of services to LSC-funded field programs, including legislative and administrative representation on behalf of the elderly poor. The Center also provides training for attorneys and paralegals, on such topics as age discrimination, Medicaid, Medicare, long-term disability, the Older Americans Act, pensions, Social Security/SSI, and disability. In addition to producing and distributing the *Washington Weekly* and the *Nursing Home Law Letter,* the Center processed approximately 1,824 requests for assistance regarding elderly issues in calendar year 1991. The Center's Executive Director, Burton D. Fretz, can be contacted for further information at the D.C. office.

Legal Counsel for the Elderly

601 E Street, Northwest, Building "A", 4th Floor, Washington, D.C. 20049 (202) 434-2120.

Legal Counsel for the Elderly (LCE) was awarded a $119,533 LSC supplemental field grant in fiscal year 1992. During calendar year 1991, LCE processed over 339 requests for assistance from elderly clients, in such general areas as public benefits protection, protective services, consumer and probate. In addition, LCE, in conjunc-

tion with the American Association for Retired Persons (AARP), provides specific outreach to the homebound and the Hispanic communities of Washington, D.C. The Program's Executive Director, Wayne Moore, can be contacted for further information.

Legal Services for New York City

Main Office: 350 Broadway, Sixth Floor, New York, New York 10013-9990 (212) 431-7200.

Branch Office: Legal Services for the Elderly—130 West 42nd Street, 17th Floor New York, New York 10036-7803 (212) 391-0120.

For fiscal year 1992, Legal Services for New York City (LSNYC) was awarded a $13,753,672 basic field grant and a $127,081 state support grant. A portion of the states support grant was given to an LSNYC branch office, Legal Services for the Elderly (LSE), which provides legal assistance exclusively to the elderly on such issues as pensions, age discrimination, Social Security and SSI.

In calendar year 1991, LSE processed approximately 320 requests for legal assistance to the elderly. LSE's Director, Jonathan Weiss, can be contacted for further information.

LAW SCHOOL CIVIL CLINICAL PROGRAM

LSC also provides funding for law school clinics. Because such grants are made on an academic year basis, the information below describes activities for two separate grant cycles—1991-92 and 1992-93

For the academic year 1991-92, LSC awarded grants to a total of 20 law school clinics, 4 of which concentrated on elderly issues.

University of Wisconsin School of Law (UWSL)

121 South Pinckney Street, Madison, Wisconsin 53703 (608) 251-4008.

The University of Wisconsin received $57,000 to provide direct legal assistance to low-income, elderly individuals on housing issues, including government-funded housing, group homes, and nursing homes. During the 12-month grant period, the clinic closed 200 cases. UWSL's Clinic Director, Louise G. Trubek, can be contacted for further information.

Southern Illinois University School of Law (SIUSL)

104 Lesar Law Building, Carbondale, Illinois 62901 (618) 536-4423.

Southern Illinois received $68,799 to continue its Legal Clinic's provision of legal services to low-income elderly persons in 13 southern counties of Illinois, on such issues as drafting wills, durable power of attorney, living wills, elderly abuse, and financial exploitation of the elderly. During the 12-month grant period, the clinic closed 742 cases. SIUSL's Clinic Director, Mary Rudasill, can be contacted for further information.

Yeshiva University/Benjamin N. Cardozo School of Law (BNCSL)

55 Fifth Avenue, New York, New York 10003 (212) 790-0240.

Yeshiva University received $59,524 to provide legal assistance to low-income elderly and disabled individuals with problems in receiving government benefits, particularly health benefits, under Medicare and Medicaid. During the 12-month grant period, the clinic closed 307 cases. BNCSL's Clinic Director, Toby Golick, can be contacted for further information.

University of Indiana/Indianapolis School of Law (UISL)

735 West New York Street, Indianapolis, Indiana 46202-5194 (317) 274-1911.

The University of Indiana/Indianapolis received $52,960 to continue the provision of legal assistance to low-income, ill, and elderly individuals who are HIV-infected or who suffer from other long-term illnesses, such as AIDS and Alzheimer's disease. During the 12-month grant period, the clinic closed 242 cases. UISL's Clinic Director, William E. Marsh, can be contacted for further information.

For the academic year 1992-93, LSC awarded $1,228,850 to a total of 22 law school clinics. While each of these schools will assist elderly clients on an as needed basis, the following two law schools concentrate specifically on elderly issues.

Yeshiva University, Benjamin N. Cardozo School of Law (BNCSL)

55 Fifth Avenue, New York, New York 10003 (212) 790-0240.

Yeshiva University received $33,072 to continue to provide legal assistance to low-income elderly and disabled individuals with problems in receiving government benefits, particularly health benefits, under Medicare and Medicaid. BNCSL's Clinic Director, Toby Golick, can be contacted for further information.

University of Wisconsin School of Law (UWSL)

121 South Pinckney Street, Madison, Wisconsin 53703 (608) 251-4008.

The University of Wisconsin received $40,000 to provide direct legal assistance to low-income, elderly individuals on housing issues, including government-funded housing, group homes, and nursing homes. UWSL's Clinic Director, Louise G. Trubek, can be contacted for further information.

ITEM 23. NATIONAL ENDOWMENT FOR THE ARTS

DEAR MR. CHAIRMAN: I am pleased to report to you on the Fiscal Year 1992 activities of the National Endowment for the Arts involving older Americans.

Through technical assistance and funding, the Arts Endowment seeks to ensure that older Americans have the opportunity to enjoy the best of our Nation's art and the excellent works of older artists are supported.

A new funding activity during this reporting period was the first national conference on designing for the life span, Universal Design: Access to Daily Living, which took place in New York City on May 14-15, 1992. Over 400 corporate executives, designers, educators, city planners, and accessibility experts attended the meeting, which was convened by the Pratt Center for Advanced Design Research, the Cooper-Hewitt Museum, and Columbia University. Attached is a report, featured in the November 1992 issue of Metropolis: the Urban Magazine of Architecture and Design, that presents an overview of the meeting.

This year marked the publication and distribution of the third update and sixth reprint of our enclosed The Arts and 504 handbook.[1] This one-of-a-kind publication provides detailed information on the best ways to make the arts available to older and disabled individuals. Updated sections in the handbook include those on the 1990 Americans with Disabilities Act and new technologies that are enhancing accessibility for people with vision-impairments.

Also, we are producing the Accessible Museum [2] with the Institute of Museum Services (IMS) and the American Association of Museums (AAM) to help museum professionals make their collections fully accessible to older and disabled people. This unique book includes 19 profiles of exemplary programs in a variety of museums throughout the country and a selected bibliography of resource materials. The Arts Endowment and IMS will distribute 2,000 free copies to grantees and the book is being marketed by the AAM. I will send you a copy when it is printed in early January.

The report that follows provides a description of our efforts to support increased access to the arts for older Americans. I am grateful for the opportunity to present the Special Committee on Aging with this overview of the Arts Endowment's work in progress for older citizens.

Sincerely,

ANNE-IMELDA RADICE,
Acting Chairman.

Enclosures.

SUMMARY OF ACTIVITIES RELATING TO OLDER AMERICANS—FISCAL YEAR 1992

INTRODUCTION

The mission of the National Endowment for the Arts is to "foster the excellence, diversity, and vitality of the arts in the United States" and "to help broaden the availability and appreciation of such excellence, diversity, and vitality."

The Arts Endowment continues to be actively engaged in an effort to make the arts more accessible to all Americans, in the firm belief that exposure to art contributes to the quality of life for all persons, regardless of age.

Through the awarding of grants and fellowships to individuals and organizations, the Arts Endowment works to assure continued involvement of older adults as artists, students, teachers, volunteers, audience members, and patrons. Beyond this support, the Endowment makes significant efforts to help eliminate barriers that may impede the full participation of older adults in the arts. Many of these projects are initiated by the Endowment's Office for Special Constituencies.

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[1] Held in Committee files; purchasing information is on p. 402.
[2] Held in Committee files.

Office for Special Constituencies

Since 1976, the Office for Special Constituencies has served as the technical assistance arm of the Arts Endowment to assist accessible programming for people who are older, disabled, or living in institutions. Our focus is twofold: inclusion—opening up existing programs; and outreach—taking the arts to people who would not otherwise have these opportunities. The Office's activities include:

Providing technical assistance to individuals and arts organizations to help them develop accessible art programs.

Initiating collaborative projects with other federal agencies to educate administrators and professionals serving older and disabled people about the benefits of arts programming for their constituents.

Advocating increased attention concerning the needs of special constituencies through Endowment Programs, and through state, regional, and national meetings.

Advising Endowment staff and grantees regarding program accessibility and compliance with Federal regulations.

Developing model projects with Endowment Programs that demonstrate innovative ways to make the arts available to special constituencies.

UNIVERSAL DESIGN LEADERSHIP INITIATIVE

Universal design accommodates people of all ages, sizes, and abilities, and addresses the life span of a human being beyond the mythical average person. This agency continues to develop its Universal Design Leadership Initiative to better serve and educate the field on this important concept.

The Arts Endowment supported the first national conference on universal design, which was convened on May 14-15, 1992 in New York City. Over 400 city planners, corporate executives, accessibility experts, developers, educators, and designers attended Universal Design: Access to Daily Living, which was sponsored by the Pratt Center for Advanced Design Research, the Cooper-Hewitt Museum, and Columbia University. The conference focused on architecture, industrial and product design, transportation, and urban planning. It featured in-depth product displays (e.g., bathtubs, tableware, and car interiors) by companies that use universal design criteria. Presenters included Ralph Caplan, design writer, critic, and author of By Design; Patricia Moore, industrial designer and gerontologist; and violin virtuoso Itzhak Perlman, who said as part of his opening remarks.

> We have come a long way, but we have a long, long way to go . . . Twenty-five years from now I hope we will look back at the Americans With Disabilities Act as a landmark piece of legislation and not just a paper tiger. As anyone who has studied the civil rights movement knows, getting a law is one thing, getting it enforced is a different thing altogether . . . A good place to start would be a change in attitude among designers and planners who, for the most part, consider accessibility to be a burden. By thinking of ramps and wide doors as an afterthought, they condemn their design from the outset. Accessibility should be a treated as a fundamental part of the design process. I envision a partnership between disabled people and the designers. Each group must see the other not in an adversarial fashion, but as a partner in achieving the ultimate goal of a barrier-free existence in the public and private spheres.

Arts Service Project With the National Assembly of State Arts Agencies

As a result of recommendations from participants in the Endowment's 1990 Mid-Atlantic regional conference, the Office for Special Constituencies developed a cooperative agreement with the National Assembly of State Arts Agencies (NASAA) to initiate a national effort that will significantly advance the Endowment's access work with arts service groups and other grantees. The project established a 17-member task force composed of staff and board members from state and regional arts organizations and three accessibility consultants to:

Develop and produce an access manual for arts service organizations and other grantees on specific ways to open existing programs and activities to older and disabled people. The document will include a wide variety of resource materials (e.g., access checklists for meetings; information on national and state resource organizations that represent older and disabled people; an updated self-evaluation booklet; job description for a 504 coordinator; staff and board training guide; and a long-range planning guide).

Determine additional ways NASAA and the Endowment might assist arts organizations with their access work.

The first meeting of the task force took place on July 17–18, 1992 in Washington, DC, where members determined access needs, brainstormed on the manual's content and format, and discussed additional ways to assist arts groups. NASAA hopes to publish the manual in November 1993 and will disseminate free copies to 5,000 arts groups throughout the country. Further, NASAA will market another 1,000 copies at minimum cost, and any profits will be used to reprint the publication. In addition to Endowment support, the Coca-Cola Foundation in Atlanta contributed $20,000 to defray printing costs of the manual.

How-To Publications

This year marks the publication of two significant how-to books that we produced to encourage and assist grantees in opening up their programs and activities to older and disabled citizens.

The third update of The Arts and 504 handbook provides detailed information on the best ways to make the literary, visual, performing, and design arts available to older and disabled persons. New information includes a section on the 1990 Americans with Disabilities Act. The Arts Endowment distributed 7,000 free copies to grantees through the state arts agencies, and the Government Printing Office continues to market the book.

The Accessible Museum tells the stories of how 19 museums are making their facilities and programs available to older and disabled visitors, volunteers, and staff. Its purpose is to encourage and assist other museums in developing similar efforts. The book is the result of a joint effort between the Arts Endowment, the Institute of Museum Services, and the American Association of Museums. In addition to 2,000 free copies that are being distributed to grantees, the AAM will market this unique publication.

Working Group on Older and Disabled Americans

Last year, the Working Group on Older and Disabled Americans was established to help develop a more integrated approach throughout the Arts Endowment on issues involving older and disabled individuals. The Working Group is chaired by the Acting Chairman and coordinated by the head of the Special Constituencies Office. It includes 22 Endowment staff, which makes it the agency's largest working group.

