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Assistant Secretary for Planning and Evaluation
Office of Disability, Aging and Long-Term Care Policy

REPORT TO THE SECRETARY ON PRIVATE FINANCING OF LONG-TERM CARE FOR THE ELDERLY

November 1986

Office of the Assistant Secretary for Planning and Evaluation

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This report was prepared under contract between HHS's Office of Social Services Policy (now DALTCP) and the Brookings Institution. For additional information about this subject, you can visit the DALTCP home page at http://aspe.hhs.gov/_/office_specific/daltcp.cfm or contact the office at HHS/ASPE/DALTCP, Room 424E, H.H. Humphrey Building, 200 Independence Avenue, S.W., Washington, D.C. 20201. The e-mail address is: webmaster.DALTCP@hhs.gov. The Project Officer was Paul Gayer.

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Technical Work Group on Private Financing of Long-Term Care for the Elderly

November 1986

Prepared for
Office of the Assistant Secretary for Planning and Evaluation
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The opinions and views expressed in this report are those of the authors. They do not necessarily reflect the views of the Department of Health and Human Services, the contractor or any other funding organization.

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EXECUTIVE SUMMARY

INTRODUCTION

The economic welfare of older persons in 1986 is better than at any point in our history, and most older persons can expect their senior years to be healthy and independent. However, the next 50 years will see the number of people age 65 and over almost double as a proportion of the population--reaching over 21 percent in the year 2030. The number of very old--people age 85 and over--will almost quadruple. Since the incidence of chronic health problems and disabling conditions which require long-term care significantly increases with age, few believe that the current system of financing and delivering long-term care services is adequate for the challenge ahead.

The great majority of older persons who need long-term care receive the support they need from friends and family members. Nevertheless, in 1985 the Nation spent over \$35 billion a year on nursing home care, about 75 percent of that on the elderly. Nursing home care represents about 8 percent of total health care expenditures, and it is the leading cause of catastrophic out-of-pocket expenditures for the elderly. This is true for several reasons:

- The lifetime risk of needing nursing home care is between 20 and 45 percent. While only about half of those who enter nursing homes will stay over 90 days, for this subgroup the average stay is over two years. Despite the improved economic status of older persons, few can afford the high cost of an extended nursing home stay (averaging \$22,000 per year).
- Unlike acute health care, there is virtually no private insurance for long-term care. Consequently, there are only two significant sources of payments--out-of-pocket payments by the elderly and/or their families, and the Medicaid program.
- Although the Medicaid program provides public financing for nursing home care, it is a welfare-based system that does not provide assistance to individuals until all other financial resources have been consumed. Approximately half of all Medicaid recipients in nursing homes were not initially poor, but "spent down" their income and resources as a result of their nursing home stay.

On February 4, 1986, President Reagan directed the Secretary of the Department of Health and Human Services, Dr. Otis Bowen, to report to him by the end of the year on how Government and the private sector can work together to address catastrophic health care needs in the United States.

The purposes of this report are to:

- Describe the characteristics of elderly people who need long-term care and how these characteristics will change over time;
- Assess the potential of private financing mechanisms to lessen the catastrophic impact of nursing home and home care expenses which can wipe out individual and family savings; and
- Develop actions that would increase the availability and use of private financing mechanisms for the long-term care of older persons.

This report addresses only one critical part of the problem of long-term care, albeit a highly neglected part. The focus on private financing strategies is not to deny the very real needs of persons who must rely on public programs to provide their long-term care because they cannot afford private alternatives. Such persons are and will continue to be the legitimate concern of government.

However, Federal, State, and local governments are already significant partners in sharing the costs of long-term care--paying almost half of all costs through Medicaid and other programs. The direct, out-of-pocket resources of individuals pay almost all the rest. The protective mechanisms relied upon for other types of health care expenses, such as private insurance and charitable sources, pay less than 2 percent of costs. There need to be suitable, effective and widely available private financing mechanisms for the elderly who want to protect themselves at a reasonable cost against the high costs of long-term care.

The findings of this report are based on a review of the existing literature, as well as analyses undertaken specifically for this report.

For the purposes of this report, the terms "elderly" and "older persons" refer to persons aged 65 and older. It is recognized, however, that these terms do not adequately reflect the diversity of this population.

OVERVIEW

Long-Term Care and Catastrophic Expenses. Long-term care refers to a wide range of medical, health related, and social services for persons who, because of chronic mental or physical illness and disability, need personal assistance in caring for themselves over an extended period of time. While long-term care services can be provided in a variety of formal and informal settings, the majority of all long-term care is provided in the recipient's own home by family and friends.

A number of factors play a role in determining whether or not the need for long-term care will result in catastrophic expenses. These factors include: the severity of a person's disability; the type and duration of services needed; the living arrangements and the availability of family support; the source of payment (i.e., whether insurance or

government will pay for services or whether they must be paid out-of-pocket); and the level of personal resources (income and assets) that are available; and the cumulative financial effect of previous acute or chronic care expenses.

Most people who require long-term care do not experience a catastrophic financial burden. This is because the greatest portion of long-term care (71 percent) is provided in the home or community, rather than in the higher cost setting of a nursing home; and most home and community care (about 70 percent) is provided totally without payment by family members and friends. Among the disabled elderly living in the community who do receive some combination of formal (paid) and informal home and community care services, only a small percentage incur any significant out-of-pocket expense for their care.

High out-of-pocket expenditures for long-term care are most strongly associated with nursing home care. However, even when nursing home care is used, it is important to note that approximately one-half of those who enter a nursing home will stay less than 90 days, and about 38 percent will stay less than 30 days.

The Long-Term Care Population and Service Needs. Approximately five percent (1.4 million) of the 65 and over population resides in nursing homes. In addition, about 16 percent (4.6 million) of the elderly are disabled and living in the community. The great majority (3.7 million) of such disabled persons in the community need assistance because of limitations in what are termed "Activities of Daily Living (ADLs)": eating, using the toilet, mobility, bathing, and dressing. The rest have less severe limitations but need assistance with activities such as shopping, cooking and performing chores.

The number of older persons, and therefore the demand for long-term care, is expected to grow significantly in the future. In 1984, there were about 28 million persons age 65 or older in the U.S. By the year 2030, this number will grow to almost 65 million. In addition, the elderly population is itself becoming older. Between 1980 and 1990, the 75 to 84 year age group will increase twice as fast as the 65 to 75 year age group; and, in the subsequent two decades, the group 85 years and over will increase three to four times as fast as the general population. Since the likelihood of needing nursing home care increases with advancing age (as well as with being female, and with living alone), these demographic changes are likely to translate into significant increases in the demand for long-term care services.

Although it is difficult to estimate lifetime risks, most recent studies indicate that an individual's chance of spending some time in a nursing home during his or her life ranges between 20 and 45 percent. The average length of stay in a nursing home is estimated to be 456 days. However, the nursing home population is a mix of short-term stayers, i.e., terminally ill patients, convalescent or rehabilitative patients who return to the community, and long-term stayers, i.e., patients with chronic illnesses such as Alzheimer's disease, who often remain in a nursing home for many years.

If advances from medical research and changes in prevention and treatment do not decrease the proportion of the population that becomes disabled, the number of elderly in nursing homes is projected to grow to 1.6 million by 1990, 2.1 million in the year 2000, and 4.4 million in 2040. Similarly, the number of older persons with ADL limitations living in the community will rise to 4.2 million by 1990, 5.1 million by the year 2000, and 10.2 million by 2040.

Long-Term Care Expenditures. Total health care expenditures for persons aged 65 and older exceeded \$119 billion in 1984. The largest category was hospital care (45 percent), followed by nursing home care (21 percent). However, in terms of direct out-of-pocket expenditures, nursing home care constituted the largest single expense category for the elderly, accounting for about 42 percent of total out-of-pocket health care expenditures. In contrast, hospital care accounted for only 5.6 percent of total out-of-pocket payments.

Separate estimates of the cost of home and community care services for the long-term care of the elderly are not currently available. However, 1983 industry estimates put home care costs for the elderly in the approximate range of \$3.0 billion.

Institutional Long-Term Care. In 1984, \$32 billion were spent for nursing home care for persons of all ages, accounting for 8.3 percent of total national health expenditures. Detailed information for 1985 is not yet available, but preliminary estimates indicate that 1985 total nursing home expenditures were \$35.2 billion, about three-fourths of which was for nursing home services for the elderly. The 1984 nursing home care expenditures were almost equally divided between public and private sources. Approximately \$15.8 billion of the \$16.3 billion spent in 1984 from private sources was out-of-pocket; and \$13.9 billion of the \$15.7 billion spent in 1984 from public sources was spent by Medicaid.

Home Health and Community-Based Services. According to the 1982 Long-Term Care Survey, 1.1 million of 4.6 million disabled elderly living in the community received some formal services from paid caregivers. Of these, about 600,000 individuals (12 percent) were estimated to have paid for some of their home care directly out-of-pocket, with median expenses being \$40 a month and the average being \$164 per month. Approximately 10 percent of the persons who had any out-of-pocket expenditures (i.e., 60,000 persons), had payments for home care services of over \$400 per month.

Public Financing Programs. While personal, family and private charitable resources are an essential and often dominant element of the long-term care system, Federal, State and local government programs also have a major effect on the nature, availability and costs of such services. In addition to Medicaid and Medicare, long-term care services and/or support are provided by the Veterans Administration (VA), the Office of Human Development Services (OHDS), and numerous State and local programs.

THE IMPACT OF HEALTH, SOCIAL AND ECONOMIC TRENDS

Trends in Chronic Disease and Disability. The diseases which cause chronic disability are generally not those which lead to high mortality. About three-fourths of all disability is caused by dementia, arthritis, peripheral vascular disease, cerebrovascular disease and hip and other fractures. Conversely, the major killers, such as heart disease and cancer, cause less than two percent of chronic disability.

As mentioned previously, if current age-specific rates of disability continue, the number of disabled Americans with ADL limitations living in the community will grow from 3.7 million persons in 1984 to about 10.2 million persons in 2040. For example, with respect to Alzheimer's disease, it is estimated that perhaps only 1 percent of those under 65 have the disorder, while 15 percent of those over 85 are afflicted. In the absence of major treatment and prevention breakthroughs, the combination of chronic mental and physical disabilities will significantly increase the need for long-term care as the population ages.

Continuing technological advances may help to limit the impact of disabilities often associated with the need for long-term care services. Technological advances are currently under development in such areas as accident prevention, hip replacement, prevention of hearing loss, urinary incontinence devices, and assistance-summoning devices.

Societal Changes. In addition to increased longevity, several other societal factors also may affect the future demand for long-term care. Between 1960 and 1984, the proportion of noninstitutionalized elderly living alone has increased from 19 percent to 30 percent. The majority of these people are older women who have outlived their spouses.

The major source of long-term care support for these widowed elderly is their children. While the increase in childbearing occurring over the past decade is expected to continue in the short-term, when the baby boom generation nears age 65 (around the year 2010), fewer elderly women are likely to have children to care for them. Another factor which affects the availability of family care is the geographic proximity of the parent and child. Between the 1960s and the 1970s, the number of elderly moving from one State to another increased by 50 percent.