Most recently, the Working Group has:

Developed preliminary plans for a publication that would feature model arts programs involving older Americans that are supported by the Arts Endowment. Its primary purpose would be to: (1) increase older Americans' participation in the arts by demonstrating how the arts enhance the quality of life; (2) make administrators in the arts and aging fields more aware of the value of including older adults in the visual, performing, literary and media arts; and (3) demonstrate how these creative experiences can be an integral part of the services available to people in their later years, whether as artists, audiences, teachers, students, volunteers, or patrons. Emphasis would be placed on cultural diversity, how the arts serve as a catalyst in bringing together people of all ages, and recognition of older artists whose work has enriched our culture. Accessibility would be highlighted in making the arts available to older people with impairments, as well as those living in rural and inner city areas of the country. The Acting Chairman has met with key staff at the White House Conference on Aging, the American Association of Retired Persons, and the Leadership Council on Aging to solicit support for the publication, which we plan to produce next year.

Worked in partnership with the National Endowment for the Humanities, the Institute of Museum Services, and the Advisory Council for Historic Preservation to convene seminars for staff on the 1990 Americans with Disabilities Act. The seminars, which took place on December 11, 1991, focused on program accessibility and legal requirements for grantees, with special attention to media, exhibitions, historic properties, and structural modifications. Over 400 staff attended the meetings, which were opened by the heads of the four agencies. Other presenters included Dianne Pilgrim, Executive Director of the Cooper-Hewitt Museum in New York City and Jane Norman, Professor at Gallaudet University in Washington, DC. this effort substantially heightened the awareness of participants concerning the needs of older and disabled Americans to gain increased access to the arts.

Arts Endowment Funding

It is difficult to estimate the number of Endowment supported programs that serve older Americans since people of all ages benefit from Endowment grants. However, many grants support arts activities that are specifically organized to include older people.

For example, the Birmingham Museum in Birmingham, AL developed a comprehensive program of museum education services for visually-impaired visitors, which includes many older adults. The project focused on solving existing problems that prevent visually-impaired individuals from fully enjoying the art museum beyond the standard tactile tour. Working in conjunction with aging and accessibility experts, the Birmingham Museum developed a five-part program that enables everyone to experience and enjoy the collection.

The program's five components include: (1) development of tactile reproductions of paintings from the collection; (2) production of special descriptive-language audio tours; (3) use of period music to complement the themes expressed in the tours; (4) awareness training for volunteers concerning interaction with visually-impaired people; and (5) use of projection enhancement equipment as part of the art appreciation program.

While this project was developed with visually impaired visitors in mind, museum staff find that the use of music in the galleries, the taped tour, volunteer training, and even the projection equipment enhances the museum experience for everyone.

Another excellent example is Elders Share the Arts, Inc. in Brooklyn, NY, which selected a group of three writers from various ethnic backgrounds, including Latino and Chinese, to participate in a literary program with approximately 500 older adults residing in East Harlem and Chinatown in Manhattan, and at Brighton Beach in Brooklyn. The writers first conducted readings and discussions of their works at local senior centers. In subsequent workshops, the older students formulated their own life narratives through writing and recordings. The writers served as a mirror, reflecting the transmission of cultural heritage and inspiring exchanges between writers and students. Though the 25 writing workships, the older adults were able to develop, as well as better understand, the richness of their own heritages.

Other examples of Arts Endowment supported efforts that benefit older adults are listed by arts discipline.

DESIGN ARTS

Disability Rights Education & Defense Fund, Inc. in Berkeley, CA produced "Main Street: The Readily Achievable Project," a package of two documentary films that show small businesses on "main street" being made more accessible to older adults and people with disabilities. Its purpose is to encourage small businesses across the country to comply voluntarily with the 1990 Americans with Disabilities Act. The before and after format of the films shows the business owner working with accessibility experts throughout the design, construction, and modification process. By showing good design practice, this film helps small businesses understand and meet their obligations.

Joseph A. Koncelik of Powell, OH is working on a design and prototype fabrication project that focuses on the development and evaluation of a new form of "geriatric chair" for older people in institutional settings. The chair will be equipped with a suspension system for long duration seating comfort, trim contouring for seat stability, and a tilting seat structure for ease in standing up.

Pratt Institute/Pratt Center for Design Excellence in Brooklyn, NY convened a multidisciplinary conference on designing for the life span entitled Universal Design: Access To Daily Living. The conference was a forum for the exchange of current information on design issues that affect younger, older, and impaired people. One of the five sessions that made up the program focused exclusively on aging. It included panel discussions and lectures by designers, architects, rehabilitation professionals, as well as corporate and government leaders.

EXPANSION ARTS

Catamount Film and Arts Company/GRACE in St. Johnsbury, VT markets, promotes, and documents works created primarily by older and disabled artists living in rural Vermont. The development of this work is accomplished through weekly, professionally directed workshops in nursing homes and community centers throughout the region.

Center on Deafness in Des Plaines, IL presented a series of performances that made theater more accessible to deaf and hearing-impaired audiences. The Center is

dedicated to enhancing individual growth within the hearing-impaired community through services for educational, vocational, and creative development.

Fairmount Theater of the Deaf in Cleveland, OH tours its performances, which are accessible to both deaf and hearing-impaired people. In many locations the company provides the only accessible theater experience for hearing-impaired people.

Lola Montes Foundation for Dances of Spain and the Americas in Los Angeles, CA presented a concert repertory series called California Heritage. The series was specifically aimed at older, disabled, and younger audiences, and provided at minimal or no cost to audience members.

Stagebridge in Oakland, CA makes its theater accessible to older people, creates professionally directed plays to bridge generations, and helps stimulate positive attitudes toward aging through its productions.

FOLK ARTS

Compania de Teatro de Albuquerque presented a series of concerts featuring traditional New Mexican-Hispanic music by Los Reyes de Albuquerque for older people at various meal sites, nursing homes, and day care centers in New Mexico.

National Heritage Fellowships were awarded to 10 older folk artists whose exhibit authenticity, excellence, and significance within a particular tradition:

Francisco Aguabella, Afro-Cuban drummer, from Manhattan Beach, California

Walker Calhoun, Cherokee musician/dancer/teacher, from Cherokee, North Carolina

Clyde Davenport, Appalachian fiddler, from Monticello, Kentucky

Belle Deacon, Athabascan basket market from Grayling, Alaska

Nora Ezell, African-American quilter, from Eutaw, Alabama

Fatima Kuinova, Bukharan Jewish singer, from Rego Park, New York

John Naka, Bonsai sculptor, from Whittier, California

Ng Sheung-Chi, Chinese Toissan muk'yu folk singer, from New York, New York

Othar Turner, African-American fife player, from Senatobia, Mississippi

T. Viswanathan, South Indian flute master, from Middletown, Connecticut

LITERATURE

Elders Share the Arts, Inc. in Brooklyn, NY presented a literary project for older adults in senior centers. Writers conducted readings and discussions of their works and held workshops for the older adults.

Southwest Texas State University in San Marcos sponsored three writers-in-residence who conducted public readings and workshops at a senior center, the University campus, the public library, and a correctional facility.

United Black Artists, U.S.A., Inc. in Detroit, MI provided six writers-in-residence who completed works-in-progress and conducted public readings and workshops. The writers performed readings for older people at the Jewish Home for the Aged and for younger people at a correctional institution.

University of Tennessee in Knoxville sponsored five residencies targeting diverse audiences, including older people and high school students. One of their writers-in-residence, William Stafford, is featured in the recent video "Writing in the Upward Years," which profiles poets over seventy years old. Prior to Mr. Stafford's residency, the University showed the video to older adults in senior centers and retirement communities throughout Knoxville to increase participation in the program.

MUSEUM

Birmingham Museum in Birmingham, AL developed a comprehensive audience-development project that targets blind or visually-impaired visitors. This highly successful effort involved tactile reproductions of paintings and awareness training for docents and volunteers.

MUSIC

Ann Arbor Symphony Orchestra, Inc. in Ann Arbor, MI has a music ensemble that visits senior centers, hospitals, and schools as part of its outreach program.

Berkeley Symphony Orchestra in Berkeley, CA provides free or discounted tickets to older adults on low or fixed incomes.

Christopher V. Costanza in Virginia Beach, VA provides residencies and solo recitals in retirement communities, hospitals, schools, churches, and recreation centers.

Cleveland Orchestra's Musical Arts Association in Cleveland, OH presents a morning series at reduced prices as part of its audience development program for older people.

Dallas Symphony Association, Inc. in Dallas, TX presents concerts for older, younger, disabled, and culturally diverse audiences.

Earshot Jazz Society of Seattle in Seattle, WA provides music residencies and a special concert series in senior centers, hospitals, and inner-city settings.

Evansville Philharmonic Orchestra in Evansville, IL presents ensemble performances in area nursing homes, hospitals, and churches.

Flint Institute of Music in Flint, MI provides Sunday matinees with commentary by the conductor that target older adults and families.

Fort Wayne Philharmonic Orchestra, Inc. in Fort Wayne, IN performs chamber orchestra and ensemble concerts in senior centers, schools, and parks.

Grand Rapids Symphony Society in Grand Rapids, MI has an outreach program for people who are older, disabled, or living in health care institutions.

Independent Composers Association for Meet the Composer/California in Los Angeles, CA supports composers who produce diverse genres of music in various settings, including senior centers.

International Art of Jazz, Inc. in Stony Brook, NY produces special events specifically for older adults.

Island Philharmonic Society, Inc. in Melville, NY has a free Open Rehearsal Program for older and disabled persons.

Lincoln Symphony Orchestra Association in Lincoln, NE provides subsidized tickets for its subscription series and transportation to the concert hall for older people on low or middle incomes.

Louisville Orchestra, Inc. in Louisville, KY sponsors the Cumberland Coffee Concerts, a series of concerts offered during the day, primarily for older adults.

Master Chorale of Orange County in Costa Mesa, CA provides discounted tickets to older adults and other individuals on low incomes.

Memphis Orchestral Society, Inc. in Memphis, TN performs in nursing homes, senior centers, libraries, and hospitals.

Pittsburgh Chamber Music Society, Inc. in Pittsburgh, PA provides transportation to its performances for older adults in retirement communities in Western Pennsylvania.

Santa Rosa Symphony Association in Santa Rosa, CA has a Music for Seniors program that provides eight free concerts each year.

Stamford Symphony Orchestra, Inc. in Stamford, CT issues discounted and free tickets to older adults and students.

Theatre Development Fund, Inc. in New York, NY makes discounted tickets available to older adults and other groups underrepresented in the arts-going public.

Tucson Symphony Society in Tucson, AZ performs each year in the retirement community of Green Valley for older adults who are not able to attend the Tucson concerts.

Xavier University of Louisiana in New Orleans, LA has a jazz clinic and concert series with activities especially targeted toward older persons, students, and Gert Town, a neighboring low-income community.

American Jazz Master Fellowships were awarded to three older adults in recognition of their outstanding lifetime accomplishments:

John Carl ("Jon") Hendricks, *Singer/Lyricist/Drummer, New York, NY*
Milton ("The Judge") John Hinton, *Bassist, St. Albans, NY*
Joseph ("Joe") Williams, *Singer, Las Vegas, NV*

OPERA-MUSICAL THEATER

Theatre Development Fund, Inc. in New York, NY provides technical assistance on accessibility to performing arts groups, and makes discount tickets available to older adults and others. The tickets are for a variety of theatrical productions and available at no cost or various rates of subsidy.

PRESENTING AND COMMISSIONING

Hospital Audiences in New York, New York convened a conference in April 1992 that focused on access awareness, the 1990 Americans with Disabilities Act, and ways to mainstream employment in the arts for older adults and people with disabilities. It featured demonstrations of adaptive equipment, including infra-red listening devices and audio description equipment. A wide variety of presenters were drawn from Connecticut, New Jersey, and New York.

THEATER

Deaf West Theatre Company, Inc. in Los Angeles, CA identified and trained American Sign Language interpreters on special techniques for interpreting theater.

Fairmount Theatre of the Deaf [FTD] in Cleveland, OH presents its performances simultaneously in both spoken English and American Sign Language. Further, it conducts educational programs and tours its productions throughout the country.

STATE AND REGIONAL

The Arkansas Arts Council in Little Rock developed a rural arts program involving older adults and youth in Arkansas' delta region. Collaborative efforts between the Delta Cultural Center and area agencies on aging included a survey of older, traditional artists to establish a cultural heritage resource bank, and development of a weekly workshop and arts exchange program for older adults.

The Tennessee Arts Commission in Nashville has an Arts Advancement and Expansion category that provides support to organizations serving older adults, disabled children, and youths.

The National Assembly of State Arts Agencies in Washington, DC is working with the Office for Special Constituencies to publish an access manual that will assist arts service groups and other grantees in making their existing programs and activities more available to older and disabled people.

ACCESS TO THE ARTS HANDBOOK AVAILABLE

WASHINGTON, DC.—A National Endowment for the Arts guide to making arts programs accessible to people with disabilities is available from the Government Printing Office.

The 1992 revised edition of The Arts and 504 Handbook is designed to assist arts organizations in advancing access to the arts for people with various disabilities. It details how to include the needs of disabled people into programming efforts. In addition, it provides information on the Arts Endowment's 504 Regulations, which applies to federally funded organizations, and the 1990 Americans with Disabilities Act (ADA), which extends accessibility provisions to the private sector.

The well illustrated 105-page publication describes approaches to making arts programs accessible through audience development and staff training. It also discusses communication with people who have hearing, sight, or learning impairments disabilities. Other chapters look at specific arts disciplines—the visual arts, performing arts, literary, media, and design arts.

Copies of The Arts and 504 Handbook are available from the Government Printing Office (GPO), Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954 for $6.50. Orders of 100 or more receive a 25% discount. To order, send a check or money order to the GPO and specify that you want The Arts and 504 Handbook, stock number 036-000-00055-4. If using VISA or MasterCard, please include credit card number and expiration date. For convenience, use your credit card also to order by phone (202) 783-3238 or FAX (202) 512-2250. (Orders also accepted at your nearest U.S. Government Bookstore; consult your Yellow Pages.)

For further information contact the Arts Endowment's Office for Special Constituencies at (202) 682-5532 (Voice) or 682-5496 (Telephone Text).

ITEM 24. NATIONAL ENDOWMENT FOR THE HUMANITIES

DEAR SENATOR PRYOR: I am pleased to enclose a report summarizing the major activities for or about the aging supported by the National Endowment for the Humanities in fiscal year 1992.

Many of the projects that received Endowment support during the past year either involved older Americans as grant recipients or project contributors or were of particular interest to them. Several also specifically addressed older persons as an audience. But the potential of NEH for older Americans does not stop there. The products resulting from all Endowment programs are available to older Americans for their personal enjoyment and enrichment—from the books and articles written by humanities scholars to the film and radio programs and reading and discussion groups supported by our Public Programs division.

The State humanities councils have also been very active in developing programs for or about the aging, and a number of their efforts are summarized in the report. Anyone wishing further information on the State councils' activities in this area is invited to contact NEH or any one of the councils.

I hope that you and your committee will find this material useful. Please let me know if we can be of any further assistance.

Sincerely,

LYNNE V. CHENEY,
Chairman.

Enclosure.

I. THE MISSION OF THE ENDOWMENT

The National Endowment for the Humanities was established by Congress to support the advancement and dissemination of knowledge in history, literature, philosophy, and other disciplines of the humanities. NEH grants sponsor scholarship and research, promote improvements in education, and foster greater public understanding and appreciation of our cultural heritage. Grants are awarded in response to unsolicited project proposals and on the basis of evaluative judgments informed by a rigorous process of review. The agency does not set aside fixed sums of money for work in any discipline or for any particular area of the country or group. As a result, there is no grant program at NEH specifically for senior citizens, nor is there a funding category within the agency expressly designed to support the study of aging or the elderly. Rather, projects for or about senior citizens may receive support through the full range of Endowment programs.

Although the Endowment does not have programs specifically related to aging, NEH-supported books, lectures, exhibitions, productions for radio and television, and library reading and discussion programs help bring the humanities to senior citizens. In addition, each year a number of scholars who are 65 years of age or older receive NEH funding to conduct research in the humanities or present educational programs for the general public, while others assist the Endowment by serving on grant review panels or as expert evaluators.

II. PARTICIPATION BY OLDER AMERICANS IN NEH PROGRAMS

Older scholars compete for Endowment support on the same basis as all other similarly qualified applicants. Applications for funding are evaluated by peer panels and specialist reviewers, Endowment staff, the National Council for the Humanities, and the NEH Chairman. Only applicants whose proposals are judged likely to result in work of exemplary quality and central significance to the humanities receive support. However, anyone may apply for an NEH grant, and no one is barred from consideration because of age. Each year numerous projects are funded that involve older persons as primary investigators, project personnel, or consultants.

The Jefferson Lecture in the Humanities is the highest official award the Federal Government bestows for distinguished intellectual achievement in the humanities. Since its establishment in 1972, the lecture has provided an opportunity for 21 of the Nation's most highly regarded scholars to explore in a public forum matters of broad concern in the humanities. Not coincidentally, many of the scholars so honored have been among the most senior members of their profession. Classicist Bernard Knox, who delivered the 1992 Jefferson Lecture, historians Gertrude Himmelfarb and Bernard Lewis, and sociologist Robert Nisbet are among the recent Jefferson Lecturers who, though still active scholars, were beyond the traditional retirement age at the time they received this honor.

The Endowment's Charles Frankel Prize, first awarded in 1989, honors distinguished individuals who have enriched our national life by sharing their understanding and appreciation of history, literature, philosophy, and other aspects of the humanities. Many of the interpreters and patrons of the humanities who have received a Frankel Prize have been 65 years of age or older, including in 1992 novelist Eudora Welty and Civil War historian and novelist Shelby Foote. In prior years, the Endowment's Frankel Scholars have included such senior Americans as Winton Blount, philanthropist and builder of the Alabama Shakespeare Festival's Carolyn Blount Theatre; Louise Cowan, University of Dallas English professor emeritus and cofounder of the Dallas Institute of Humanities and Culture, which is helping teachers use literature to teach values; Daniel Boorstin, Librarian of Congress Emeritus and historian; author and folklorist Americo Paredes; Mortimer Adler, philosopher, prolific author, and originator of the Great Books program; classicist and 1992 Jefferson Lecturer Bernard Knox; and Ethyle Wolfe, originator of Brooklyn College's highly regarded core curriculum.

Older scholars are particularly evident in several types of research and teaching projects supported by the Endowment's Fellowships and Seminars division and Research Programs division. Of course, this is merely a reflection of the depth and breadth of knowledge that many senior scholars bring to their work in the human-

ities. In a number of cases, older scholars are receiving NEH support to continue long-term, collaborative research projects that they have directed and sustained for many years. In FY 1992, NEH support for the research and teaching efforts of scholars, 65 or older, included the awarding of 3 Fellowships for University Teachers totaling $75,876, 7 grants totaling $462,427 to direct Summer Seminars for College Teachers, 5 grants totaling $356,106 to direct Summer Seminars for School Teachers, 13 grants totaling $726,620 to produce scholarly editions, 4 grants totaling $125,187 to conduct major interpretive research projects, and 6 grants totaling $828,762 to produce research tools and reference works. In FY 1992 a number of eminent older scholars received NEH support to continue making contributions to the humanities well past the traditional age of retirement, including:

Thomas Winner of Brown University, who is writing a book about the Czech artistic and literary avant-garde;

Howard Stein of Columbia University, who directed a Summer Seminar for College Teachers on the American playwright, 1920–80;

Historian Richard Herr of the University of California, Berkeley, who directed an interdisciplinary Summer Seminar for College Teachers about group identity and loyalty in the modern West;

Philip Curtin of Johns Hopkins University and a director of a recent NEH Summer Seminar for School Teachers, who is creating exhibitions, videotapes, and educational materials for libraries and schools about the ecological history of the Chesapeake Bay and the encounter of Europeans, Africans, and American Indians in the region from the 17th to the 19th centuries;

Frederick Burkhardt, president emeritus of the American Council of Learned Societies, who, under the auspices of that organization, is preparing an edition of the correspondence of Charles Darwin;

Richard Showman of the Rhode Island Historical Society, who is preparing an edition of the papers of Revolutionary War general Nathanael Greene;

Stephen Parrish, Goldwin Smith Professor Emeritus of Cornell University, who is preparing an edition of the manuscripts of W. B. Yeats' poetry and plays;

Omeljan Pritsak of Harvard University, who is directing the translation of nine volumes of early Ukrainian literature written in Church Slavonic, Ukrainian, Byelorussian, Russian, and Polish;

Art historian Margaret Alexander of the University of Iowa, who is completing volume 4 of *The Corpus of the Mosaics of Tunisia,* which records the mosaics of Roman Carthage in their architectural and archaeological settings; and

Frederick Cassidy of the University of Wisconsin, whose *Dictionary of American Regional English* is documenting our regional and folk idioms.

Older Americans also participated in NEH programs by serving as grant review panelists and specialist reviewers. Mabel Lang, professor emeritus of classics at Bryn Mawr University; Edgar Polome, professor of linguistics at the University of Texas in Austin; Carl Woodring, professor of literature at Columbia University and past NEH Summer Seminar director; Lucy Grigsby, professor of English at Clark Atlanta University and editor of *Phylon,* a journal founded by W.E.B. DuBois; Charles Gillispie, historian of science at Princeton University; and Thomas Rosenmeyer, professor emeritus of Greek and comparative literature at the University of California, Berkeley, are among the senior scholars who contributed their time and talent in this way during FY 1992.

In some cases, older Americans without scholarly training have contributed to Endowment-sponsored projects by providing invaluable information. For example, several NEH-supported projects to document or preserve the unique cultures of Native American peoples are heavily indebted to older tribal members for their, in many cases, irreplaceable resources of memory and understanding. In FY 1992, the Endowment awarded $322,571 in support of a long-term linguistic project in which a panel of tribal elders is helping scholars at the University of Arizona compile a dictionary of the Hopi language. Researchers from the Sealaska Heritage Foundation in Juneau received $80,000 to collect, analyze, and translate the oral literature of the Tlingit Indians. Surviving Tlingit elders are our last source for this cultural tradition; no one under the age of forty now speaks Tlingit. The Shoshone Episcopal Mission in Fort Washakie, Wyoming, was awarded $41,009 to create two traveling photographic exhibitions about Shoshone boarding schools and reservation life. One of the exhibitions, "Through the Eyes of Tsutsukwanah," will examine the perceptions of tribal elders about changing conditions on the reservations and their effect on the Shoshone sense of community.

Of course, the Endowment achieves its greatest impact among older Americans when they read books, attend public programs, view television productions, or listen to radio broadcasts made possible by an NEH grant. Many humanities programs for

the general public supported by the Endowment through our Division of Public Programs reach large numbers of older persons.

HUMANITIES PROJECTS IN MEDIA

Television productions supported by the Endowment are ideal for older people who cannot or prefer not to leave their homes. Widely acclaimed programs such as the 11-hour historical documentary series, *The Civil War*; the series of dramatic literary adaptions, *American Short Story* and *Life on the Mississippi*; the biographical documentary, *Huey Long*; and *Voices and Visions*, a 13-part series chronicling the achievements of America's outstanding contemporary poets, have been viewed by millions throughout the country. NEH-funded programs broadcast during fiscal year 1992 include the seven-part historical dramatization, *Columbus and the Age of Discovery*, and two historical documentaries of particular interest to older Americans, *Pearl Harbor: Surprise and Remembrance* and *Duke Ellington: Reminiscing in Tempo*.

Elderly persons who have visual handicaps may find Endowment-sponsored radio programs best suit their needs. For example, during FY 1992 the NEH-supported *Passages to India*, a 10-part series of 29-minute radio documentaries on Indian culture and society, and *The Glory and the Power: Fundamentalism Observed*, a 7-part series on the historical and philosophical foundations of global fundamentalism, were broadcast on National Public Radio.

Information about NEH-sponsored media programs is routinely provided to organizations working for special groups, including the elderly. For many elderly people confronting problems such as impaired vision, reduced mobility, and isolation, Endowment-funded media programs not only provide individual access to the humanities but can also provide the context for stimulating group activities and discussions.

HUMANITIES PROJECTS IN MUSEUMS AND HISTORICAL ORGANIZATIONS

In this program, the Endowment encourages museums or historical organizations receiving Federal funding to waive entrance fees for the general public on certain days, an effort that helps make cultural programming more accessible to retired persons living on a fixed income. In recent years, a number of the institutions that have received NEH support for interpretive exhibitions have begun to establish a continuing relationship with local senior centers.

HUMANITIES PROJECTS IN LIBRARIES AND ARCHIVES

By sponsoring reading and discussion programs for adults in public libraries, this Endowment program is helping to make intellectually stimulating activities available to senior citizens in their local communities. During FY 1992, the Endowment awarded $1.8 million for programs throughout the country that will offer adults, including persons over 65, opportunities to read and talk about important books and issues under the direction of a humanities scholar from a nearby college or university, and a great many more reading and discussion programs—more than 1,600—were supported by the state humanities councils.

The first reading and discussion programs in which scholars led regular group discussions of books related to a central theme were developed by Patricia Bates with support from the Endowment and several New England State humanities councils. Patricia Bates received a Charles Frankel Prize in 1989 for her pioneering efforts over two decades to bring substantive humanities programs to the general public. In FY 1992 she, in conjunction with the Howard County Library in Columbia, Maryland, was awarded $205,000 to conduct two large-scale reading and discussion programs that will be especially well suited for senior persons, who are expected to comprise approximately half of the participants. The programs, "Winds of Change: The Middle East and the Soviet Union/Eastern Europe" and "The Reader, the Writer, the Muse. . . .", will bring opportunities for lively discussion of challenging readings to libraries and senior centers in Maryland, the District of Columbia, Virginia, and Pennsylvania.