The willingness of adult children to provide support to their elderly parents is a major issue in projecting the need for formal long-term care. The increasing participation by women in the work force suggests that middle-aged daughters may have less time to provide assistance to their elderly parents. Nevertheless, the research that is available has found that middle-aged daughters who also work will make considerable personal sacrifice to care for elderly parents and that the commitment of young women to care for their parents remains strong.

Economic Status of the Elderly. The economic status of the elderly has improved dramatically over the past two decades. The proportion of elderly living below the poverty line has decreased from 25 percent to 12 percent. However, a significant number of the elderly are "near-poor" and are highly vulnerable to being poor. Poverty rates remain higher among elderly women, persons who live alone, the oldest old (85+) and minority populations, some of the very groups at highest risk for long-term care. In 1984, the average income of elderly families was \$26,000; for unrelated elderly individuals, average income was \$10,800.

Social Security benefits were the largest source of income for the elderly in 1984, averaging 37.6 percent of income for couples and 44.5 percent for individuals. Money from assets (savings, IRAs and stocks) was the second largest source of income for the elderly, averaging 27.6 percent for couples and 30.6 percent for individuals. Earnings and pensions also are significant sources of income for the elderly.

Home equity is the largest asset of older persons. In 1984, 75 percent of older persons owned their homes, and about 83 percent of this group owned them free and clear. The most recent figures from the U.S. Census indicate that the average home equity for persons aged 65 and over was \$54,700 in 1984.

ANALYSIS OF PRIVATE FINANCING MECHANISMS FOR LONG-TERM CARE OF THE ELDERLY

Although there are several ways in which individuals can use their private resources to protect against the high costs of long-term care, the existing options for private financing are neither well developed nor widely used. It is the underlying premise of this report that private financing options for long-term care can play a larger role in our society than is currently the case.

General Approaches to Private Financing. This report considers three basic approaches to the financing of care: cash accumulation, risk pooling and resource mobilization techniques. The strengths and weaknesses of various caregiver support strategies are also considered. Lastly, the report presents the results of special analyses which explore the potential of combinations of approaches.

Cash accumulation strategies refer to savings mechanisms that encourage individuals to increase the resources available for future long-term care needs. The principal cash accumulation strategy examined in this report is the long-term care Individual Medical Account (IMA), which would provide Federal or State tax advantages for savings deposited in accounts earmarked for long-term care expenses.

Risk Pooling refers to mechanisms which pool the resources of a large group of individuals at risk to pay for long-term care services which will be needed by a relatively small but unknown subset of the group. Three types of risk pooling mechanisms are examined:

- **Long-term care insurance**, which pools the premiums of a group of beneficiaries to cover the risk of needing extended nursing home care, intermediate care or home health services
- **Social health maintenance organizations (SHMOS)**, which use the pre-paid, capitated (i.e., set fee per person), case management approach of health maintenance organizations to provide long-term care benefits to groups of individuals
- **Continuing care retirement communities (CCRCs)**, which typically provide older persons with a package of benefits that includes residential, health, social and custodial services, in return for an entrance fee and monthly charges

Resource mobilization refers to financing mechanisms that enable individuals to convert non-liquid resources to cash, thus enhancing an individual's ability to pay for long-term care services. Two types of resource mobilization approaches are considered:

- **Home equity conversion (EEC) plans** allow a homeowner to convert the equity in a home into a stream of income without having to move or make immediate repayment.
- **Employee benefit options for retirees** refer to the addition of long-term care benefits as an option in the package of pension or health benefits offered employees.

Caregiver support strategies refer to mechanisms designed to strengthen and expand the existing informal network of long-term care provided by families in the home and in the community. This network is essential to the success of private financing mechanisms because home and community-based services usually are provided at no cost to the patient and because it keeps disabled older persons with their families, where most persons would prefer to be. Two types of caregiver support strategies are examined:

- Tax allowances for home care, which provide special tax credits, deductions, or cash subsidies to assist family members in providing home care services for an elderly dependent
- Volunteer systems, in which organizations and individuals assist others in providing unpaid long-term care services to older persons in the community

Combination financing approaches are designed to improve the effectiveness of one financing mechanism by blending its attractive features with that of another. This report analyzes the potential of a variety of combinations, including the development of long-term care IMAs that have a risk pool feature.

ANALYSIS OF SPECIFIC PRIVATE FINANCING MECHANISMS

Long-Term Care Individual Medical Accounts (IMAs)

A variety of proposals have been advanced which would permit individuals to establish tax-favored accounts dedicated, in whole or in part, to the purchase of long-term care health services. In May 1986, Colorado became the first State to enact legislation creating a tax-favored IMA and is in the process of implementing its planned program.

Because IMA proposals are new, analysts assessing the potential impact of various IMA proposals have used the Federal experience with Individual Retirement Accounts (IRAs) as a base for estimating the number of persons likely to establish an IMA if given an opportunity (i.e., the participation rate) and for estimating the amounts likely to be saved.

Although participation rates varied considerably by income level, only 15.4 percent of all tax returns showed a contribution to an IRA in 1984. About 9.5 percent of all taxpayer returns contributed the maximum tax-favored amount. The Treasury Department estimates revenue losses of \$14.4 billion in 1986 from IRAs, some of which will be recovered in later years as future withdrawals are taxed.

Most analysts consider the IRA participation and savings rates to be an upper limit on a voluntary IMA program. This is because IMA proposals place more restrictions on the use of funds by the saver and, therefore, are less flexible and less attractive to the public as a savings device. The financial incentives of IMA proposals will be altered by the tax reform legislation. The legislation affects deductions for medical expenses and IRA contributions, as well as overall rates of taxation.

A critical issue in considering IMA proposals is the amount a person must save to pay for future long-term care should it be needed. Individual savings must be sufficient to cover the high costs of nursing home care (which averaged \$22,000 in 1984). The problem is compounded by inflation rates, which are rising faster in the nursing home sector than in the general economy. A significant amount must be saved every year if a person wishes to accumulate sufficient funds to cover the average nursing home stay. Yet, the majority of persons are likely to need no paid long-term care services.

Because of this latter phenomenon, called "target inefficiency", IMA proposals which have a risk pooling dimension (such as that proposed by Bowen and Burke in Federation of American Hospitals Review, December 1985) are somewhat more promising. As discussed below, such combinations lower the amount individuals need to save.

Freestanding Long-Term Care Insurance

Freestanding long-term care insurance is insurance that provides payment for long-term care services in an institution or a person's home. The policy covers chronic care services needed for an extended period of time, rather than the acute, recuperative or rehabilitative care covered by Medicare and medigap policies. Beneficiaries are free to select their own provider within general qualifying guidelines.

The market for long-term care insurance is still in an early stage of development. According to the American Health Care Association, there were about 25 long-term care insurance products being sold in 1986, many of which were new entries into the market. Most policies have been sold on an individual rather than a group basis. Estimates of the total number of policies sold range from 50,000 to 300,000.

Although there is considerable diversity among the long-term care insurance products, all focus on nursing home care, with only limited (or no) custodial and home care benefits. Benefits are structured as indemnity plans, paying fixed amount per day (usually not indexed for inflation), with waiting periods before coverage begins and coverage from two to six years.

Products have traditionally been sold to persons of retirement age, although marketing for a few newer products has been expanded to earlier age groups. Premiums differ substantially among companies. According to a Money Magazine article that appeared in March 1986, a 65 year old person could pay from \$174 to \$1,451 for policies that cover differing ranges of skilled and custodial care.

The principal strengths of freestanding insurance as a mechanism for financing long-term care include: 1) long-term care insurance addresses the major cause of catastrophic expense among the elderly by focusing primarily on the nursing home risk; 2) long-term care insurance provides affordable protection for many individuals; and 3) long-term care insurance can potentially relieve upward cost pressures on Medicaid by slowing or eliminating the spend-down process for insured persons.

The weaknesses of the mechanism include: 1) existing products reinforce the bias toward institutional care, a bias that is both costly and contrary to the preference of most older persons for home care services; 2) the insurance does not provide complete catastrophic coverage and generally pays fixed benefits that can be eroded by inflation; 3) at present, the premium levels for complete coverage are higher than many older persons can afford; 4) the freestanding product, which separates long-term care from acute care, reduces the incentive to manage the total spectrum of care and leads to the marketing of two insurance products, with possible overlap and confusion for purchasers; and 5) marketing to individuals rather than groups raises premium costs and can more easily lead to adverse selection.

Research indicates that there is substantial room for growth in the long-term care insurance market. Two major studies have estimated the number of persons over age

65 who could afford long-term care insurance. One placed the number in the range of 4.7 million elderly, and the other placed the number in the range of about 7.0 million elderly. However, because neither study factored in the effects of inflation over time, the estimates may be high. Various linkages have been proposed to enhance the marketability of long-term care insurance including:

- **Medicare Super Supplements** that include both acute and long-term care benefits and create an opportunity to coordinate benefits
- **Medicare-HMOs** in which HMOs integrate an optional long-term care insurance package with their traditional acute care services for Medicare beneficiaries and provide appropriate case management for all services
- **Medicare Vouchers** under which Medicare beneficiaries would have the option of receiving a voucher covering the Medicare part of the cost of purchasing private insurance that not only covers Medicare acute care services but could include long-term care benefits
- **Retirement Community Reinsurance** with CCRCs establishing joint ventures with insurance carriers to underwrite the CCRCs' chronic care guarantee
- **Continuing Care at Home** models that enable participants to buy into a long-term care risk pool that has a managed care component
- **Combined Life and Long-Term Care Insurance** to balance different lifetime risks and encourage the purchase of long-term care protection at younger ages

Several States including Washington, California and Colorado, have initiated programs which help consumers select long-term care insurance protection. Developing an appropriate regulatory environment has been difficult for States because of the unfamiliarity of long-term care insurance, which combines features of both health and life insurance. Efforts to protect consumers have sometimes inadvertently worked to stifle the market. A recent study by the National Association of Insurance Commissioners may help clarify issues and serve as a basis for model laws and regulations.

Social Health Maintenance Organizations

A social health maintenance organization (SHMO) is a managed system of health and long-term care services in which a single provider entity assumes responsibility for a full range of acute and chronic care under a fixed budget that is prospectively determined. At present, development of the SHMO concept is highly experimental, being tested by the Health Care Financing Administration (HCFA) in four demonstrations that began operation in March 1985. The demonstrations, selected to represent different organizational possibilities, includes sites in Portland, Oregon; Brooklyn, New York; Minneapolis, Minnesota; and Long Beach, California.

The benefit package offered includes all Medicare benefits, plus a range of long-term care and other supplemental benefits. Copayments for long-term care services

are required and long-term care benefits are subject to annual dollar maximums which range from \$5,000 to \$12,000. The financing arrangements of the demonstrations vary but include capitated payments (which are pooled) from Medicare (for all enrollees), Medicaid (for eligibles) and private enrollees (for non-Medicaid enrollees).

Although SHMOs may have the potential of reaching a large target population, they are still in the early stages of development and can only be operated by explicit statutory waivers of existing program requirements. An independent evaluation of the SHMO demonstration program is being conducted by the University of California, San Francisco and will be completed in 1990.