III. Examples of NEH Grants Specifically for or About Older Americans

Since FY 1976, the Endowment has awarded approximately $4.8 million to the National Council on the Aging for its reading programs in senior centers and libraries. Throughout a network of over 1,500 senior centers and other sites participating in the NCOA's "Discovery Through the Humanities" program, volunteer leaders guide small groups of senior citizens through active, in-depth discussions of the

work of prose writers, poets, artists, philosophers, scholars, and critics. Project staff prepare and distribute thematically organized anthologies and ancillary instructional materials and provide training and technical assistance to discussion leaders. Anthologies currently in use include: "A Family Album, The American Family in Literature," "Images of Aging," "Americans and the Land," The Remembered Past, 1914-1945," "Work and Life," "The Search for Meaning," and "Roll On, River: Rivers in the Lives of the American People." Each anthology is designed to stimulate the group participants to relate what they read to their own experience and to universal human issues. Ranging between 100 and 300 pages in length, printed in large print-type, and attractively illustrated with paintings, sculpture, and photographs, each anthologizes material from history, philosophy, and literature. Both the classics and works are represented.

NEH grants to the National Council on the Aging have also supported several large-scale reading and discussion programs based in libraries and led by scholars. Rather than read short selections from an anthology as in the NCOA's "Discovery Through the Humanities" series, participants in these programs read the full texts of literary works (which are available in Talking Book and large-print formats). In FY 1991 for example, the National Council on the Aging received $178,000 to conduct scholar-led reading and discussion programs in libraries and senior centers in Florida, Oregon, Pennsylvania, and Texas on the theme "The Family in American Cultures."

IV. State Programs and the Aging

The State Programs Division of the Endowment makes grants to humanities councils based in the 50 States, Puerto Rico, the District of Columbia, the Virgin Islands, the Northern Marianas, and Guam. These councils, in turn, competitively award grants for humanities projects to institutions and organizations within each State. State humanities councils have been authorized to support any type of project that is eligible for support from the Endowment, including educational and research projects and conferences. The special emphasis in state programs, however, is to make focused and coherent humanities education possible in places and by methods that are appropriate to adults.

Examples of projects for older Americans or about aging-related topics that received State council support during FY 1992 are presented below.

CONNECTICUT

The Connecticut Humanities Council supported two projects conducted by the Older Adult Service and Information System (OASIS). Scholars led groups of older adults in discussion programs about the history of theater and about the historical and cultural continuities of Native Americans and the role of elders and healers in traditional Native American cultures.

FLORIDA

The Florida Endowment for the Humanities supported a weekly program of readings on public radio station WUWF in Pensacola of original biographical and autobiographical stories about the integral connections among generations and cultures in West Florida.

KANSAS

The Kansas Committee for the Humanities supported a reading and discussion projects conducted by the Senior Citizens Center of Lindsborg, Kansas. Using materials prepared by the National Council on Aging, the participants examined the years between the First and Second World Wars through the writings of novelists, essayists, and political figures.

MARYLAND

The Maryland Humanities Council supported a series of humanities discussion programs in 22 Baltimore County senior centers. Scholars in a wide range of disciplines addressed topics such as "Southern Literature," "Baseball and American Life," "The Middle East Peace Process," and "The Architecture of Baltimore County."

MINNESOTA

The Minnesota Humanities Council supported a series of humanities courses conducted by the Cooperative Older Adult Ministry of Minneapolis. Six courses were

offered for older adults on topics related to literature, history, ethics, and music history.

MISSOURI

The Missouri Humanities Council supported a reading and discussion program for senior citizens with low reading skills. A scholar led discussions about the changes in values that occur as one moves from a rural to an urban community, from the natural world to the world of computer technology, and from one era to another.

NEW HAMPSHIRE

The New Hampshire Humanities Council supported a series of philosophical discussions for older people conducted by New England College. Five philosophers met weekly with participants in nursing homes, elderly housing complexes, and libraries to discuss such diverse subjects as the nature of happiness, moral dilemmas, and political and religious freedom.

NEW JERSEY

The New Jersey Committee for the Humanities supported several series of reading programs in Spanish for Hispanic senior citizens. Short stories by Jose Luis Gonzales, Gabriel Garcia Marquez, Isabel Allende, and others were read aloud, and the participants were invited to comment.

WASHINGTON

The Washington Commission for the Humanities supported a series of lecture and discussion programs for older adults on Russian and Soviet history and culture.

ITEM 25. NATIONAL SCIENCE FOUNDATION

DECEMBER 2, 1992.

DEAR MR. CHAIRMAN: Your request for information on actions completed in 1992 by the National Science Foundation (NSF) that relate to the Nation's older Americans was forwarded to me by Walter E. Massey, Director of NSF.

Enclosed is a copy of a report of NSF activities. As stated in the report, NSF does not have any programs directed specifically toward issues related to older Americans. However, basic and applied research projects having both direct and indirect bearing on elderly Americans are supported through the Foundation's regular grant programs. Most projects related to aging have been supported through the Division of Biological and Critical Systems in NSF's Directorate for Engineering, the Division of Social and Economic Science in the Directorate for Social, Behavioral and Economic Sciences, and the Division of Integrative Biology and Neuroscience in the Directorate for Biological Sciences.

We look forward to receiving a copy of your final report. If you have additional questions, please do not hesitate to call me.

Sincerely,

CORA B. MARRETT,
Assistant Director.

REPORT FOR DEVELOPMENTS IN AGING

The National Science Foundation, an independent agency of the Executive Branch, was established in 1950 to promote scientific progress in the United States. The Foundation fulfills this responsibility primarily by supporting basic and applied scientific research in the mathematical, physical, environmental, biological, social, behavioral and engineering sciences, and by encouraging and supporting improvements in science and engineering education. The Foundation does not support projects in clinical medicine, the arts and humanities, business areas or social work. The National Science Foundation does not conduct laboratory research or carry out education projects itself; rather, it provides support or assistance to grantees, typically associated with colleges and universities, who are the primary performers of the research.

The National Science Foundation is organized generally along disciplinary lines. None of its programs has a principal focus on aging-related research; although, a substantial amount of research bearing various degrees of relationship to aging and the concerns of the elderly is supported across the broad spectrum of the Foundation's research programs. Virtually all of this work falls within the purview of the

Directorate for Biological Sciences, the Directorate for Social, Behavioral, and Economic Sciences, and the Directorate for Engineering.

DIRECTORATE FOR BIOLOGICAL SCIENCES

The research projects supported by the Directorate for Biological Sciences are designed to strengthen scientific understanding of biological phenomena. Research is supported across a spectrum ranging from the fundamental molecules of living organisms to understanding of changes in memory and learning. These projects are supported by four research divisions incorporating 23 research programs. Within the Directorate, the Division of Integrative Biology and Neuroscience supports research which is aimed at understanding the behavior of human beings and animals. To achieve this end, it uses molecular, developmental, and behavioral approaches while concentrating on model systems and behaving organisms. Aging of the brain is known to involve the loss of neurons, changes in neuronal growth factors and neurotransmitter systems, alterations in the shape of neurons and synapses, and major changes in behavioral functioning. Currently supported research is addressing maintenance and regeneration of neurons, regulation of neurotransmitter systems, the plasticity of the nervous system, and hormonal mechanisms underlying adaptation to stress that results in behavioral functioning.

Other Divisions in the Directorate supporting research related to aging are the Environmental Sciences Division, and Molecular and Cellular Biosciences Division. Research on the aging process in plants and animals is supported by the Division of Environmental Sciences. The Division of Molecular and Cellular Biosciences supports related research in model systems such as drosophila where the biochemical and genetic mechanisms underlying cell death or viability are dissected.

Directorate for Social, Behavioral, and Economic Sciences (SBE)

The SBE Directorate through two of its divisions (Division of Social and Economic Science, and Division of Behavioral and Cognitive Science) supports research in a broad range of disciplines and interdisciplinary areas.

Anthropological research is being supported through the Division of Behavioral and Cognitive Sciences to study how economic and social change has affected traditional family behaviors associated with caring for dependent elderly (or elder care) in developing and modern countries and to look at social, ethnic, and dietary factors affecting the incidence of high blood pressure in adults. Research on human memory is examining long-term retention of material, including mathematics and Spanish, learned in college as a function of age.

The Division of Social and Economic Science focuses primarily on expanding fundamental knowledge of how social and economic systems work. Attention is centered on organizations and institutions, and how they function and change, and how human interaction and decisionmaking take place. The Division supports the collection of large sets of data, such as national surveys, that are used by many investigators, as well as the research projects of individual scientists. Most of the work supported by this division has indirect, rather than direct, relevance to aging and the concerns of the elderly. For example, the Panel Study of Income Dynamics provides information on changing household composition, labor force participation, income, assets, and consumption patterns as individual respondents grow older. The General Social Survey contains several attitudinal questions relevant to older persons, such as the optimal age of retirement and Government's role in the care of the elderly. This survey also permits the assessment—by age and by cohort—of shifts over time in opinions generally. The final survey supported by this division is the National Election Survey, which provides information on attitudes regarding candidates and issues held by different age groups in the population at large.

Current projects are addressing questions about the Social Security System, including how changes in the system may affect the labor supply of older workers, and status maintenance and change during old age.

Directorate for Engineering

The National Science Foundation's Directorate for Engineering seeks to strengthen engineering research in the United States and, as appropriate, focuses some of that research on areas relevant to national goals. This is done by supporting projects across the entire range of engineering disciplines and by identifying and supporting special areas where results are expected to have timely and topical applications.

Most aging-related research supported by this directorate is through its Biomedical and Research To Aid Persons With Disabilities Programs, in the Division of Biological and Critical Systems. Some of this work is indirectly related to issues of aging and the elderly—its relevance derives from the increased propensity for the elderly to develop physical disabilities. Projects currently supported by this program include studies related to the musculoskeletal system. Among the projects falling into this category are several concerned with joint replacement including computer assisted design of the orthopedic surgeries, cementing techniques and failure detection of the devices. Other studies are being performed on orthoses and techniques to the cardiovascular system are currently funded and include work on tissue engineering for the replacement of arteries and veins. Still other research is directed at the sensory area with one such project related to signal processing techniques to compensate for hearing impairments. Finally, a number of studies are concerned with drug infusion and control techniques. While not specifically directed toward problems of aging, all of these studies have potential for dealing with conditions prevalent in the aging population.

ITEM 26. OFFICE OF CONSUMER AFFAIRS

DECEMBER 9, 1992.

DEAR SENATOR PRYOR: In response to your request, I have enclosed the "Report of Activities of the U.S. Office of Consumer Affairs (USOCA) During 1992 Relating to Older Americans."

My office is pleased to have the opportunity to contribute to the committee's Annual Report on Aging. USOCA is aware of the problems and concerns of our nation's elderly consumers and will expand its activities in 1993 to provide even greater assistance.

If you have questions, please have your staff call Juanita Yates, USOCA's Associate Director for Special Concerns at 634-4297.

Sincerely,

ANN WINDHAM WALLACE,
Director.

Enclosure.

The Director of the U.S. Office of Consumer Affairs (USOCA) is Ann Windham Wallace, who directs consumer affairs activities at the Federal level. She also serves as Chairperson of the Consumer Affairs Council, established by Executive Order 12160. USOCA encourages and assists in the development and implementation of programs dealing with consumer issues and concerns; serves as the focal point for the coordination and standardization of Federal complaint handling efforts; works to improve and coordinate consumer education at the local, State and Federal levels; and cooperates with States and local government agencies, and voluntary consumer and community organizations in the delivery of consumer services and information materials.

The Office's major initiatives focus on voluntary mechanisms, marketplace innovations, consumer education and information, and conferences to exchange information and develop dialogues. USOCA efforts also focus on helping State and local government units and consumer and community groups to deal with issues affecting consumers.

Highlighted below are USOCA activities having the greatest impact on older Americans.

OUTREACH

MEETINGS AND CONFERENCES

The USOCA Director and staff frequently met with program staff from the American Association of Retired Persons and other aging constituency organizations to underscore the Administration's concern for the elderly and seek their support and views on policies which impact on the elderly.

USOCA provided consumer education materials and conducted workshops at a wide range of conferences and seminars sponsored by organizations representing elderly and disabled consumers. These included the national Caucus and Center on the Black Aged, National Council on the Aging, the American Association of Retired Persons, National Energy and Aging consortium, Gallaudet University, and National Association of Adults with Special Learning Needs.

USOCAs Associate Director for Special Concerns participated in planning and conducted a consumer education workshop at the January 28-30 National energy and Aging consortium (NEAC) Conference in Washington. More than 250 representatives of aging organizations, Government agencies, and gas and electric utilities attended. USOCA is a founding member of the NEAC which was established in 1981 to address the energy concerns of the elderly.

In April, USOCA coordinated a special seminar which focused on the Consumer Concerns of the Disabled. The USOCA Director and representatives of the Department of Justice and the council of Better Business Bureaus discussed the Americans with Disabilities Act and its impact on business. Members of the National Organization on Disabilities also participated. A large number of elderly citizens are also disabled.