Continuing Care Retirement Communities

The continuing care retirement community (CCRC) is a financially self-sufficient residential community for the elderly that offers medical and nursing services in specialized facilities. It is based on a lifetime contract between the CCRC and each resident that defines each party's financial and service obligations.

Ordinarily, one of the requirements for admission to a CCRC is that the resident be covered by Medicare and own a medigap insurance policy. As a consequence, nursing home care is the key service added and guaranteed as part of the basic CCRC arrangement. Most CCRCs have their own nursing home facilities within the community. Increasingly, however, CCRCs are contracting with outside facilities to provide needed nursing home care. CCRCs are also beginning to contract with private insurance companies to insure or reinsure nursing home services.

The number of CCRCs is relatively small, with estimates ranging from 300 to 400 communities, serving 100,000 to 200,000 persons. The industry is growing rapidly, with the potential of developing 1,500 more communities by 1990, housing a total of 500,000 persons or two percent of the older population.

Entrance fees range from \$15,000 to \$175,000, depending in part on the size of the residential unit and the extent of the health care services guaranteed. Monthly service fees range from \$300 to upwards of \$2,000. Some CCRCs offer contracts in which fees are totally or partially refundable to residents who leave or to their heirs upon death.

CCRCs have attracted the middle class almost exclusively, often former professionals with pensions. Research indicates that 10 to 20 percent of older persons could afford CCRC residence.

Many of the early CCRCs guaranteed total health care for life to residents and were known as "life care communities". Due to inflation, high interest rates and poor actuarial estimates, the costs of providing such guaranteed health care exceeded revenues and led to financial problems in a number of CCRCs, as well as to a few bankruptcies. Although the terms "life care community" and "CCRC" often are used

interchangeably, the newer CCRCs guarantee a more limited range of health care services, with additional services being billed separately.

A number of States have developed legislation aimed at defining life care communities, regulating contracts between communities and residents, and requiring financial disclosure. States without specific life care legislation often review requirements for nursing home beds to be built in CCRCs or implement other State health planning requirements. In addition, the American Association of Homes for the Aging, which represents the predominant non-profit sector, is developing rigorous accreditation standards to safeguard the quality and financial integrity of CCRCs.

Home Equity Conversion Plans

Home equity conversion (HEC) plans are designed to allow a homeowner to convert the equity in a home into a stream of income, without having to move or make immediate repayment. HEC plans differ from home equity loans, which require the homeowner to begin repayment immediately. The assets freed through the HEC plan can be used for any purpose, including the purchase of long-term care services. Although HEC plans have been available since 1961, in 1985 fewer than 1,000 bank or mortgage company financed HEC loans are thought to exist nationwide.

The equity held is usually the older persons most important financial asset, yet it may be difficult to use without having to sell and move from the home. Seventy-five percent (13.4 million) of households headed by older persons in 1984 were homeowners, and most (83 percent) owned their homes free of debt. According to the Census Bureau, the average home equity for persons aged 65 and over was \$54,700 in 1984. The aggregate home equity held by the elderly is estimated at \$700 billion.

There are three basic types of HEC plans in use. Open term reverse mortgages, the most common commercial type, pay monthly cash advances to the homeowner until he or she dies, reaches age 100 or moves. The effective annual interest rate for this type of mortgage depends on how long the borrower lives in the home and the home's rate of appreciation. In general, the interest rate is very high for loans repaid after a short term but tends to decline the longer the borrower is able to remain in the home.

The second type of HEC mechanism is the sale plan, which enables the owner to sell his home while retaining occupancy rights. The city of Buffalo, New York has been a major public developer of a life estate form of sale plan. Under Buffalo's program, elderly homeowners sell their house to a non-profit entity established by the city in return for a monthly cash annuity for life or lump sum payment. The entity also rehabilitates, maintains and pays the taxes on the house until the owner's death. Through 1985, the program had undertaken about 650 contracts.

Special purpose loans are a third type of HEC plan used by a number of States to provide older homeowners with low interest home equity loans that do not have to be repaid until the borrower dies or sells the home. As used to date, the loans have been

designed to help older persons remain in their homes, rather than to pay for long-term care expenses or insurance.

Research findings on the utility of HEC mechanisms for long-term care needs are mixed. One major study by researchers at ICF, Inc. concluded that annuities paid out by HEC plans are not sufficient to generate substantial increases in the number of elderly able to afford long-term care insurance. A study by Jacobs and Weissert in 1983, which adopted different assumptions, concluded that about 5.1 million homeowners could pay for insurance with their home equity payments. Preliminary analyses by Manton and Liu indicate that HEC payment levels would pay the out-of-pocket home care costs for a large number of disabled elderly.

From the point of view of financing long-term care, a major weakness of HEC mechanisms is that use of the funds is entirely discretionary (except special purpose HEC loans) and may not end up being used for long-term care expenses. In addition, the mortgage arrangements are complex for both lender and homeowner and older persons have demonstrated strong reluctance to borrow against their home.

Employee Benefit Options for Retirees

The addition of long-term care coverage as a option in the package of pension or health insurance benefits offered to retirees has been suggested as one approach to private financing of long-term care for the elderly. A majority of workers are covered by an employer-sponsored pension plan and a significant number of companies provide health insurance after retirement.

Few companies are now offering long-term care benefits. While there is some suggestion of corporate, employee and labor interest in changing this situation, major barriers exist and a combination of legal, accounting and statutory changes will probably be necessary before many companies will get involved.

The barriers to progress in this area are several. First, employers are increasingly concerned about their large and unfunded liabilities for retiree health and welfare benefits. Benefits are not only becoming a significant percent of payroll but, due to an accounting change under consideration, may soon be required to be disclosed as unfunded liabilities on the financial disclosure statement of companies. Adding to the reluctance to expand benefits are recent court rulings indicating that employers may not be permitted to terminate or cut back on any defined health benefit promised to retirees.

These factors combine to make employers wary of adding any new benefit for long-term care, where demand and costs are expected to grow substantially in the future, unless it is pre-funded. However, recent policy changes under the Deficit Reduction Act of 1984 eliminated the tax advantages of pre-funding retirement health benefits by subjecting investment earnings on retirement health plan assets to current income taxation.

Despite these very real problems, employers could develop long-term care insurance options for retirees. For example, insurance for long-term care could be provided by employers as an additional fringe benefit choice, or employers could simply help form a group so that interested employees could purchase insurance. In this regard, the Federal Government might well be in a position to provide leadership through its Federal Employees Health Benefits Program.

The principal immediate strength of employer-based groups for long-term care financing lies in its potential to expand the market for long-term care insurance. Insurance offered through employer groups would be likely to carry significantly lower premiums, since the risk of adverse selection and marketing costs are minimized in this approach.

Employers could also establish programs which help support employees caring for disabled family members or which help retirees obtain the services they need. A restructuring of pension payout plans to allow for lump sum withdrawals is another way of assisting retirees meet their long-term care expenses.

Tax Allowances for Family Caregiving

Currently, family caregivers provide most of the long-term assistance given to functionally disabled persons living in the community. Public policy support for family caregivers is advocated on the grounds that it can prevent costly institutionalization by reducing the incidence of family "burnout"; relieve the excessive financial and emotional burden on caregivers; and ease the conflicts between work and caregiving responsibilities.

Subject to a number of restrictions, current federal tax policy provides three tools for targeting subsidies to taxpayer households in which dependent elderly persons are living: 1) a \$1,000 exemption permitted for each elderly dependent supported by the taxpayer; 2) deductions for medical expenses of dependents if expenses exceed 7.5 percent of income; and 3) a tax credit given employed taxpayers for the care expenses of a disabled spouse or dependent, under the Child and Dependent Care Credit provisions of the current tax code.

None of these tools are widely used by taxpayers nor, as presently structured, are they considered very influential on a family's decisions about whether or not to institutionalize an elderly person. Social and emotional factors typically weigh more heavily than the financial burden in such decisions.

There are numerous Congressional proposals pending which propose further tax benefits for family caregivers. Most build on the child and dependent care credit and attempt to remove or reduce some of the limitations such as the requirement that all taxpayers in the household must be gainfully employed.

Some of the more substantial ideas for assisting family caregivers through the tax system have been developed by the States. Arizona has adopted an unusual variation which permits taxpayers to deduct eligible medical expenses for any elderly person, whether or not they are a relative, living in the State.

Tax subsidy approaches typically assist working caregivers, rather than persons who drop out of the workforce in order to provide another's care. The caregivers who leave or reduce their employment pay a price in foregone earnings and probably also in lower future earnings, both of which will lower his or her later Social Security benefits. To offset this, proposals have been put forward to allow family caregivers to deduct those years in which they provided care from the usual total earning period (35 years) mandated for other Social Security beneficiaries.

Family caregiving may also be assisted by changes in employment policies. More flexible work and leave policies, counseling programs and work-based caregiver support groups have started to attract the attention of business and other groups. A 1985 study by Traveler's Insurance Company found that about 1 in 5 of all company employees over aged 30 had caregiving responsibility for an elderly relative. Other research indicates that the conflict between work and caregiving responsibilities shows up in greater tardiness, lower productivity, and more depression.

Volunteer Systems and Service Exchange

Volunteer work is work or assistance performed without compensation except for expenses incidental to performing the volunteer role, such as supervision, training costs or assistance with transportation. Volunteerism is an important component of the Nation's public and private services systems. Surveys indicate that almost half of all Americans do some sort of volunteer work. Many of these volunteers are over age 65 and the number of older volunteers is expected to increase at twice the rate of growth for the older population itself.

Although many charitable organizations assist with the needs of the elderly, the continuum of long-term care is not a traditional focus for most organized volunteer services. In attempting to envision how volunteers can play an increasing role in meeting the long-term care needs of the dependent elderly, several principles emerge:

- Volunteer approaches will vary widely because they need to be developed and supported by individuals and community organizations to fit community needs.
- Volunteers serve to complement paid staff and cannot replace the specialized expertise of professional caregivers.
- Additional knowledge is needed to support the widespread involvement of volunteers in long-term care, e.g., to identify appropriate assignments and to strike a proper balance between paid staff and volunteers.

- Volunteer efforts cost time and money, especially those done well. While the value of volunteer efforts can far exceed operational costs, financial assistance is needed for coordination, training and other related costs.
- Future approaches need to build on existing organizations and systems, rather than create new ones. There are a number of volunteer programs providing services for the disabled elderly, with national, State and local sponsors.

Special Analysis of Individual Medical Accounts (IMAs). Long-Term Care Insurance and Combined Financing Strategies

In March 1986, the Department initiated a series of special analyses designed to assess the potential of IMAs, long-term care insurance and insurance combinations for protecting consumers against the expenses of nursing home care. A total of seven financing prototypes and scenarios were developed and their likely future impact on out-of-pocket and Medicaid expenditures was explored using economic simulations and projections up to the year 2018. The following approaches and scenarios were examined:

1. an expansion of the current limit on IRAs to include dedicated savings for long-term care;
2. replacement of current IRAs with IMAs;
3. long-term care insurance based on an existing private market policy;
4. IMAs combined with an insurance (i.e., risk pool) feature;
5. long-term care insurance on a wide scale, provided as an employee (pension) benefit;
6. limited coverage long-term care insurance purchased by medigap policyholders; and
7. varying coverage long-term care insurance, with premiums targeted to 1 percent of income.