On May 27 in Phoenix and on September 15 in Minneapolis, USOCA cooperated with the Direct Marketing Association in sponsoring a Consumer/Industry Dialogue on Direct Marketing and Mail Order. The USOCA Director was the keynote speaker at the Phoenix Dialogue and Deputy Director, Fred Grubbe, addressed the Dialogue in Minneapolis. The sessions were designed to discuss the problems of purchasing products through the mail. Participants included representatives of the mail order industry, including the catalog, list selling, sweepstakes, telemarketing and television marketing divisions. Postal inspectors, officials of Federal, State and local consumer protection offices and representatives of Better Business Bureaus also attended. The sessions addressed concerns of the elderly. Older individuals, who may be ill or have limited mobility, are particularly receptive to direct marketing solicitations and are most often the victims of fraud.

In recognition of Older Americans Month, USOCA's Associate Director for Special Concerns coordinated and presided at a special May 13 forum on "The Impact of the Americans with Disabilities Act on Older Persons: Broadening Our Perspective." The forum was cosponsored by USOCA, the American Association of Retired Persons, National Energy and Aging Consortium and the Society of Consumer Affairs Professionals In Business.

Also in May, USOCA's Associate Director for Special Concerns evaluated proposals for the Edison Electric Institute Special Needs Award. Electric utilities throughout the country highlighted their special programs which serve elderly customers. At the urging of USOCA, the special needs category was added to the list of awards given to selected utilities.

USOCA sponsored an exhibit at the June 2-4 AARP Biennial Convention in San Antonio. USOCA's Associate Director for Special Concerns discussed consumer fraud and distributed the *Consumer's Resource Handbook* to the thousands of elderly citizens and service providers who attended. Materials from the Commodity Futures Trading Commission, Securities and Exchange Commission and Federal Trade Commission were also distributed.

On June 8, the USOCA Director was the keynote speaker at The SeniorNet Conference in Washington. SeniorNet, a San Francisco based nonprofit organization, teaches computer skills to older adults. Portions of USOCA's *Consumer's Resource Handbook* have been placed on SeniorNet's network to provide its members ready access to consumer tips and consumer assistance contracts.

On August 3-7, USOCA's Associate Director for Special Concerns served as a reviewer for the Administration on Aging's Discretionary Funds Program. Grants and contracts were awarded to State and area agencies on aging, aging consumer organizations, and colleges and universities.

As part of the national Blacks In Government Conference, USOCA's Associate Director for Special Concerns, conducted a workshop on "Consumer Fraud and the Elderly." The conference was held on August 24-29 and attracted more than 2,000 Federal, State, and local government officials.

USOCA cooperated with the Commodity Futures Trading Commission in sponsoring a Roundtable on Investment Fraud which was held August 27 at the University of San Francisco. USOCA's Director of Policy discussed the *Consumer's Resource Handbook* and emphasized consumer education and prevention as the most important way to combat fraud. Representatives of Federal and northern California law enforcement agencies, consumer and community organizations attended. The Roundtable's focus on fraud, particularly affinity fraud, was especially useful for community representatives who serve multicultural communities. Con artists target older persons and particularly older women in investment scams.

USOCA cooperated with the Department of Commerce and AT&T Universal Card Services in sponsoring the Second International Quality Summit. More than 200 business leaders attended the Summit which was held October 5 in Washington. The Summit allowed top managers to explore how corporations are using quality

strategies to strengthen their competitiveness in a changing marketplace which must respond to the needs of older customers and an older workforce.

USOCA worked with the National Society for Patient Representation and Consumer Affairs of the American Hospital Association in conducting a survey to identify hospital billing problems. The survey found that consumers are often confused and frustrated by the process of hospital billing. USOCA prepared and distributed a Fact Sheet on Hospital Billing during National Consumers Week. It offers tips to help consumers check their bills. This information is especially helpful for older consumers who are frequent users of hospital services and are often on fixed, limited incomes.

MINORITY CONSUMER OUTREACH

Minority Dialogues

USOCA convened two Minority Consumer Dialogues with representatives of community based organizations and Government agencies to focus on strategies for raising the levels of consumer literacy in the African American, Hispanic, Asian, and Native American communities. The Dialogues were held on April 23 in San Francisco and July 20 in Houston. They addressed home mortgages, telecommunications, credit, vocational education scams, housing, and home repair which were identified by the community leaders as major issues of concern.

The community leaders' recommendations on how Government, business, and consumer organizations can improve the delivery of consumer information to minority communities were listed in our fact sheet on "Getting Our Messages to Minority Consumers." It was included in USOCA's National Consumers Week Press Packet. We will continue to pass along information to businesses, government, and consumer organizations seeking to expand outreach into minority communities. Minority elderly will especially benefit from expanded outreach. Additional Dialogues are planned for 1993.

New Americans Program

USOCA, in cooperation with Consumer Action of San Francisco and Sprint, initiated a national campaign to increase comprehension of the U.S. telephone system among new Asian and Hispanic Americans. A series of public service announcements (PSAs) and fact sheets are being distributed in San Francisco, Los Angeles, New York, Miami, Chicago, and Brownsville, Texas. The PSAs in English and Spanish offer tips to help consumers recognize and prevent telephone fraud. Single topic fact sheets in English, Chinese, Korean, and Spanish are being distributed through social service agencies in each of the cities. "Protecting Yourself Against Phone Fraud" is the first fact sheet to be published and is being distributed in Spanish and Korean communities. Older Asian and Hispanic immigrants will certainly benefit from the educational campaign.

Conferences

On October 26, USOCA sponsored a national conference which focused on Consumer Fraud in the Minority Community. More than 300 elderly, community, consumer, government, and business leaders attended the conference which was held in Los Angeles. The conference was the kick-off event for National Consumers Week and addressed recent frauds in vocational schools, credit, health care, and advertising. Elderly consumers are most often the victims of fraud.

USOCA's Associate Director for Special Concerns discussed "Minority Consumer Outreach" at the March 25–28 American Council on Consumer Interests Conference in Toronto, Canada and the June 14–17 National Association of Consumer Agency Administrators Conference in Seattle, Washington. This is the first time that either of the national consumer organizations has addressed the issue at its conferences. More effective outreach into minority communities will certainly benefit minority elderly consumers.

INFORMATION AND EDUCATION

The USOCA Director and other staff were interviewed on a wide range of subjects affecting older consumers. USOCA also distributed press releases on a number of major issues designed to alert consumers to the pitfalls of uninformed purchasing. In November, press releases were distributed which target specific problem areas for consumers during the Holiday Season. The areas covered included holiday trav-

eling, product warranties and guarantees, holiday safety, using credit cards, holiday fraud, holiday hotlines, and outlet shopping for holiday gift giving.

USOCA cooperated with the Federal Trade Commission and Environmental Protection Agency in publishing a brochure to help consumers compare products and packaging on their environmental merits. The brochure, *Green Advertising Claims*, explains environmental marketing claims, including "recyclable," "degradable" and "ozone friendly." The brochure recommends that consumers look for claims that provide specific information. All consumers, including the elderly, will find the brochure useful.

USOCA sends *Consumer News* to publications that target seniors each month. Many of the articles provide information about actions on behalf of or of particular interest to older consumers, usually not well covered in the general media. Included in the past year were:

A discussion about the National Eye Institute's survey which found that many Americans who are at high risk of developing glaucoma and diabetic eye disease are not seeking adequate eye care. The Institute is strongly recommending that persons 60 or older undergo an eye examination at least yearly.

Food and Drug Administration (FDA) approval of the first device designed to open blocked heart arteries of persons who are in danger of suffering a heart attack. The AIS Excimer Laser Angioplasty System is designed for use in heart patients for whom conventional balloon angioplasty does not work well.

The Federal Communications Commission (FCC) final regulations which provide additional protection to consumers from unauthorized switching of their long distance service.

FDA changes in regulations and guidelines designed to accelerate the approval process for "breakthrough" drugs for patients with such life-threatening or serious illnesses as cancer, AIDS, Alzheimer's, depression, and cystic fibrosis.

FDA approval of Proleukin, the first drug earmarked specifically for the treatment of kidney cancer. The drug is not a cure and can have serious side effects, including heart attack, neurological problems, gastrointestinal bleeding, and kidney failure.

Discussed the American Association of Retired Persons' report on "Living Trusts and Wills" which can help consumers sort through a variety of estate planning options. The report examines the different features and costs of estate planning alternatives.

The FCC's newly established regulations for telemarketers which protect residential telephone subscribers who request that they not be called with unwanted solicitations. The rules also bar telemarketers from calling homes before 8 a.m. and after 9 p.m.

FDA's proposed banning of 415 ingredients from seven categories of nonprescription drugs because they have not been shown to be safe and effective for their stated claims. The action affects a variety of nonprescription, over the counter products.

Announced new steps being taken by the Health Care Financing Administration to streamline Medicare and Medicaid claims processing by eliminating most paperwork. Under the new system, which will be in place in 15 months, health care insurance and billing will be handled by computer.

National Consumers Week

USOCA coordinated National Consumers Week (NCW) which was celebrated October 25–31. The USOCA Director discussed the theme, "Operation Wise Buy," at a number of NCW activities throughout the country. To encourage participation in multicultural communities, NCW's poster and brochure were printed in Spanish and Chinese, as well as English. Many of the activities addressed issues of interest to the elderly.

In addition to the Consumer Fraud Conference in Los Angeles, the USOCA Director discussed consumer fraud and money management at events in Minneapolis, Jacksonville, Florida, El Paso, Texas and Washington, D.C. One major activity was the American Association of Retired Persons' Consumer Action Award Reception. USOCA's Deputy Director, Fred Grubbe, joined Horace Deets of AARP in honoring the Reverend Rims Barber, 1992 Consumer Action Award recipient. Reverend Barber, of Jackson, Mississippi, was recognized for his life-long contribution in educating low income, minority, and elderly consumers.

USOCA prepared fact sheets on major consumer issues, including fraud, hospital billing, environmental shopping, credit education, food labeling, and minority out-

reach. Several of these issues are of particular interest to elderly consumers. The fact sheets were distributed to aging organizations throughout the country.

INTRAGOVERNMENTAL ACTIVITIES

International

In April and in October, the USOCA Director headed the U.S. Delegation to the Organization for Economic Cooperation and Development's (OECD) Committee on Consumer Policy Meetings in Paris. The Committee is composed of representatives from the 24 member countries. The Committee will conduct a study on issues relating to elderly consumers, including product safety and labeling. All issues addressed by the OECD are reviewed from a broad perspective and the concerns of the elderly are always reflected in final reports.

Throughout the year, the USOCA Director and staff met with government and consumer delegations from other countries. Issues of concern to elderly consumers were often addressed at these meetings.

Committees

USOCA was represented on the following committees which have a special impact on the elderly.

The National Energy and Aging Consortium is a network of 50 government, aging and private sector organizations which have joined together to help the elderly cope with rising energy costs. The NEAC is working to establish state consortia.

The Information and Referral Consortium on Aging is a network of government, aging and private sector organizations which provide information about and develop programs which strengthen information and referral systems throughout the country.

The Alliance Against Fraud in Telemarketing and the Department of Justice Telemarketing Fraud Working Group. Both are networks of Government agencies, consumer organizations, telecommunication companies and marketing trade associations which provide consumer information on telemarketing fraud. The elderly are particularly vulnerable to telemarketing fraud. This is reflected in many of the written inquiries and complaints that USOCA receives each year from older Americans.

Executive Order

The USOCA Director is designated by the President to be the Chairperson of the Consumer Affairs Council, established by Executive Order 12160. Executive Order 12160—the Consumer's Executive Order—is a directive to Federal agencies to institute consumer programs which are effective and responsive to the needs of consumers. This action is a logical progression from the Consumer Representation Plans of the 17 Executive Branch departments and agencies developed in 1976.

The Order addressed the problems of citizens in achieving adequate participation in Government decisionmaking processes. For example, agencies are required to develop information materials to inform consumers about their procedures for participation. Elderly consumers have been identified as a constituent group which should be reached with information. Under the Order, agencies must ensure that groups such as the elderly are being reached. Council member agencies report monthly to the Chairperson on their consumer-related activities. These reports provide information frequently incorporated in USOCA publications, presentations, and policy recommendations.

CAC Seminars

On June 22, the Consumer Affairs Council (CAC) sponsored a seminar designed to improve the management of Federal agency hotlines. In addition to analyzing the latest data on the use of 800 numbers for customer service, the seminar reviewed the prerequisites for a successful hotline (i.e., staffing, computer and organizational support), innovations and pitfalls in technology use, and how to position hotlines to discourage inappropriate calls and control workload.

A follow-up seminar was held November 2 at the Federal Aviation Administration. Representatives of 10 agencies shared information about hotlines and discussed the need for agencies to exchange information regarding resources. Additional seminars are planned for 1993. Many elderly consumers who may be home bound rely on Federal hotlines for information.