It is emphasized that the work performed in developing these projections was highly experimental and the findings should be viewed accordingly.

The special analyses were limited to study of nursing home care expenditures only, primarily because nursing home care is the major cause of catastrophic health expenditures for the elderly. In addition, however, there are no national data on home care expenditures by source of payment to provide a reasonable base for prototype assumptions.

In order to assess the future impact of financing proposals, several prototypes were designed with specific features incorporated. Assumptions were made about who would participate, how much it would cost for what kind of coverage, and how factors such as inflation and induced demand would be factored. To the extent that these assumptions ultimately prove realistic, the simulation findings may be a valid approximation of the possibilities of each proposal.

It should be noted, however, that several of the prototypes and simulations were designed for exploratory purposes only and were not designed to test "realism". Rather, they were intended to give the researchers a general indication of the "upper bound", or maximum, limits of a particular approach. Further analysis of more realistic variations was undertaken only when the upper bound results showed promise.

The micro-simulation model used to estimate the impact of the various financing approaches was developed by the Brookings Institution and ICF, Incorporated. The model is based on data and assumptions that allow the user to estimate patterns of earnings, asset accumulation, and disability, and the effect of these factors on the utilization and financing of long-term care over the years 1986 to 2020. One significant limitation of the model is that it does not cover the likely peak disability Years of the "baby boom" generation born between 1945 and 1960. Some important simplifying assumptions included in the model are:

- Supply is assumed to adjust to demand. Trends in the supply of nursing home beds have been erratic and no readily available methods exist to forecast supply. This assumption is thought to be fairly reasonable for the long modeling period used;
- The findings discussed below assume a 5.8 percent per year increase in nursing home charges, the same as given in the Old Age Survivors and Disability Insurance and Health Insurance (OASDI and HI) Trustees Reports, Alternative II-B. The general inflation rate assumed is 4.0 percent per year, again the same estimate used in the OASDI and HI Trustees Report;
- The age-specific rates of utilization of nursing home services were held constant, with only minor adjustments to the 1977 data used to develop the rates.
- The model assumes that persons will first spend their current income for long-term care-then their assets, and finally will draw on Medicaid. No divestiture of assets to others to qualify for Medicaid is assumed.

The baseline estimates, which provide the basis for comparing the results of the options analyzed, project nursing home expenditures for the elderly as follows (in 1987 dollars):

Total 1986 expenditures	\$29.7 billion
Medicaid	\$12.9 billion
Out-of-pocket	\$16.1 billion
Total 2018 expenditures	\$98.1 billion
Medicaid	\$46.2 billion
Out-of-pocket	\$50.3 billion

FINDINGS OF THE SPECIAL ANALYSES

Expanded IRA Prototype Under this option, the tax-favored savings limit of current IRAs would be increased by \$1,000, raising the maximum contribution to \$3,000 for an individual and \$6,000 for a working couple.

- The additional \$1,000 is treated as an individual medical account for nursing home expenses;
- After age 65, funds may be withdrawn from the IRA to pay for nursing home expenses without payment of taxes. Withdrawals for other purposes would continue to be taxed at current marginal rate;
- The requirement that individuals begin withdrawals from their IRA savings by age 70 1/2 is removed and contributions are permitted indefinitely;
- It is assumed that all those who save the additional \$1,000 would leave it untouched until the need for long-term care arises, or until death;
- It is assumed that 90 percent of those who saved the maximum in 1983 would save to the new maximum of \$3,000.

Projected Impact

- Some IMA funds would be held by 28 percent of persons aged 65 and over by the year 2018;
- Additional IMA savings would pay for about 3.0 percent (\$2.9 billion) of total nursing home costs by 2018;
- Out-of-pocket spending would be reduced by 4.3 percent compared to the base case;
- Medicaid spending would be reduced by 1.3 percent.

Replacement IMA Prototype This prototype was developed as a gross "upper bound" model, to explore the possibilities of IMAs in the event that Congressional tax reform actions eliminate IRAs for those with pensions. It is considered useful only as an general order-of-magnitude probe.

- Assumes that IRAs are eliminated entirely;
- IMAs for long-term care would be established, with a maximum contribution of \$2,000 per year tax deduction;
- Assumes that everyone who currently participates in IRAs would contribute the same amount to an IMA;
- Tax treatment of contributions and earned interest is unchanged;
- The amounts saved would be tax free if used for long-term care purposes after age 65.

Projected Impact

- IMA savings would pay for 8.5 percent (\$8.4 billion) of total nursing home expenditures by the year 2018;
- Out-of-pocket expenditures would be reduced by 11.9 percent;
- Medicaid expenditures would be reduced by 3.9 percent.

Long-Term Care Insurance--Private Market Policy This option modeled a new policy recently issued by Fireman's Fund which offers 6 years of long-term care coverage, with an optional inflation-adjusted benefit. Other features include a 100 day deductible, \$50 per day benefit, and a three day prior hospitalization requirement. A very limited home benefit is included. The annual premium charged at age 65 is \$506.

- Persons were assumed to buy the insurance if they could afford it for less than 5 percent of their income and if they have \$10,000 or more in assets;
- It is assumed that, in 1986, persons aged 67 to 81 will purchase the policy. After 1986, policies will be purchased at age 67.
- No one who is disabled will be allowed to purchase the policy. Persons who become disabled will continue to hold the policy;
- Once a policy is purchased, coverage is continued as long as premiums are less than 7 percent of income and the person has \$10,000 in assets;
- Induced demand is reportedly factored into premiums but, due to proprietary considerations, the rate is not known.

Projected Impact

- About 23 percent of those age 65 and over would own the Fireman's Fund policy in the year 2018;
- About 7 percent of total nursing home expenditures would be paid by insurance by 2018;
- Out-of-pocket expenditures would decline by about 12 percent;
- Medicaid expenditures would decline by less than 2 percent.

IMA Combined with a Risk Pool (Insurance) Feature Under this option, a variation of the Bowen-Burke proposal, IMAs would be established with all contributions deposited into an individual account, along with one-half the interest earned. The other half of the interest is placed in a pooled fund and is used to pay a \$50 per day benefit to persons with long-term care needs who have exhausted their own account. All interest on the pooled fund remains in the pooled fund. Amounts remaining in the account at death go to the estate.

- It is assumed that 90 percent of all persons who contributed the IRA maximum in 1983 will contribute an additional sum to the IMA;
- Without an induced demand factor, the initial annual contribution necessary for a person age 40 would be \$943, and for a person age 60 would be \$2,628, over and above the IRA maximum.

- If induced demand is factored in (37 percent), the initial annual contribution necessary for a person age 40 would be \$1,497 and, for a person age 60 would be \$3,603, over and above the IRA maximum;
- The level of necessary contributions would rise at the rate of inflation, currently estimated at 5.8 percent for the nursing home sector;
- The level of contributions necessary to assure solvency of the pooled fund were calculated by the Department's Office of the Actuary;
- Contributions are waived while an individual is in a nursing home at age 65 or older.

Projected Impact

- About 29 percent of those age 65 and over would have a combination IMA account in 2018;
- Funds saved in the combination accounts would pay about 8 percent of total nursing home expenditures in 2018;
- Out-of-pocket expenses would be reduced about 11 percent;
- Medicaid expenditures would be reduced about 4 percent.

Long-Term Care Insurance Linked to Pension Benefits This scenario linking insurance to pension benefits was developed as a preliminary upper bound test of significantly broader-based participation than is now the case for long-term care insurance models. It is not considered 'realistic, in the near term because of the barriers to broadening pension benefits discussed earlier in the analysis.

- It was assumed that, beginning in 1987, all persons aged 65 and older who start to receive pension benefits of \$1,000 or more per year would receive a long-term care insurance policy. The policy would cover a 2 year nursing home stay, have a 90 day deductible period and pay \$50 per day in 1986 dollars for nursing home care;
- One half of the cost of the insurance is deducted from the pension;
- Induced demand is not factored into premium estimates.

Projected Impact

- Under these assumptions, about 35 percent of those age 65 and over would have a long-term care insurance policy in the year 2018;
- Insurance would pay about 11 percent of total nursing home expenditures in 2018;
- Out-of-pocket expenditures would decline by 11 percent;
- Medicaid expenditures would decline by nearly 8 percent.

Limited Coverage Long-Term Care Insurance Purchased by Medigap Policyholders This prototype investigated the impact of limited coverage long-term care insurance if purchased by persons who have already demonstrated a willingness to supplement their acute care coverage, i.e., medigap policyholders. Surveys indicate

that the percentage of older persons who purchased one or more medigap policies ranged from about 53 percent for persons just above the poverty level, to 77 percent for upper income groups.

- It is assumed that, beginning in 1987, persons aged 67 and over who had purchased a medigap policy, also purchased a 1 year long-term care insurance policy with a \$50 per day benefit and 90 day deductible;
- Induced demand is not factored into premiums.

Projected Impact

- About 55 percent of those aged 65 and over would have a one year policy in the year 2018;
- Insurance would pay about 18 percent of total nursing home care expenditures;
- Out-of-pocket expenditures would be reduced about 12 percent;
- Medicaid expenditures would be reduced about 18 percent.

Varying Coverage Long-Term Care Insurance with Premiums Targeted at 1 Percent of Income Assuming some long-term care insurance coverage might be better than no protection, this prototype simulates the impact of providing persons with varying levels of insurance, depending on what they could purchase with 1 percent of income.

- It is assumed that, beginning in 1987, persons age 30 and over purchase the maximum coverage available (1 to 6 years or unlimited) that costs no more than 1 percent of their income. Policies would pay \$50 per day benefit, with a 90 day deductible period;
- If premium exceeds 2 percent of income for three consecutive years while under age 65, the coverage is dropped by 2 years (or from no limit to 6 years);
- Persons aged 65 or over in 1987 are assumed to purchase the longest coverage that costs no more than 3 percent of income, if assets are \$10,000 or more. If premiums exceed 5 percent of income for three consecutive years, then the coverage is dropped by 2 years;
- Induced demand is not factored into premiums.

Projected Impact

- Under these assumptions, about 63 percent of those aged 65 and over would own an insurance policy in 2018;
- Insurance would pay about 17 percent of total nursing home expenditures in the year 2018;
- Out-of-pocket expenditures would decline by about 18 percent;
- Medicaid expenditures would decline by about 12 percent.

The Effect of-Induced Demand on Projected Impacts

Experience has shown that when the direct cost of a health service is reduced for a consumer, either due to lower costs or increased payment by a third party (insurance), demand for that health service increases. Although the decision to enter a nursing home is generally considered a 'last resort, decision, it is reasonable to assume that financial considerations play some role. Should nursing home insurance (public or private) become more widely available, the financial barriers will be reduced and entry into nursing homes will be facilitated. Utilization rates for nursing homes can be expected to rise.

The problem for researchers and insurance companies is, "What level of additional induced demand will be generated by widespread use of long-term care insurance mechanisms?" No reliable data are available for the precise determination of what the rate should be.

Most persons agree that induced demand in the nursing home sector will be less than has been the case with acute care, because of the biases against entering a nursing home. The level will also be affected by the broadness of the coverage offered, i.e., the cost to the consumer of using the policy. Factors such as up-front deductibles (elimination periods) and copayments (benefits may cover all or only part of the daily cost) can be expected to significantly affect the induced demand factor.

The factors used in this report are based on the expert judgement of the Office of the Actuary (Social Security Administration) and could arguably be more or less. Detail concerning the effect of induced demand on premiums or contributions is provided in the full report.

An example of the effect of induced demand can be seen by comparing the results of the last option cited above (Long-Term Care Insurance/Premiums Targeted at 1 Percent) with the projected impact of the same option when induced demand is factored at 11 percent. When induced demand is considered, overall expenditures for nursing home care increase by 2.3 percent. The amount of total nursing home expenditures paid by insurance is 15 percent, rather than 17 percent; out-of-pocket expenses are reduced by 14 percent, rather than 18 percent; and, Medicaid expenditures are reduced by about 9 percent, rather than 12 percent.

THE RELATIONSHIP OF MEDICAID TO PRIVATE FINANCING MECHANISMS

Medicaid was established in 1966 as a joint Federal-State program to provide medical assistance to certain groups of low-income individuals. About half of total Medicaid expenditures in 1984 were for long-term care, including skilled, intermediate, home care, and mental health services as well as services for the mentally retarded.

Medicaid is a welfare-based system. Medicaid eligibles include the low-income aged, the blind, the disabled and those eligible for Aid to Families with Dependent Children (AFDC). States may also cover benefits for "medically needy" individuals and nursing home residents with incomes up to 300 percent of the Supplementary Security Income (SSI) payment level.

There has been some concern that Medicaid acts as a disincentive to the purchase of private protection. The issue has two related aspects: that because Medicaid is available, people will not give serious attention to long-term care insurance and other privately financed protection; and that people with resources will "game" the system by passing their assets along to others or protecting them in a trust, thus becoming eligible for Medicaid benefits.

A recent critique of these issues concludes that these concerns may be considerably overemphasized. The analysis presented in Chapter 4 of the report suggests that while incentives for people to alter their behavior to qualify for State-supported benefits do exist, it is not at all clear that significant numbers of people are responsive to such incentives.

First, the public's understanding of how long-term care is paid for and what coverage people actually have is very poor. A recent national survey of members of the American Association of Retired Persons revealed that 79 percent of those who expected at some point to have an extended nursing home stay, thought that Medicare would pay for all or part of this care. About one-third of those with private medigap insurance coverage incorrectly believed that their policies would cover extended nursing home care.

A second consideration in evaluating Medicaid's impact on private financing mechanisms is evidence that middle-class people are generally not disposed to rely on a welfare-based program for long-term care expenses. For example, a recent study by the National Center for Health Services Research of 4,000 older persons in six states found that only 19 percent said they would not purchase long-term care insurance because they viewed Medicaid and other welfare coverage as adequate.

The degree to which the elderly are aware of and willing to use methods of circumventing Medicaid's asset restrictions is also unknown. However, asset protection requires considerable advance planning and an awareness of Medicaid eligibility rules and, in general, is both difficult and expensive to accomplish.

The considerations mentioned above suggest that Medicaid is not currently a significant barrier to private financing of long-term care. However, this does not preclude the possibility that changes in Medicaid could have a positive impact on private financing mechanisms. As a consequence the report describes, but takes no position on the merits of, several approaches which would make it more difficult for persons who can afford to pay for their own long-term care costs to become eligible for Medicaid. These proposals would:

- Severely restrict Medicaid eligibility to prevent persons from qualifying for Medicaid benefits if they could once have afforded to provide for long-term care insurance in a prior period;
- Permit States to require spouses of Medicaid recipients to contribute to the cost of their spouse's care;
- Allow States greater flexibility in use of liens imposed on recipients, property before death; and
- Require States to restrict Medicaid eligibility of people with assets sheltered in trusts.

Another approach currently receiving some attention (but not advocated by the report) would waive Medicaid spend-down requirements for persons who financed their own care for a fixed period, e.g., one or two years. Medicaid would pay for the full costs after the consumer paid the front-end long-term care costs. The point of this would be to increase the marketability of private financing strategies such as insurance.

This approach would build on the fact that there is a significant effect on the affordability of insurance premiums when the period of coverage is limited. For example, a two year, \$50 a day nursing home policy purchased at age 65 costs approximately \$650 per year. A lifetime policy (no limit on nursing home coverage) purchased at the same age would cost about \$1400.

One critical issue is whether the increased affordability of a limited nursing home policy, in combination with waiving spend-down, would expand participation under an insurance option enough to offset the drain on Medicaid. The intuitive answer is that it would not. The analyses done to date suggest that the people who would purchase long-term care insurance are not the people who end up on Medicaid. Therefore, picking up the Medicaid costs for everyone at the end of one or two years would end up increasing Medicaid costs over current projections. If one factors-in induced demand, the problem for Medicaid is worse.

Another major problem with this proposal is the issue of equity. Persons at higher income levels who could afford insurance would have their assets protected. Persons at lower income levels who could not afford insurance would lose everything. In essence, such a proposal would create a new Federal long-term care benefit, but only for those who are already well-off.

CONCLUSIONS

Federal, State and local governments pay almost half the costs of long-term care services received by older persons in the United States. Almost all the rest is paid directly by individuals or families who are largely unprotected by insurance or other types of mechanisms that shield the individual from catastrophic health expenses. It is evident that the vast majority of older Americans would greatly benefit if suitable and

effective private financing mechanisms for long-term care were more widely available, at a reasonable cost.

This report has analyzed the feasibility and effectiveness of a broad range of private financing strategies which can assist persons in paying for long-term care. Of particular interest has been the extent to which these strategies can be expected to attract broad participation and help limit the out-of-pocket expenditures for individuals.

Clearly, the private financing strategies discussed in this report cannot solve all of the problems associated with catastrophic long-term care costs, especially for those at the low end of the income scale. There will continue to be a need, regardless of the potential of private solutions, for a public role in assisting people who need formal long-term care services and who cannot afford private means of protection. Further, there will continue to be a need to assist those individuals and families who, despite advance planning and private financial protection, encounter long-term care expenses that are well beyond ordinary means.

Nevertheless, private financing mechanisms can help a substantial number of individuals protect themselves and their families against the high costs of nursing home and other long-term care expenses. However, these options for private financing are neither well-developed nor widely known. This report is intended to serve as both a summary of what is presently known about the need for and costs of long-term care, as well as to promote a better understanding of the potential of private financing mechanisms and of how their use might be further developed.

The report has determined that the potential for expanding private financing mechanisms is significant and should be carefully nurtured. The analysis has demonstrated the potential of private mechanisms. However, the analysis also indicates that, while the economic status of the elderly is improving, one of the central problems in realizing the potential is the affordability of the private financing approaches.

The report also stresses that the great majority of elderly will not require extended nursing home stays during their lifetime. Those that do, encounter expenses that can easily deplete the savings of a lifetime. The challenge to private financing mechanisms is to bring the cost of protection within the means of a wider segment of the older population. This will enable the elderly to translate their resources into protection from financial ruin.

Analysis suggests that several of the options could provide protection to large numbers of the elderly, especially those in the middle and upper income ranges. Private long-term care insurance and combinations of insurance and other mechanisms show the greatest promise. In particular, insurance combined with alternate delivery approaches (e.g., CCRCs and SHMOs) and with supportive funding sources (e.g., IMAs and HECs), offer the opportunity to mass market insurance and to reduce concerns over adverse selection.

The report also indicates that, for the older persons who can afford the regular monthly fees, CCRCs provide an appealing alternative. Other mechanisms such as SHMOs are exciting in concept, but are just too new for analysts to assess with confidence.

Family and community-based care are the bulwark of the long-term care system. Even though most research suggests that the addition of home care does not significantly deter nursing home use, the informal care network should be encouraged and supported because it is humane and reflects what most of the elderly and their families desire.

The report suggests that volunteers represent an under-utilized resource for long-term care that could provide valuable services to elderly disabled and their families. Volunteerism is an important component of the Nation's public and private service system.

The report's focus on long-term care tends to isolate the discussion from the other essential components of care. In the judgement of many, the greatest potential for creating savings in total health care expenditures, as well as for fostering improvements in the appropriateness and satisfaction in care rendered, is in development of health systems which encourage a comprehensive approach to care. For this reason, special attention is drawn in the report to those private financing mechanisms which foster a comprehensive care approach.

Foremost in promoting the expansion of any of these mechanisms is the need for consumer education. This report has cited surveys which clearly demonstrate that older persons do not fully appreciate their vulnerability with respect to catastrophic nursing home care costs. They do not recognize that nursing home costs, not hospital or physician costs, constitute the highest out-of-pocket expenditure for persons over age 65. Nor do older persons understand that neither Medicare nor private supplemental insurance offers much coverage in this regard. Once these facts are widely appreciated, then the opportunity for achieving the potential of any of the private financing approaches is significantly enhanced.

Governments can continue to assist the process through further research and development and by helping to educate the public as to both risks and options. Flexible regulatory policies and close collaboration among all levels of government and the private sector are also essential.

Private options are not certain to have a large impact in the immediate future. They are only now emerging, mostly on a trial basis, and they have not begun to touch the lives of most of the population at risk for having long-term care needs. Yet, their potential for expansion is significant and should be carefully nurtured.

CHAPTER 1. INTRODUCTION

A. BACKGROUND OF THE REPORT

In the middle of this century, aging policy was dominated by issues of poverty and economic disadvantage. The concern was well founded, for in the 1950s over a third of older persons had incomes below the poverty line. However, as America moves toward the 21st century, the economic well-being of the average older person is improving dramatically.

Since 1981, the poverty rate for people over the age of 65 has been less than the poverty rate for the general population. This strengthened economic security comes at a point in our history when the aging policy debate is shifting emphatically to concerns about how the health and long-term care needs of a rapidly growing elderly population can best be met.

Within 50 years, the number of people age 65 and over will more than double. The number of people living to age 85 or over will almost quadruple from 2.2 million in 1980 to 8.6 million by 2030.

The majority of these older people can expect most of their senior years to be healthy and independent ones. Nonetheless, the incidence of acute medical problems and chronic disabling conditions which require long-term care increases with age. For example, about 90 percent of nursing home residents are elderly and almost one-quarter of persons over the age of 85 are institutionalized.

This situation foreshadows sizeable increases in the need for long-term care and points the way towards a new policy challenge. The current system of financing and delivering long-term care services is strained. The system is heavily oriented toward institutional care, yet the vast majority of elderly people who need long-term care prefer to remain in their own homes. It is expensive--the Nation's nursing home bill has soared to over \$35 billion a year and is projected to reach \$56 billion by 1990. It can be dehumanizing when it results in the impoverishment of middle income people who cannot afford the average cost of \$22,000 a year that nursing homes now charge private pay patients.