ITEM 27. PENSION BENEFIT GUARANTY CORPORATION

NOTE: Information was not received prior to publication.

ITEM 28. U.S. POSTAL SERVICE

JANUARY 13, 1993.

DEAR MR. CHAIRMAN: This is in response to your November 3 letter to Postmaster General Marvin Runyon, requesting information from the Postal Service on activities and programs which assist elderly Americans.

The enclosed document describes Postal Service programs which are designed to meet the mailing needs of older Americans and to prevent them from being victimized by mail fraud.

The Postal Service is pleased to contribute to this endeavor and will continue to develop programs to assist in improving the quality of life for the aging.

Sincerely,

WILLIAM T. JOHNSTONE.

Enclosure.

PROGRAMS AFFECTING OLDER AMERICANS

CARRIER ALERT PROGRAM

Carrier Alert is a voluntary community service provided by city and rural delivery letter carriers who watch participants' mailboxes for mail accumulations that might signal illness or injury. Accumulations of mail are reported by carriers to their supervisors, who then notify a sponsoring agency, through locally developed procedures, for follow-up action. The program completed its ninth year of operation in 1991 and continues to provide a lifeline to thousands of elderly citizens who live alone.

DELIVERY SERVICE POLICY

The Postal Service has a long-standing policy of granting case-by-case exceptions to delivery regulations based on hardship or special need. This policy accommodates the special needs of elderly, handicapped, or infirm customers who are unable to obtain mail from a receptacle located some distance from their home. Information on hardship exceptions to delivery receptacles can be obtained from local postmasters.

FEDERAL ACCESSIBILITY STANDARDS

The Postal Service is subject to the Architectural Barriers Act of 1968, which requires that most Federal buildings leased or constructed after 1968 meet applicable standards. The Postal Service is also affected by the Rose Decision, which requires that any building with a lease action between January 1977 and April 1986 must be made accessible. Also, these provisions provide that any new quarters leased for the first time since April 1986 must be accessible prior to occupancy.

These accessibility standards apply to the majority of Postal Service facilities. Nearly 27,000 facilities have been surveyed and 8,600 projects have been completed which provide accessibility where none previously existed. The Postal Service is committed to providing accessibility, which greatly benefits senior citizens as well as handicapped customers.

MAIL FRAUD AND MAIL THEFT INVESTIGATIONS

To many elderly Americans living alone and on fixed incomes, shopping by mail is a convenient way for them to obtain products and services. Unfortunately, they are also attractive targets for a few individuals who operate mail-order swindles.

Through mail fraud and misrepresentation of products and services, unscrupulous promoters not only cheat the public but also damage the reputation of the legitimate mail-order industry.

There are several types of fraudulent promotions which, by their nature, tend to focus on the elderly population. One of the most widespread is the work-at-home scheme. Senior citizens seeking to supplement their incomes may be enticed by advertisements promising enormous earnings while working from the convenience of home. The scheme begins with the promoter requiring an initial fee, typically from $5 to $25, before information about the plan is supplied. The fraud continues as a

pyramid operation, whereby the consumer involves others in the scheme, resulting in funds being generated to the promoter and not the respondents.

Individuals approaching retirement or those already retired sometimes respond to what appear to be attractive land sales deals. The promise of a warmer climate, low down payment, and easy monthly installments appears enticing until the purchaser discovers that the parcel of land is located in a desert wasteland and cannot be resold for even a fraction of the price paid.

Another fraud perpetrated against elderly customers is the mail-order sale of worthless pills, nostrums, and devices which promise to rid the aged of needless suffering. Probably the cruelest of these frauds are those that offer hope for cure of cancer, diabetes, and other major illnesses.

The ailments and afflictions that are a part of aging will leave the buyer looking for a magical cure to alleviate arthritic pain, restore lost vigor, and improve impaired sight or hearing. These pills and devices often have not been tested by medical authorities, are not capable of curing, and could even be injurious to one's health.

In an effort to heighten public awareness of mail fraud and other postal-related crimes, the Postal Inspection Service maintains across the country a cadre of Postal Inspectors trained as Crime Prevention Specialists. Working with Federal and State agencies and consumer groups, one of their missions is to educate and inform the public. Each year they appear on hundreds of television and radio interview programs and prepare articles for numerous newspapers and magazines. They give presentations at health fairs, community action groups, and national prevention conferences emphasizing the need for consumer awareness in fighting crime. They respond to special requests, often from senior citizens, regarding specific problem areas.

Over the past 8 years, the Postal Inspection Service has issued a series of public service announcements alerting the public to fraud schemes operating through the mails. In 1989, the Postal Inspection Service contracted for the production of a Video News Release on fraudulent "Boiler Room" operations which often target the elderly. The release was distributed via satellite to over 600 stations across the country, and in many instances, was customized to parallel local consumer problems.

In 1991, the Postal Inspection Service produced a Video News Release (VNR) on the use of 900 numbers in fraudulent promotion schemes. While the VNR was designed for a general audience, it is particularly useful to elderly customers, who are often victims of 900 fraud.

During February 1992, another VNR was produced which highlighted Postal Inspectors' efforts to obtain a Mail Stop Order against a Kansas City firm offering a product, purported to be therapeutic eyeglasses, called "Laservision." This product was sold nationally through professionally produced infomercials and direct mail sales which clearly took aim at the elderly and vision impaired. Four thousand dollars per day was being received by the operators until Postal Inspectors shut them down.

The Postal Inspection Service also works closely with numerous study groups of regulatory and enforcement agencies which serve on various task forces organized by the Department of Justice. Currently, Postal Inspectors serve on task forces studying health care fraud, insurance fraud, telemarketing fraud and psychiatric care fraud, all of which affect the elderly disproportionately.

Despite the existence of such preventive efforts, the number and variety of mail fraud schemes ensure that many people will continue to be victimized by mail fraud promotions. In dealing with this, the Postal Service uses a two-pronged attack. Criminal prosecution is possible under the Mail Fraud Statute, 18 U.S.C. Section 1341, which provides penalties of up to 5 years in prison and a maximum fine of $250,000 for those who use or cause the mail to be used to further a fraudulent scheme. Second, and perhaps more important for the consumer, the Postal Service can take action under the False Representations Statute, 39 U.S.C. Section 3005. This statute permits the Postal Service, following a full due process hearing before an administrative law judge, to return to the sender all mail addressed to a promotion whose advertisements soliciting remittances by mail are proven to contain false representations. In addition, the Postal Service may request the U.S. District Court, in the area where the promotion receives its mail, to issue a temporary restraining order to stop the delivery of mail to that promotion until the administrative law judge renders a decision.

A crime which strikes the elderly population particularly hard is mail theft. Many poor and elderly Americans depend on the receipt of a monthly check in the mail as their sole income. These individuals suffer greatly when their checks do not

arrive as scheduled. Each year the Postal Service delivers hundreds of millions of Federal, State, and local benefit checks. Although the number of stolen checks in relation to the number mailed is minute, the Postal Inspection Service considers this a significant problem and recognizes the impact this crime has on the victim, particularly on elderly persons who are dependent upon the checks for subsistence. The Postal Service also delivers millions of personal and commercial checks and other valuable items such as savings bonds, money orders, credit cards, and food stamps, all of which are appealing targets for mail thieves.

Postal Inspectors also work closely with private sector initiatives to educate customers about theft and fraud prevention techniques. These techniques help protect important financial data, credit cards, and personal checks sent through the mail. For example, the Postal Inspection Service Congressional and Public Affairs Branch worked with Citibank to produce a VNR on the problem of credit card fraud, and is actively participating in a series of seminars given nationwide with Citibank.

A Postal Service booklet, "A Consumer's Guide to Postal Crime Prevention," has been updated to include new information. It furnishes tips to consumers on how to avoid being victimized by fraudulent schemes and mail theft. This booklet also includes the addresses of Postal Inspection Service Divisions throughout the country.

In October 1992, the Inspection Service published a new pamphlet titled, "DON'T TAKE THE BAIT." This pamphlet, distributed nationally during National Consumers Week, highlights many of the schemes and representations used by telefraud artists that affect senior citizens and drain their life savings. Specific warning signs are emphasized for easy recognition, such as the telefraud tactic of insisting on the customer's credit card number to pay nominal shipping or handling charges. Additional charges, not authorized by the customer, eventually appear and often are undetected.

A series of investigative programs to combat the problem of mail theft is also in place. Postal Inspectors cooperate with the U.S. Secret Service and local police investigating the forgery of checks believed to have been stolen from the mail. They also work with officials of check issuing agencies to improve procedures for the prompt charge-back of checks and referral of information whenever theft from the mail is suspected. The Postal Service has encouraged the development of better photo and signature identification cards and has enlisted the cooperation of public housing authorities to install and maintain more secure mail receptacles and mail rooms.

Injunctions and Other Civil Powers

In addition to the investigation of individuals or corporations for possible criminal violations, the Postal Inspection Service can protect consumers from material misrepresentations through the use of several statutes. In less severe cases, operators of questionable promotions agree to a Voluntary Discontinuance. This is an informal promise to discontinue the operation of the promotion. Should the agreement be violated, formal action against the promoter could be initiated. In certain cases where a more formal action is better suited, a Consent Agreement is obtained. Generally, a promoter signs a Consent Agreement to discontinue the false representations or lottery charged in a complaint. If this agreement is violated, the Postal Service may withhold the promoter's mail pending additional administrative proceedings.

The Postal Service (Judicial Officer) is empowered under 39 U.S.C. 3005 (b)(2) to issue a Cease and Desist (C & D) Order which requires any person conducting a scheme in violation of Section 3005 to immediately discontinue. C & D Orders are issued as part of a False Representation Order and, as a matter of course, are agreed to as part of a Consent Agreement. Violations of C & D Orders may be subject to civil penalties under 39 U.S.C. 3012. When more immediate relief to protect the consumer is warranted, the Postal Service has a number of effective enforcement options available. Title 39 U.S.C. 3003 and 3004 enables the Postal Service, upon determining that an individual is using a factitious, false, or assumed name, title, or address in conducting or assisting activity in violation of 18 U.S.C. Sections 1302 (Lottery), 1341 or 1342 (Mail Fraud), to withhold mail until proper identification is provided and the person's right to receive mail is established.

In those instances where a more permanent action is necessary, 39 U.S.C. 3007 allows the Postal Service to seek a Temporary Restraining Order detaining mail. By withholding service to the suspected violator, the extent of victimization is limited while an impartial judge reviews the facts and makes a final determination. If the judge decides that all mail pertaining to the promotion should be returned, then a False Representation Order, authorized under 39 U.S.C. 3005, is issued. In addition,

U.S. District Judges may hold a hearing on alleged fraudulent activity, and issue a permanent injunction regarding the operation pursuant to 18 U.S.C. 1345.

By requesting the court to withhold mail while a case is argued, Postal Inspectors have been successful in many cases in limiting the extent of victimization. Action under these statutes does not preclude criminal charges against the same target.

National Consumers' Week/Consumers' Protection Week

The Postal Service has sponsored an annual Consumer Protection Week since 1977. Since 1980 the Postal Service's Consumers' Protection Week has been scheduled to coincide with National Consumers' Week. Promotion and publicity kits are prepared and distributed to warn consumers about mail fraud and misrepresentation of products and services sold by mail. Additional information about proper addressing of mail, address changes, and how to report service problems are also beneficial to senior citizens and are included in the kit. As medical fraud and work-at-home schemes have traditionally ranked at the top of fraudulent promotions, the focus of material distributed has frequently been directed toward alerting senior citizens of such schemes.

Stamps by Mail

Stamps by Mail (SBM), one of the Easy Stamp Services, allows customers to purchase postal products by ordering through the mail. These products include stamps in booklet, sheet, and coil form, postal cards, stamped envelopes, and philatelic items. The SBM program benefits a wide variety of people and is particularly beneficial to elderly or shut-in customers who cannot travel to the post office. The SBM order form, which incorporates a self-addressed postage-paid envelope, is available in lobbies or from city delivery carriers. The customer fills out the order form and returns it to the carrier or drops it in a collection box. Orders are normally returned to the customer within 5 business days. SBM is used primarily by city delivery customers; rural and highway contract route customers obtain similar products from their carriers using Form 3227-R.

Stamps by Phone

Stamps by Phone is a convenience program that is intended to target the business, professional, and household customers who are willing to pay a handling charge based on the amount of the order for the convenience of ordering by phone and paying by credit card (VISA, DISCOVER, or MasterCard) to avoid trips to the post office. The customer calls the (1-800-STAMPS-24) toll-free number, 24 hours a day, 7 days a week, and orders from a menu of postal products. There is no minimum amount and customers will receive their order within 5 business days.

Window Automation at Retail Facilities

Automated systems, called Integrated Retail Terminals, have been installed at retail facilities in most medium to large cities. These terminals use video screens to display information about each transaction for the customer. The screens show some mailing restrictions and required mailing forms, total amount due, and change from the amount tendered. The display of this type of information is useful to many customers with hearing impairments, including some older Americans.