The cost of long-term care is borne almost entirely by patients and their families or by Medicaid. Unlike the financing for acute care, there is almost no participation by the private sector in long-term care financing. As a result, individuals wishing to plan to meet their own long-term care needs have very limited options.

Clearly, it is time for new directions. On February 4, 1986, President Ronald Reagan directed the Secretary of the Department of Health and Human Services, Dr. Otis Bowen, to examine catastrophic health care needs in the United States and to

report to him by the end of the year on how government and the private sector can work together to address this problem. Long-term care is a major portion of this effort because it is considered the leading cause of catastrophic health care expense in those age 65 and above.

In keeping within the general mandate, this report focuses upon private financing strategies to help ameliorate the high public and out-of-pocket costs resulting from the current long-term care system. The report has three objectives:

- To describe the characteristics of elderly people who need long-term care and how these characteristics will change over time;
- To assess the potential of private financing mechanisms to lessen the catastrophic impact of nursing home and home care expenses that can wipe out individual and family savings; and
- To develop actions that would increase the availability and use of private financing mechanisms for the long-term care of older persons.

Because the elderly population, particularly the very old, is by far the largest population group that is truly vulnerable to the need for long-term care, the scope of this report is limited to private financing of the elderly's long-term care needs. Other parts of the catastrophic initiative address the long-term care needs of the nonelderly, with special emphasis on younger sub-populations (e.g., developmentally disabled persons, the mentally retarded, and the chronically mentally ill).

For purposes of this report, the terms "elderly" and "older persons" refer to those individuals who are age 65 and above. It is recognized, however, that these terms do not adequately reflect the diversity of this population.

B. STRUCTURE OF THE REPORT

The report is organized as follows:

- Following this introductory chapter, chapter two provides an overview of the elderly population which needs long-term care and the characteristics of the current long-term care delivery system--including its structure, costs, and financing. A discussion of health status, social and economic trends and their potential impact on the future need for long-term care is included.
- Chapter three evaluates the potential, now and in the future, of a variety of private long-term care financing approaches, including their feasibility, affordability, and marketability, and the extent to which they might have an impact on the catastrophic costs of long-term care now borne by individual consumers and Federal and State Governments.

- Chapter four discusses the central role of the Medicaid program in public long-term care financing, how it is perceived to affect the growth of private financing mechanisms, and possible modifications for encouraging greater private sector participation in long-term care financing.

CHAPTER 2. AN OVERVIEW OF LONG-TERM CARE

A. LONG-TERM CARE AND CATASTROPHIC COSTS

Long-term care refers to a wide range of medical, health-related, and social services for persons who, because of chronic illness or disability, need personal assistance in caring for themselves over an extended period of time (Doty, Liu and Weiner, 1985). The cause of the chronic illness or disability may be physical or mental, or both.

Long-term care services are provided in a variety of settings--in hospitals, nursing homes, and in a person's own residence. They can also be provided either formally--by individuals or agencies paid for their services--or informally--by relatives and friends who are not paid. In fact, about 70 percent of all long-term care in the community is provided voluntarily by family members and friends (Liu, Manton and Liu, 1985).

Even though long-term care has been acknowledged as the leading cause of catastrophic expenses among the elderly (CBO, 1977), the majority of people who experience long-term care needs do not experience catastrophic expenses. Thus, the need for long-term care does not inherently lead to catastrophic expenses. Whether or not it does depends on a variety of factors that are often interrelated. These factors include: the degree of impairment; living arrangements and family supports; the type and duration of services and the setting in which it is provided; the source of payment; the availability of out-of-pocket resources; and the cumulative financial effect of previous illness.

Degree of Impairment. Most people, as they age, will acquire one or more chronic diseases and experience some decline in their ability to perform daily tasks. In many cases, this can be accommodated by simple and relatively inexpensive life style adjustments (e.g., the use of memory jogging techniques) or neighborly assistance (e.g., help with snow shoveling). At the other extreme are those persons who, because of physical and mental disabilities, are totally dependent in their basic personal care, such as eating and using the toilet. Such dependency is associated with high expense levels or extraordinary family or voluntary agency support or both.

Living Arrangements and Family Support. Two individuals with identical limitations in their capacity for self-care may require very different amounts of paid assistance depending on the availability and capacity of their informal caregiving network of family and friends. Most care provided to impaired older people who live in the community comes from this informal network. Even a moderately impaired person, who lives alone without family members or friends nearby, must either purchase care or receive assistance from other formal systems (e.g., community programs).

The Type and Duration of Services and the Setting in which it is Provided. There is tremendous variation in the costs of long-term care services, depending on the type, duration, and setting of services required. For example, supervision and companionship are less costly than skilled nursing care when the latter is not the primary need. In-home care is generally less costly than nursing home care unless 24-hour supervision is required.

A relatively small proportion of out-of-pocket expenditures for long-term care is used to purchase community services. High out-of-pocket expenditures for long-term care are most often the result of the purchase of nursing home care. However, nursing home stays are not inherently catastrophic since estimates show that a large proportion (38 percent) of nursing home admissions include short-term stays of 30 days or less (Liu and Manton, 1983).

Source of Payment and the Availability of Out-of-Pocket Resources. If private insurance or government pays the bill, the patient avoids most out-of-pocket expenses, although total costs may be higher because cost-saving activities may not be undertaken. Income and assets, including equity in a home, provide the resources with which individuals pay their long-term care bills. The level of these resources, as well as the flexibility with which they can be accessed, are important considerations.

Cumulative Financial Effect of Previous Illness. Long-term care typically becomes costly to the individual when it involves extended need for services. Long-term care services may not be especially costly in themselves, but they are beyond the normal expenses of daily living and their cumulative effect may result in a catastrophic expense. Such expenses may often occur following, or in conjunction with, a series of acute care episodes in hospital and outpatient settings. The expenses associated with acute care may have already eroded the patient's resources and hastened the point at which long-term care expenses become catastrophic.

Elsewhere in this report, the range of costs (total and out-of-pocket) associated with long-term care are described, both alone and in relation to various approaches to private financing. The range of costs and approaches, overlaid upon the factors outlined in this section, means there are many possible ways to define (and also ameliorate) catastrophic expenses for long-term care.

B. THE LONG-TERM CARE POPULATION AND ITS SERVICE NEEDS

The need for long-term care is difficult to estimate. It is not necessarily identified with any particular medical diagnosis because the mere Existence of a chronic condition does not mean that a person cannot adequately care for himself or herself. For example, one half of the noninstitutionalized elderly population has one or more chronic conditions or impairments, yet the majority of these people manage with little or no

assistance. As a result, an individual's need for long-term care is defined by the prevalence of major activity limitations which may result from chronic conditions, be they physical or mental.

Of the elderly living in the community in 1984, about 16 percent (4.6 million) have a need for assistance due to one or more activity limitations. About 3.7 million have limitations in Activities necessary for Daily Living (ADL) (eating, using the toilet, mobility, bathing, and dressing). Another 900,000 individuals have limitations in Instrumental Activities necessary for Daily Living (shopping, cooking, performing chores). Finally, an additional five percent of the elderly (about 1.4 million) reside in nursing homes and are assumed to have one or more ADL limitations (Manton and Liu, 1984).

The prevalence of activity limitations which require assistance dramatically increases with age. For example, only 2.6 percent of persons aged 65-74 need assistance with personal care, compared with 31.6 percent of those 85 years of age and over (HCFA, 1981). Among those aged 85 and over living in the community, 43.8 percent of the women and 31.0 percent of the men need daily help from another person.

C. GROWTH OF THE ELDERLY POPULATION AND THE DEMAND FOR LONG-TERM CARE SERVICES

The number of older persons, and therefore the demand for long-term care, is expected to grow significantly in the future.

The population aged 65 and above increased more rapidly from 1950 to 1980 than the U.S. population as a whole. As shown in Table 2-1, the elderly population doubled from 12.3 million persons in 1950 (8.1 percent of the U.S. population) to 25.5 million persons in 1980 (11.3 percent of the U.S. population).

In 1984, there were about 28 million persons age 65 or older in the U.S. By the year 2030, this number should more than double to about 64.6 million, and those over 65 and over will be about 21.2 percent of the population.

Perhaps more importantly, the elderly population is itself becoming older (Table 2-2). Between 1950 and 1980, the population 75 years of age or over--those most at risk of chronic disease, disability, and institutionalization in a nursing home--increased more rapidly than the population 65 to 74 years of age. Between 1980 and 1990, the 65 to 74 age group will increase by 13.8 percent, while the 75 to 84 age group will increase by 26.6 percent and the group 85 years and older will increase by 20.1 percent. In the subsequent two decades, 1990 to 2010, the group 85 years of age or over will increase three to four times as fast as the general population.

These projections have the potential to translate into major increases in the demand for long-term care. By 1990, about 4.2 million older Americans living in the community are projected to have one or more ADL limitations, assuming current age

and sex adjusted rates (Table 2-3). By the year 2000, the number is expected to increase to 5.1 million, and by 2040, the number is projected to grow to 10.2 million elderly (Manton and Liu, 1984).

Similarly, the elderly nursing home population is projected to grow to 1.6 million by 1990, to 2.1 million by the year 2000, and to 4.4 million by the year 2040 (Manton and Liu, 1984) (Table 2-3).

D. CHARACTERISTICS OF THE LONG-TERM CARE SERVICES SYSTEM

Long-term care services are extremely heterogeneous. The information below illustrates the range of institutional, community-based, and informal services used by the long-term care population, as well as how many and what types of impaired older people used particular services.

1. Institutional Care

Long-term care institutions include:

- Nursing homes (primarily skilled nursing and intermediate care facilities);
- Institutions for the mentally retarded (including intermediate care facilities for the mentally retarded and private community-based residences); and
- Residential care facilities (e.g., board and care homes, personal care homes, domiciliary care facilities) and long-stay hospitals (including psychiatric hospitals).

Because the utilization of nursing homes is more likely to be associated with catastrophic long-term care costs for the elderly, this report focuses on this type of long-term care institution.

In 1984, about 1.4 million Americans who were age 65 years and older were residents of nursing homes. At any given time, estimates from the 1977 National Nursing Home Survey indicate that about 5 percent of the elderly are in nursing homes; in any given year about 8 percent of the elderly are estimated to experience a nursing home stay. Compared to other industrialized nations, the U.S. has among the lowest long-term care institutionalization rates for the elderly (Doty, in press).

The risk at age 65 of ever entering a nursing home during the remainder of one's life (i.e., the lifetime risk) is difficult to estimate. Studies suggest that the lifetime risk may range from 20-45 percent (LaPorte and Rubin, 1979; McConnel, 1984; Cohen et al., 1986); however, this range combines individuals with short nursing home stays (about 50 percent of residents) and those with lengthy stays of greater than 90 days. (The figures on length of nursing home stays are discussed in more detail later in this section.)

According to the 1977 National Nursing Home Survey, the median age of nursing home residents was 81 years. Ninety two percent of residents were white, and this figure reflects the overall proportion of whites in the elderly population. About 71 percent were female. Sixty-two percent were widowed, 19 percent were never married, 12 percent were married, and about 7 percent were divorced or separated. (Results of the 1985 National Nursing Home Survey were not available at the time this report was prepared).

These data indicate that advancing age, being female, and lacking a spouse are strongly associated with institutionalization. These are, of course, not separate categories since women have longer life expectancies than men and, thus, are overrepresented among those of advancing age and without spouses. Other major variables associated with institutionalization include: mental and cognitive disorders (such as dementia) and severe functional dependencies (especially the need for assistance with using the toilet, eating, or incontinence).

However, it is important to note that, at present, there is limited information on the characteristics of persons at the point they enter nursing homes. Consequently, it has proven extremely difficult to predict which people with the above types of characteristics will actually enter nursing homes and which will remain in the community. While the institutionalized population is generally more disabled than dependent persons living in the community, for every nursing home resident there are estimated to be two times as many people living in the community with similar care needs (GAO, 1979; Shanahan, 1979; Soldo, 1983).

According to the 1977 National Nursing Home Survey, about one-third of elderly nursing home residents entered the nursing home directly following an acute hospital stay. There is some evidence (Harkins, 1985) that institutionalization is more likely when moderate to heavy long-term care needs develop as the result of an acute condition creating a sudden, sharp drop in functional ability rather than a slow decline in functioning. This may be because the family does not have time to develop or adjust its capacities to provide informal support to a previously independent or only mildly impaired elderly person who suddenly requires extensive support.

A recent analysis of data from the 1982 Long-Term Care Survey of the noninstitutionalized disabled elderly living in the community (Soldo and Manton, 1985) found that those who had applied for nursing home entry and were awaiting a vacancy differed significantly from those not seeking nursing home placement. The distinguishing features were their greater likelihood of previous nursing home stays, hospital use during the previous 12 months, extreme ADL dependency, having more than one caregiver, and use of paid providers to supplement informal caregiving.

Another study among persons being screened for nursing home admission examined the factors precipitating family decisions to stop providing home care and seek institutional placement (Arling and McAuley, 1983). Those being screened were

all currently residing in the community and would require public financing either immediately or within three months of nursing home entry.

In 68 percent of the cases in which institutional placement was deemed appropriate, family members cited a decline in the older person's health as the primary reason for placement, and as the second most important reason in 18 percent of cases. Changes in the informal support system causing a reduced capacity for care were cited as the most important reason by 20 percent and the second most important reason by 28 percent. The next most frequently cited reasons were a physician's recommendation, followed by concern about the elderly person's ability to live independently (only 19 percent of those applying for nursing home entry were living alone). Financial considerations were cited by only four percent of family members and then only as the second most important reason for seeking placement.

Based on a "simulated" cohort of nursing home admissions from the 1977 National Nursing Home Survey, the average length of stay in nursing homes is estimated at 456 days (Liu and Manton, 1984). However, this estimated average masks important differences in the mix of the nursing home population.

About 52 percent of the admissions had stays of less than 90 days, and only 18 percent stayed for two years or longer. About 46 percent of those who stayed less than 30 days were discharged to the community, compared to 8 percent of those who stayed more than one year. The expected length of stay for those already in for 90 days was 831 days. These estimates illustrate the mix of the nursing home population among long-term residents, the terminally ill, and those individuals in the nursing home for relatively short periods of convalescence.

As noted earlier, institutionalization rates increase dramatically with age. In the 1977 National Nursing Home Survey, only two percent of the elderly 65 to 74 years of age were in nursing homes, compared to six percent of the elderly 75 to 84 years of age and 23 percent of those 85 years of age and older. Only 24 percent of the elderly 65 to 84 years of age with ADL dependency resides in institutions, but by 85 years of age, 61 percent of those with ADL dependency are in nursing homes.

Although nursing home use rates have increased greatly over the past 35 years, overall institutionalization rates for the elderly (including mental hospitals and non-medical homes for the aged) have not increased except among the very old (80 and older, particularly persons 85 and older).

Two factors are generally believed to be responsible for the rising rates of institutionalization among the elderly who are 80 and older. First, advances in medical science have increased the survival rates of individuals who have severe chronic disease and disability. Second, elderly women suffer from more chronic illness and disability than men (Verbrugge, 1984) and are overrepresented in the 80 and older group. This overrepresentation is due to differences in longevity between men and

women (e.g., as of 1977, white females aged 65 could anticipate on average another 18.5 years of life as compared to 13.9 years for white males).

2. Home and Community Based Care

While 29 percent of the elderly long-term care population resides in an institutional setting (e.g., nursing homes), 71 percent resides in the community (Doty, 1986a). Thus, the vast majority of impaired older persons receive all of their care in the community.

According to the 1982 Long-Term Care Survey, 11 percent of these disabled elderly persons lived alone, 39.5 percent lived with their spouses only, 36 percent lived with their children, and 14 percent lived in other arrangements. In addition, about 60 percent were female and 40 percent were male; 51 percent were married; 41 percent were widowed; and the remainder were divorced, separated, or never married. Approximately 33 percent of the disabled elderly living in the community were poor, 62 percent low to middle income, and 5 percent high income. Their mean age was 78 years (Stone, Cafferata and Sangl, 1986).

The long-term care services received by this community population can be roughly divided between formal services furnished by paid providers and informal services provided by family and friends.

Formal sources of care (paid providers) provide a small minority of the home and community-based long-term care services used by' the functionally disabled elderly. In 1982, formal services accounted for less than 15 percent of all "helper days of care" in the community (Table 2-4) (Liu and Manton, 1984). Only a small minority (9 percent in the 1979 Health Interview Survey, 5 percent in the 1982 Long-Term Care Survey) receive all their care from paid providers. The remainder receive all of their care informally or through some combination of formal and informal services.

Home and community-based long-term care is generally thought of as encompassing the following types of services: service-enriched sheltered housing; home-delivered professional nursing and therapy services; non-professional home health aide and personal care services; homemaker/chore services; day-care for the elderly or mentally ill; habilitation services for the mentally retarded or developmentally disabled; home delivered and congregate meals; case management, assessment, and referral services; home adaptations; transportation; friendly visiting; and surveillance services.

Service-Enriched Sheltered Housing. Often referred to as "congregate care," this type of service is typified by apartment-style dwelling specially designed to accommodate the functionally impaired elderly. Often such housing has a common dining facility where residents are expected to take at least one meal per day. Individual units are typically equipped with special devices which make it easy for the elderly to call for help if needed. Additional services such as laundry, housekeeping assistance,

and personal care or nursing services may or may not be available. Service-enriched sheltered housing for the elderly is much more common in certain European countries (Great Britain, the Netherlands, Sweden) than it is in the United States.

Professional Home-Delivered Nursing and Therapy Services. This includes visits to the home by licensed (RN or LPN) nurses, physical, occupational, or speech therapists, and medical social workers. These services are reimbursable under Medicare so long as the beneficiary is determined to require "skilled nursing care" as defined under Medicare's coverage rules. Since the need for skilled care is usually part of an acute illness, this kind of Medicare-financed service is generally inapplicable to those with long-term care needs. (Subsequent sections contain more lengthy discussions of the circumstances under which these services may be reimbursed under Medicare and Medicaid.)

Non-professional Home Health Aide and Personal Care Services. These typically include assistance with Activities of Daily Living (bathing, dressing, eating, toileting, mobility) and supervision of mentally impaired persons to prevent them from wandering or otherwise endangering themselves or others. If supervision is all that is required, the service is often termed "companion" care.

Homemaker/Chore Services. This includes assistance with instrumental activities of daily living, i.e., cooking, shopping, housekeeping, laundry, and errands.

Adult Day Programs. These may be primarily "social," involving structured activities programs and opportunities to socialize, or they may involve medical and nursing services, in which case they resemble a day nursing home or hospital. Day programs for the mentally retarded/developmentally disabled usually involve habilitation; i.e., teaching skills to increase functional independence.

"Meals on Wheels". Hot meals may be home-delivered to the homebound or provided in group settings (such as senior citizens, centers or congregate care facilities).

Case Management, Assessment, and Referral Services. These provide professional help in determining a disabled person's long-term care needs, in formulating a plan of care, and in helping the person locate or obtain providers of services and, in some cases, financing for the services. Case management is a continuing process, responsive to the disabled person's changing needs over time.

3. *Informal Care Giving*

About 70 Percent of the elderly disabled living in the community receive all their care informally from family and friends. About 2.2 million "caregivers," who are most often spouses, daughters, or daughters-in-law, are responsible for 1.2 million moderately to severely impaired elderly persons. About 80 percent of these caregivers report spending an average of four hours per day on caregiver tasks over and above

their normal household work (Stone, Cafferata and Sangl, 1986). The mean age of these family caregivers is about 57 years. Seventy-four percent live with the disabled elderly person. Only 16.8 percent work, a statistic which reflects the high percentage of spouse caregivers (over one-third) and the older age of the caregivers, about one-third of whom are over 65.

The tasks which family caregivers most frequently report providing are shopping and transportation (86 percent provide these services) and housekeeping (80 percent). About 67 percent of caregivers report giving help with bathing, dressing, eating, or using the toilet; and 46 percent report helping the elderly get in and out of bed or helping them move around indoors. Approximately 53 percent help administer medications and 49 percent help manage finances (Stone, Cafferata and Sangl, 1986). According to one study (Harkins, 1985), by the time family caregivers actively seek institutional placement for their elderly disabled relatives, only very substantial amounts of supportive care by paid providers (on the order of 20 or more hours per week) are seen as making continued home care possible.

E. LONG-TERM CARE EXPENDITURES AND FINANCING

1. Total Health Care Expenditures of the Elderly

In 1984, total health care expenditures by those aged 65 and older, regardless of source of payment, exceeded \$119 billion (Waldo and Lazenby, 1984). The largest expenditure category was hospital care (\$54.2 billion), followed by nursing homes (\$25.1 billion), and physicians (\$24.8 billion). All other care accounted for \$15.8 billion (Figure 2-1).

Direct out-of-pocket health care expenses for the elderly averaged \$1,059 per person in 1984, about 15 percent of the elderly's median income in that year (U.S. Senate, 1986). The majority of these expenses were for nursing home care, physician visits, and services not covered by Medicare, Medicaid, or private insurance.

Out-of-pocket expenses for nursing home care amounted to 41.6 percent of total out-of-pocket personal health expenses of the elderly in 1984. Thus, nursing home care represents the elderly's second largest expenditure category, but it is their largest out-of-pocket expenditure (Figure 2-2).

2. Nursing Home Charges and Expenditures

According to the American Health Care Association, nursing homes currently charge private patients an average of about \$22,000 a year. Daily rates average \$55 to \$60, with the range from \$30 to \$100 per day. Medicaid reimbursement rates are lower than those charged to private payers: Medicaid reimbursement rates for Fiscal Year 1983 averaged \$38 per day (or almost \$14,000 per year) for care in a skilled nursing facility (SNF) and \$27 a day or \$10,000 a year for care in an intermediate care facility.

In calendar year 1984, \$32 billion were spent for nursing home care, accounting for 8.3 percent of total national health expenditures. In 1985, total nursing home expenditures are estimated at \$35.2 billion (Lazenby et al., in press). These estimates include nursing home expenditures for all ages. Nursing home expenditures for the elderly population account for about 75 percent of total expenditures.