Some post offices have installed call lights that are used to summon customers to the next available retail counter with both a slowly flashing light and a pleasant chime. This is helpful for customers with either impaired hearing or sight. In addition, some retail units with space available in their service lobbies have installed benches or chairs for senior citizens and handicapped customers.

Lobby Director Program

Some post offices have implemented the lobby director program. Lobby directors assist customers in preparing forms, explain postal products and services, and offer general information as the customer enters the lobby. This program reduces waiting time and improves customers' ability to receive the best value for their purchases or postal services or products. This is especially important to those on fixed incomes.

Alternate Postal Retail Sites

Alternate postal retail sites include the following:

Contract Postal Units.—For the convenience of customers who demand one-stop shopping. An example would be a local drugstore that sells postage and money orders as well as handles routine transactions. As you wait for a prescription to be filled, you can do your postal business.

Stamps Where You Shop (Stamps on Consignment).—This program allows the customer to purchase stamp booklets at face value at locations such as their local grocery store. Moreover, many banks now are offering self-adhesive stamp booklets through use of the customer's Automatic Teller Machine card. While the cost to the customer is slightly higher than regular stamps, many people, including the elderly, prefer a self-stick stamp and the convenience of one-stop shopping while banking.

Mobile Post Offices.—Some postal districts augment their alternative retail sites by providing a mobile post office. This post office vehicle travels around larger cities and visits senior citizen apartment complexes and in some cases nursing homes on a regular schedule.

More convenient locations available for customers to purchase stamps generally means less time for them to obtain these retail services. Purchasing stamps and postal money orders, registering a letter, and other postal errands, can be combined with a trip to the neighborhood shopping center. This is particularly advantageous to the elderly.

ITEM 29. RAILROAD RETIREMENT BOARD

DECEMBER 15, 1992.

DEAR MR. CHAIRMAN: In response to your letter of October 27, 1992, we are enclosing a report summarizing the U.S. Railroad Retirement Board's program activities for the elderly during fiscal year 1992.

We look forward to your committee's report, Developments in Aging: 1992. If we can be of further assistance, please feel free to contact the Secretary to the Railroad Retirement Board, Bea Ezerski, at (312) 751-4920.

Sincerely,

GLEN L. BOWER.
V.M. SPEAKMAN, JR.
JEROME F. KEVER.

U.S. RAILROAD RETIREMENT BOARD ANNUAL REPORT ON PROGRAM ACTIVITIES FOR THE ELDERLY

The U.S. Railroad Retirement Board is an independent agency in the Executive Branch of the Federal Government, administering comprehensive retirement-survivor and unemployment-sickness benefit programs for the Nation's railroad workers and their families under the Railroad Retirement and Railroad Unemployment Insurance Acts. The Board also has administrative responsibilities under the Social Security Act for certain benefit payments and railroad workers' Medicare coverage.

Under the Railroad Retirement Act, the Board pays retirement and disability annuities to railroad workers with at least 10 years of service. Annuities based on age are payable at age 62, or at age 60 for employees with 30 years of service. Disability annuities are payable before retirement age on the basis of total or occupational disability. Annuities are also payable to spouses and divorced spouses of retired workers and to widow(er)s, divorced or remarried widow(er)s, children, and parents of deceased railroad workers. Qualified railroad retirement beneficiaries are covered by Medicare in the same way as Social Security beneficiaries.

Under the Railroad Unemployment Insurance Act, the Board pays unemployment benefits to railroad workers who are unemployed but ready, willing, and able to work and pays sickness benefits to railroad workers who are unable to work because of illness or injury.

BENEFITS AND BENEFICIARIES

During fiscal year 1992, benefits paid under the railroad retirement and railroad unemployment insurance programs totaled almost $7.8 billion. Retirement and survivor benefits amounted to $7.7 billion, and unemployment and sickness benefits totaled $78 million. The number of beneficiaries on the retirement-survivor rolls on September 30, 1992, totaled 854,000. The majority (84 percent) were age 65 or older.

At the end of the fiscal year, 381,000 retired employees were being paid regular annuities averaging $1,007 a month. Of these retirees, 186,000 were also being paid supplemental railroad retirement annuities averaging $45 a month. In addition, approximately 212,000 spouses and divorced spouses of retired employees were receiving monthly spouses benefits averaging $410 and, of the 272,000 survivors on the

rolls, 234,000 were aged widow(er)s receiving monthly survivor benefits averaging $604. Approximately 10,000 retired employees were also receiving spouse or survivor benefits based on their spouse's railroad service.

Railroad retirement annuities, like Social Security benefits, are being increased in January 1993 to reflect a 3 percent increase in the Consumer Price Index (CPI) during the 12 months preceding October 1992. Cost-of-living increases are calculated in each of the two tier portions of a railroad retirement annuity. Tier I portions, like Social Security benefits, increase in January 1993 by 3 percent, which is the percentage of the CPI rise. Tier II portions increase by 1 percent, based on 32.5 percent of the CPI rise. In 1993, the average regular railroad retirement employee annuity rises over $23 to $1,031 a month and the average spouse benefit increases about $9 to $419 a month. For aged widow(er)s, the average monthly benefit rises over $15 to $620.

Some 766,000 individuals who were receiving or were eligible to receive monthly benefits under the Railroad Retirement Act were covered by hospital insurance under the Medicare program at the end of fiscal year 1992. Of these, 751,000 (98 percent) were also enrolled for supplemental medical insurance.

Unemployment and sickness benefits under the Railroad Unemployment Insurance Act were paid to 46,000 railroad employees during the fiscal year. However, only about $0.2 million (less than 1 percent) of the benefits went to individuals age 65 or older.

Benefit Financing

By the end of the 1992 fiscal year, the equity balance in the Railroad Retirement Account had increased from $9.6 billion to $11.7 billion, and the Railroad Unemployment Insurance Account's debt to the Railroad Retirement Account was reduced from $271.6 million to $245.3 million during the year.

The Board's 1992 reports to the Congress on the financial condition of the railroad retirement and railroad unemployment insurance systems were both favorable. The report on the railroad retirement system concluded that, barring a sudden, unanticipated, large drop in railroad employment, the railroad retirement system will experience no cash-flow problems for at least 20 years, but the long-term stability of the system depends on actual levels of railroad employment over the coming years. The report on the financial status of the railroad unemployment insurance system indicated that experience-based contribution rates will keep the system solvent, even under the most pessimistic assumptions. It also stated that the unemployment insurance system's debt to the Railroad Retirement Account is expected to be repaid by the end of fiscal year 1995 with revenue from a temporary repayment tax and that no new loans should be required during the projection period.

Management Improvement Plan

The 1992 and 1993 Federal budgets included almost $7 million to fund the first 2 years of a $14 million, 5-year plan for management improvements agreed to by the White House Office of Management and Budget, the Railroad Retirement Board and the Congress. The Board is using this commitment of funds to reduce claims processing backlogs, enhance debt collection activities, expand fraud controls, improve tax accounting operations, increase verification of payroll tax receipts, streamline automated claims processing systems and make other administrative improvements. All goals for fiscal year 1992 were met or exceeded.

Claims processing backlogs.—The Board's objective for fiscal year 1992 was to reduce the number of cases in eight targeted workload categories to 67,787, which includes normal carry-forward balances. The balance of cases was reduced to 59,519 as of September 30, 1992.

Debt collection.—A debt collection executive was hired to develop, implement, and coordinate agencywide policy for debt collection. Goals for increased collections through offsets from Federal tax refunds and related voluntary repayments and the use of collection agencies were far exceeded.

Fraud control.—The expansion of the Board's computer wage matching programs with the States was greatly accelerated. As of September 30, 1992, signed agreements were in place with 48 States and the District of Columbia, covering 99 percent of the railroad population.

As a result of a recommendation by the U.S. General Accounting Office and the Office of Management and Budget, the Board's staff began accessing the Social Security Administration's extensive data base on decreased individuals on a monthly basis in 1992 to help prevent erroneous payments.

Information systems.—Development of a database for a work measurement system for field service operations was completed. In addition, the Board contracted with the General Services Administration's Federal Systems Integration and Management Center to provide agency management with an analytical review of its automation processes. Work also began on converting procedure manuals to an online, electronic medium, to be maintained and updated through automation means.

Tax accounting.—A plan was developed to improve the processing of statements issued beneficiaries for Federal income tax purposes over the next 5 years. In the meantime, high-quality laser printing has already been introduced, making the tax statements easier for elderly retirees to read and helping to reduce statement-related inquiries by 50 percent. Individual records with data problems and/or recurring tax accounting problems are now being corrected throughout the year rather than just during the tax season, and the number of computer-generated statements requiring review prior to release has dropped by nearly 70 percent. Fiscal year 1992 goals were exceeded in the areas of record corrections and corrected tax statements.

Trust fund integrity.—The Board is significantly ahead of schedule in completing its 1990 compensation reconciliations which compare compensation reported by employers to the Board for benefit computation purposes with compensation reported to the IRS for tax purposes. Board staff is also working with the Department of the Treasury and the Internal Revenue Service to implement the use of the Automated Clearing House system to collect railroad retirement taxes.

The Board Members have met with senior officials at the Department of the Treasury and the Internal Revenue Service and received support for significant changes in the law allowing access to Treasury/IRS information. If enacted, these proposals will enhance the Board's ability to verify a wide range of financial reports and data.

Program Enhancements

Several major applications automating various aspects of claims processing have been developed and put into operation. They include a system to expedite payment of survivor benefits, an on-line inquiry system containing railroad retirement beneficiary data and an expansion of facilities to correct tax data on-line.

An automated system was instituted to control new address investigations resulting from undeliverable and returned mail. The system automatically generates an address investigation to the proper field office or to the financial institution involved if the beneficiary is receiving direct deposit payments.

A monitoring program for persons handling benefit payments for annuitants unable to manage their own affairs was made subject to more stringent guidelines, with the focus placed on the amount of benefits used and the registration of bank accounts holding conserved funds.

Medicare Contract

As part of its management improvement effort the Board competitively bid its national contract for processing the Medicare Part B claims of rail retirees. These claims total more than $700 million annually, and administrative costs exceeded $22 million in fiscal year 1992.

Travelers Insurance Company has processed Medicare Part B claims for the Railroad Retirement Board for 26 years, but the contract had never been competitively bid, and the no-bid arrangement had been questioned by the Board's Inspector General, the Office of Management and Budget, and members of the Appropriations Committees in both houses of Congress. While Travelers submitted the winning bid, the terms of the new contract will reduce administrative costs by approximately $1.5 million a year and provided additional resources to reduce Medicare fraud.

The new contract will directly benefit retirees by expanding the number of facilities available for walk-in service from 2 to 33 sites in 20 States, as well as by guaranteeing the highest degree of accuracy in processing claims. While costs are an important factor, the Board's primary consideration remains a high level of service.

Public Information Activities

The Board maintains direct contact with railroad retirement beneficiaries through its 87 field offices located across the country. Field personnel explain benefit rights and responsibilities on an individual basis, assist railroad employees in applying for benefits and answer any questions related to the benefit programs. The Board also relies on railroad labor groups and employers for assistance in keeping railroad personnel informed about its benefit programs.

At informational conferences held for railroad labor union officials, Board representatives describe and discuss the benefits available under the railroad retirement-survivor, unemployment-sickness and Medicare programs; and the attendees are provided with comprehensive informational materials describing in detail the benefit provisions as well as the administration and financing of the programs.

At seminars for railroad executives and managers, Board representatives review the benefit programs, financing, and administration, with special emphasis on those areas which require cooperation between railroads and Board offices. These meetings have facilitated cooperation and coordination, and they help keep railroad officials up-to-date on the Board's benefit programs.

Office of Inspector General

The Board's Office of Inspector General continued its efforts to eliminate fraud, waste and abuse, and to ensure that accurate and timely benefits are paid to railroad retirement annuitants. Audit and investigative efforts resulted in additional monetary benefits for the agency's trust funds, improvements in agency operations, and the identification and prosecution of individuals committing fraud violations of the benefit programs.

During fiscal year 1992, the Board's Office of Inspector General provided the White House Office of Management and Budget with independent monitoring reports on the Board's progress in making the operational improvements set forth in the 5-year Management Improvement Plan. The Inspector General agreed to monitor corrective actions to ensure that the agency properly uses the additional resources provided by the Administration and Congress.

In fiscal year 1992, the Inspector General's Office of Audit issued 26 reports with actual and potential monetary benefits totaling $76.9 million. Additional financial benefits of $19 million were realized from interest and adjustments resulting from prior audit reports. The Office of Audit also performed internal reviews of the Board's fixed assets, its system for maintaining rail employees' service and compensation data, credits for a special excise tax enacted to repay railroad unemployment insurance loans, the financial interchange with the Social Security Administration, employer compliance with electronic funds transfer deposit requirements, and debt recovery actions.

Actions by the Inspector General's Office of Investigations resulted in 158 criminal convictions, 122 indictments/informations plus $7.4 million in court-ordered restitutions and fines as well as recoveries made directly by Special Agents. Investigations addressed fraud violations of the Medicare and disability benefit programs, retirement fraud involving the forging and cashing of deceased payees' U.S. Treasury checks or the illicit conversion of Treasury electronic funds transfers, and fraudulent claims for unemployment or sickness benefits.

OFFICIALS

President Bush appointed Jerome F. Kever to be the Carrier Member of the U.S. Railroad Retirement Board, V.M. Speakman, Jr. to be the Board's Labor Member, and reappointed Glen L. Bower as Chairman of the Board. Their appointments were confirmed by the Senate on August 12, 1992.

Mr. Kever was appointed Management Member, succeeding Andrew Reardon, and will serve the remainder of a statutory 5-year term expiring in August 1993. Recently a private consultant, Mr. Kever had served as Vice President and Corporate Controller for the Santa Fe Pacific Corporation, and held executive posts with Household International and Deloitte and Touche.

Mr. Speakman was appointed Labor Member, succeeding C.J. Chamberlain, and will serve the remainder of a 5-year term expiring in August 1994. Mr. Speakman, who had been President of the Brotherhood of Railroad Signalmen, had also served as Vice Chairman of the Railway Labor Executives' Association and Chairman of the RLEA's Committee on Railroad Retirement.

Mr. Bower was reappointed as Chairman for a 5-year term ending in August 1997. Prior to his initial appointment to the Board in 1990, he was Assistant Director of the Department of Revenue for the State of Illinois and had also served as its General Counsel. He was also a member of the Illinois House of Representatives and a former prosecutor.

The Inspector General, appointed by the President in 1986, is William J. Doyle III. Prior to his appointment, Mr. Doyle served as Inspector General for ACTION, the national Federal volunteer agency. He had also served as the Executive Assistant to the Administrator of the Law Enforcement Assistance Administration at the Department of Justice.

ITEM 30. SMALL BUSINESS ADMINISTRATION

DECEMBER 11, 1992.

DEAR MR. CHAIRMAN: Thank you for your letter of October 27, 1992 regarding activities or initiatives on behalf of older Americans and the preparation of the Senate Special Committee's Annual Report, "Developments in Aging."

The U.S. Small Business Administration (SBA) is charged with the responsibility to create, implement, and deliver technical and financial assistance programs for the benefit of the Nation's small business community. We have a number of programs and services to help businesses get started as well as to stay in business and prosper. They include pre-business workshops, publications, advisory services, and financial support through our loan guarantee programs. These programs are described in the enclosed brochure entitled, "Your Business and the SBA."

SBA's Offices of Women's Business Ownership, Veterans Affairs, and Minority Small Business/Capital Ownership Development are the only offices in the Agency that direct specific, programmatic information to a targeted segment of the business community. We currently do not have a program that gives focus to older Americans other than those initiatives that are generic to all aspiring or existing small business persons.

However, the SBA *is* the sponsoring Federal agency for the Service Corps Of Retired Executives (SCORE) program. SCORE is an organization of nearly 13,000 retired (and some still active) business men and women who volunteer their time to provide management counseling and training to small businesses. They have extensive business experience, either as entrepreneurs and business owners or as executives in the corporate environment. Their counseling is confidential and free of charge. Workshops that SCORE promotes and develops may include topics from pre-business counseling to the specific aspects of marketing, development of business plans, and all other strategies inherent with the operation of a small business enterprise.

Although SCORE is provided for in the Small Business Act of 1953, as amended, and receives its appropriation from the Congress, the SBA provides management oversight of this very special resource partner through the Office of Business Development, Office of Business Initiatives, Education and Training. An SBA National Program Manager for the SCORE program works in conjunction with the National SCORE Association's Board of Directors and Executive Director. The National SCORE Office shares office space with the SBA in our Washington, DC Central Office. The relationship between SCORE and SBA is continuously manifested and enhanced because of our joint resolution to provide the highest quality of counseling and training to the small businesses of this country. The fact that SCORE counseling cases and workshop attendees have increased dramatically in each of the past 10 years is testament to the need and value of SCORE. We anticipate such increases to continue.

If we can relate any SBA initiative specifically to "older" Americans, the SCORE program befits this criteria. The volunteer "employment" of this very special segment of our population, i.e., retired senior citizens, who volunteer their time to give something back to their communities, specifically, the knowledge and experience that can be shared with small businesses, significantly promulgates the mission of the Small Business Administration. Occasionally, when counseling is required in the high-tech or extremely specialized aspect of business operations, the SCORE Association will call in specialists located in the Skills Bank from the American Association of Retired Persons. Without question, "Older Americans" make a significant contribution to the SBA's mission objectives with a passion to assist America's small businesses.

Thank you for your inquiry with the SBA. I hope the information provided is beneficial in the development of the Committee's Annual Report. I appreciate your interest and support in small business.

Sincerely,

PATRICIA SAIKI,
Administrator.

Enclosures.

YOUR BUSINESS AND THE SBA

STARTING AND STAYING IN BUSINESS

WHAT IS SBA?

The U.S. Small Business Administration (SBA) was created by Congress in 1953 to help America's entrepreneurs form successful small enterprises. Today, SBA's programs offer financing, training and advocacy for small firms. These programs are delivered by SBA offices in every state, the District of Columbia, the Virgin Islands and Puerto Rico. In addition, the SBA works with thousands of lending, educational and training institutions nationwide.

WHY ARE SMALL BUSINESSES IMPORTANT?

Small businesses are the backbone of the American economy. They create two of every three new jobs, produce 40 percent of the gross national product, and invent more than half the nation's technological innovations. Our 20 million small companies provide dynamic opportunities for all Americans.

CAN SBA HELP ME?

If your business is independently owned and operated, not dominant within its field, and falls within size standards set by the SBA, we can help you.

MANAGING YOUR BUSINESS

Through workshops, individual counseling, publications and videotapes, the SBA helps entrepreneurs understand and meet the challenges of operating businesses—challenges like financing, marketing and management. The SBA has business development specialists stationed in more than 100 field offices nationwide. Technical assistance, training and counseling also are offered by three partner organizations:

More than 13,000 volunteers in the Service Corps of Retired Executives (SCORE) provide training and one-on-one counseling at no charge.

Small Business Development Centers provide training, counseling, research and other specialized assistance at more than 600 locations nationwide.

Small Business Institutes at more than 500 universities provide free management studies, performed by advanced business students under faculty direction.

FINANCING YOUR BUSINESS

SBA opens doors of opportunity for small businesses by helping them secure capital.

We back eligible small businesses that are having trouble securing conventional financing by offering loan guarantees on loans made by private lenders.

We also offer a full range of specialized financing:

International Trade Loan Guarantees to finance U.S.-based facilities or equipment for producing goods or services for export,

Export Revolving Line of Credit Guarantees to help firms penetrate foreign markets,

Small Loan Guarantees to help businesses needing capital of $50,000 or less,

Small General Contractor Loan Guarantees for small construction businesses,

Seasonal Line of Credit Guarantees for firms facing seasonal business increases,

Energy Loan Guarantees for firm that make, install, sell or service energy equipment and technology,

Handicapped Assistance Loans for businesses owned by physically handicapped persons and private nonprofit organizations that employ handicapped persons and operate in their interest,

Pollution Control Loan Guarantees for firms involved in pollution control and reduction, and

Loans to disabled and Vietnam era veterans to start, operate or expand a small business.

SBA provides small businesses with long-term loans and venture capital by licensing, regulating and investing in privately owned and managed Small Business Investment Companies across the country.

We foster rural and urban economic development with Development Company Loans, geared to create and retain jobs.

We expand access to surety bonds through guarantees on bonding for small and emerging contractors, including minorities, who otherwise cannot secure bid, payment or performance bonds.

Expanding Your Business Horizons

EXPORT ASSISTANCE

SBA helps small businesses enter and succeed in the global marketplace through counseling by international trade experts, training sessions and publications, and Matchmaker Trade Missions (co-sponsored with the U.S. Department of Commerce) to link U.S. firms with potential foreign buyers.

FEDERAL GOVERNMENT PROCUREMENT ASSISTANCE

We help small businesses secure their fair share of the billions of dollars in federal contracts awarded each year. Working closely with all federal agencies we monitor and help increase both the dollar value and percentage of prime and subcontract awards to small firms. Through the Procurement Automated Source System—PASS—we electronically bring the resumes of qualified small businesses to the desks of thousands of government procurement officials and large government prime contractors throughout the U.S.

SMALL BUSINESS INNOVATION RESEARCH SET-ASIDES

The SBA administers a federal program among government agencies that provides grants to small businesses for innovation research and development.

Making Your Voice Heard

SBA champions the cause of small business before Congress, the Executive Branch, State governments, and with financial, educational, professional and trade organizations. We ensure small business' voice is heard at the policy-making table.

Reaching Out

TO MINORITIES

SBA offers special assistance to help minority-owned small businesses grow and thrive. We serve as the prime contractor for a share of all awards made by Federal agencies and subcontract that work to firms owned by socially and economically disadvantaged Americans. We provide management and technical assistance, such as business planning, accounting and marketing to socially and economically disadvantaged firms and firms located in areas of high unemployment. Specialized Small Business Investment Companies, which we license and regulate, are dedicated to providing venture capital to socially or economically disadvantaged small firms. We also provide loans to eligible minority-owned businesses.

TO WOMEN

Our national network of SBA offices offers potential and established women business owners a wide range of services and resources, including prebusiness workshops, technical information, credit conferences and programs that promote women business owners in Federal procurement. The Women's Entrepreneurial Training Network links new and long-term successful women business owners in ongoing mentoring relationships.

TO VETERANS

SBA makes special efforts to help veterans get into business or expand existing businesses through workshops, long-term entrepreneurial training, and personal guidance from veterans affairs specialists in SBA field offices. We also offer direct business loans to Vietnam-era and disabled veterans.

TO DISASTER VICTIMS

SBA helps meet the needs of victims of natural disasters, whenever the President or the SBA Administrator declares a "disaster area." We offer loans to businesses and homeowners to help them recover from uninsured disaster-incurred damages.

For a list of SBA publications and videotapes on starting and managing a small business, write: Small Business Directory, P.O. Box 1000, Ft. Worth, TX 76119.

Consult the "U.S. Government" section in your telephone directory for the SBA office nearest you or call: 1-800-U ASK SBA.

All of SBA's programs and services are extended to the public on a nondiscriminatory basis.

THE FACTS ABOUT . . . SCORE

The Program

SCORE, the Service Corps of Retired Executives, is a volunteer program of the U.S. Small Business Administration (SBA) that matches retired volunteers with small businesses that need expert advice. About 14,000 men and women business executives, whose collective experience spans the full range of American enterprise, share their management and technical expertise with present and prospective owners/managers of small businesses.

Executives who are still employed in the business sector are eligible for ACE (the Active Corps of Executives) memberships in SCORE.

Helping American small businesses to prosper has been SCORE's goal since the program began in 1964. SCORE volunteers are members of 390 locally organized, self-administered chapters offering services in more. than 700 locations throughout the United States, Puerto Rico and the U.S. Virgin Islands.

They work in or near their home communities to provide management counseling and training to small businesses and to those thinking about going into business. Every effort is made to match a client's needs with a counselor experienced in the appropriate line of business. The counseling is provided without charge, although there is a nominal fee for the training programs.

Assistance Offered

Through in-depth counseling and training, SCORE volunteers help business owners and managers identify basic management problems, determine the causes, and become better managers. SCORE counseling also can help successful firms review their distribution channels, evaluate expansion, modify products and meet other business challenges.

Management counseling takes place either at a client's business, at an SBA field office or a SCORE chapter location. Counselors analyze each business and its problems, and offer a plan to correct the trouble and help the owner through the critical period.

SCORE also offers "Pre-Business Workshops" as well as a variety of other workshops nationwide to present and prospective small business entrepreneurs. These workshops take place in local communities and provide a general overview of what it takes to start a business.

Eligibility

Almost any small independent business not dominant in its field can get help from SCORE. The approach is confidential and person-to-person. Business clients don't need to have an SBA loan to participate. In fact, they don't even need to have a business yet. Consultation and counseling before a business start-up is an important part of the service.

Additional Information

The SBA has a number of programs and services available. They include training and educational programs, advisory services, publications, financial programs and contract assistance. The Agency also offers specialized programs for women business owners, minorities, veterans, international trade and rural development.

The SBA has offices located around the country. For the one nearest you, consult the telephone directory under U.S. Government, or call the Small Business Answer Desk at 1-800-U ASK SBA.

All of SBA's programs and services are extended to the public on a nondiscriminatory basis.

ITEM 31. VETERANS AFFAIRS

November 16, 1992.

Dear Mr. Chairman: Thank you for your letter in which you request information for your committee's report, *Developments in Aging.*

I appreciate your special interest in this matter and will be back in touch with you in greater detail as soon as possible.

Sincerely yours,

ANTHONY J. PRINCIPI,
Acting Secretary.

NOTE: Information was not received prior to publication.

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