Expenditures for nursing home care increased about five-fold between 1972 and 1984 (Table 2-5). As a percentage of total national health expenditures, nursing home expenditures increased by almost 17 percent (from 6.9 percent to 8.3 percent) between 1972 and 1984. Nursing home expenditures are expected to increase to \$56.3 billion by 1990 (Arnett et al., 1986).

In 1984, expenditures on nursing home care were almost equally divided between public and private sources (Figure 2-3).

- Approximately \$15.8 billion of the \$16.3 billion spent from private sources was out-of-pocket. Insurance payments accounted for about one percent (\$300 million) of the total national nursing home expenditures.
- Medicaid is the major public source of payments for nursing home care, accounting for \$13.9 billion of the \$15.7 billion spent from public sources (43.4 percent of the overall national total of \$32 billion) in 1984.
- Medicare spent about \$545 million for skilled nursing facility (SNF) services in Fiscal Year 1984. Medicare SNF expenditures accounted for only 2 percent of total national expenditures for nursing homes and one percent of total Medicare expenditures.

3. *Out-of-Pocket Expenditures for Nursing Home Care*

At present, there are no nationally representative data on out-of-pocket expenditures by nursing home residents. The only large scale systematic data come from a recent analysis of a subset of the elderly long-term care population which participated in the National Long-Term Care Channeling Demonstration (Kemper et al., 1986; Wooldridge et al., 1986). The Channeling demonstration was an initiative of the Department of Health and Human Services. The demonstration's purpose was to test whether case-managed, community-based care could serve as a cost-effective alternative to institutionalization.

The total Channeling sample of 6,300 elderly and functionally disabled persons was not selected to be representative of the general elderly population or, for that matter, the disabled elderly population living in the community. In general, the Channeling sample members were older, poorer and more functionally impaired. In addition, prior hospital and nursing home admission rates were significantly higher for the Channeling sample. Nonetheless, data from the demonstration reveal the out-of-

pocket expenditure burden for nursing home care for 1,800 frail elderly persons from the "control group" of the study (i.e., those who did not receive special services through the Channeling demonstration).

The key data on out-of-pocket expenses of the "control group", based on in-house HHS staff analysis, suggest that, while a relatively small percentage of the frail, poor elderly actually experience nursing home stays, those who do face exceedingly high out-of-pocket expenses relative to their current income.

- About 15 percent of the "control group" had a nursing home stay in the six months following the baseline interview. For the seven to 12 month period, the figure was 14 percent. The average number of days of care received by those with any stay was 75 for the first six months. This average was 119 days in the second six months. Thus, even though a smaller percentage of the sample was admitted in months seven through twelve, the average number of days of care increased. (Note: the estimates for the two six month periods were developed independently and, therefore, are not additive.)
- Out-of-pocket expenditures as a percent of income (exclusive of assets) over six months comprised an average of 80 percent for those with any nursing home stay in months one through six. For months seven through twelve, the average figure was 102 percent, indicating that those with nursing home stays had to rely on more than their income (e.g., savings or other assets, or Medicaid) over the second six month period to meet expenses.

4. Home and Community-Based Service Expenditures

Medicare Home Health Spending. Medicare home health payments were \$1.9 billion in Fiscal Year 1984 and accounted for 3.1 percent of total Medicare expenditures in that year. Home health agencies are reimbursed by Medicare on a reasonable cost basis, subject to limits. Even though home health expenditures constitute only about three percent of overall Medicare costs, they are growing rapidly. From 1974-1980, Medicare expenditures for home health increased at an annual rate of 34 percent. Since 1980, Medicare home health expenditures have doubled from \$772 million in 1980 to \$1.5 billion in 1983, at an annual compound rate of 26 percent.

Only about one-third of the Medicare expenditure increases for home health care from 1976-1980 were due to price inflation. The other factors accounting for increased expenditures were:

- An increased proportion of beneficiaries using home health services, which accounted for almost half of the growth in expenditures;
- The growth in the number of Medicare beneficiaries, which accounted for 10 percent of increased expenditures; and
- Increased visits per person served, which accounted for eight percent of the growth in expenditures.

Medicaid Home Health Spending. Medicaid home health expenditures of \$765 million accounted for 2.3 percent of total Medicaid payments in Fiscal Year 1984. Approximately three-quarters of Medicaid home health expenditures were for personal care services. Three-quarters of all Medicaid personal care expenditures for home health were made in New York.

Private Out-Of-Pocket Expenditures. According to the 1982 Long-Term Care Survey, about 1.1 million (24 percent) of the 4.6 million disabled elderly living in the community received some formal services from paid caregivers. (This figure of 4.6 million includes individuals with ADL limitations and also those with limitations in instrumental activities of daily living, e.g., the need for assistance with shopping and cooking.)

However, only about 600,000 individuals (12 percent) are estimated to have paid out-of-pocket, in whole or in part, for their care, with the average being \$164 per month out-of-pocket and the median amount being \$40 per month. Two-thirds of this spending was for homemaker-chore types of services rather than for nursing and personal care services. The average is heavily weighted by the approximately 10 percent of respondents reporting payments of over \$400 per month.

From these figures, it is possible to estimate total out-of-pocket spending by the disabled elderly on home and community-based services (excluding amounts spent on durable medical equipment) of approximately \$1 billion per year (Liu, Manton and Liu, 1985).

Elderly persons with above average out-of-pocket payments had especially high rates of prior nursing home use, had three times the rate of payments for "nursing" as opposed to other types of assistance, and had substantially higher rates of use of Medicare and Medicaid home health benefits. They were also twice as likely as the average disabled elderly to have cognitive impairments and were more likely to be older and unmarried (Liu, Manton and Liu, 1985).

Further analysis of data on out-of-pocket spending for home care from the 1982 Long-Term Care Survey was commissioned for this report (Liu and Manton, 1986). The analysis indicates that the variable most strongly related to any out-of-pocket spending on home care is living alone. With all other-variables held constant, an elderly-disabled person living alone has a 172 percent greater likelihood of paying out-of-pocket for home care services than one who is living with others.

Other variables which are significantly related to the likelihood of any out-of-pocket payments for home care are (in order of predictive power):

- Prior nursing home stay (107 percent greater likelihood);
- ADL 5-6 (dependent on all "activity of daily living" measures including eating and using the toilet--85 percent greater likelihood);

- ADL 3-4 (mobility dependent and needs help with bathing and dressing--54 percent greater likelihood);
- ADL 1-2 (bathing, dressing dependent only--34 percent greater likelihood);
- Prior hospital use within the past 12 months (24 percent greater likelihood); and
- Incontinence (20 percent greater likelihood).

The number of days of informal caregiving support per week and being male were weakly associated with a decreased likelihood of spending out-of-pocket for home care.

Among those who had any out-of-pocket spending for home-care, income was the variable most strongly Predictive of a high dollar amount of out-of-pocket spending for home care. Also predictive, but to a lesser extent, were a dependency score of ADL 5-6, dementia, and--in a negative direction--the number of days of informal caregiving received per week. Extreme ADL dependency and dementia are among the same variables that are most strongly predictive of nursing home use.

With income and other factors held constant, an individual who is dependent on 5 or 6 ADL measures would be projected, on the basis of average monthly payments, to spend \$3,270 more out-of-pocket for home care in a year than a less dependent person. An individual with dementia paying out-of-pocket for home care also would be projected to spend \$3,270 more than a person who was not demented. The amounts are additive. Thus, a person who has a dependency score of ADL 5-6 and who is demented would be projected to spend \$6,540 more per year on home care than a disabled elderly person paying for home care who does not have these characteristics.

Projected spending amounts for home care tend to be reduced if there is informal support available. For each "11 caregiver day" of informal support available per week, it is estimated that the annual amount of out-of-pocket spending for formal home care will be reduced by \$388 (or \$2,265 if daily informal support is available).

Out-of-Pocket Expenses as a Proportion of Income. According to data taken from the 1982 Long-Term Care Survey, it is quite rare for those 4.6 million disabled elderly living in the community to spend a high percentage of income on formal home care. About 88 percent have no out-of-pocket expenditures and another 9 percent spent less than 10 percent of their monthly income on home care services. Only 3 percent spent more than 10 percent of their monthly income on home care, and under 1 percent spent over 20 percent of monthly income on home care.

It is quite striking that even among the 4.6 million disabled elderly living in the community with high levels of impairment (5 - 6 ADLs) and with comparatively high incomes (over \$1,025 per month), 81 percent reported no out-of-pocket spending on formal home care services.

The relationship between income and out-of-pocket spending on home care comes across most strongly in the findings that, of the relatively few persons spending \$140 or more per month (regardless of ADL level), 42 percent had monthly incomes of \$1,025 or more; and at ADL 5-6, 45 percent of those spending \$140 or more per month had at least \$1,025 in monthly income. Thus about half of those spending \$140 per month or more had comparatively high incomes.

The Relationship between Home Care Expenditures and Prior Hospital and Nursing Home Use. Use of formal home care services is strongly related to prior hospital use within the previous year, particularly longer than average hospital stays. Thirty-eight percent of the elderly disabled living in the community had a prior hospital stay in the previous year: of those who had prior hospital stays of 13-25 days, 38 percent used formal services; and of those who had hospital stays over 25 days, about half used formal home care services. In contrast, among the disabled elderly who had no hospital stay in the previous year, only 14 percent used formal home care services.

Most of the formal home care services used were Medicare-financed. Thus, only 15 percent of functionally disabled elderly with long prior hospital stays reported out-of-pocket payments for home care, as compared to 12 percent of those without a prior hospital stay in the previous year,

Prior nursing home use is even more strongly related to out-of-pocket payments for home care than is a prior hospital stay. However, prior nursing home use is quite rare: only about 8 percent of the functionally disabled living in the community reported prior nursing home stays. About 27 percent of those with prior nursing home stays had out-of-pocket payments for home care, compared to 12 percent of those without prior nursing home stays. About 17 percent of persons spending \$40 or more per month had prior nursing home stays.

Duration of Out-of-Pocket Payments. High out-of-pocket payments over an extended period of time were extremely rare among the respondents to the 1982 Long-Term Care Survey. Although over 50 percent of those paying \$140 per month or more had been receiving paid care for one year or more, the survey estimates indicate that there were only 8,000 such cases in the U.S., out of a total of 4.6 million functionally disabled elderly living in the community.

F. PUBLIC LONG-TERM CARE FINANCING PROGRAMS

While personal, familial, and private charitable resources continue to be an essential and often dominant element of long-term care services, Federal, State, and local government programs also have a major effect on the nature, availability, and financing of long-term care services. The bulk of public dollars expended, primarily through Medicaid, is for institutional services. Yet, the variety of public programs and their impact upon home and community-based services should not be underestimated.

1. **Medicare**

As originally enacted, the Medicare law was intended to support only acute care needs. This purpose has never been altered. Accordingly, Medicare's skilled nursing facility and home health benefits are not for long-term care, but rather are designed to be part of the continuum of care for an acute episode, either following hospital care or as a less costly substitute for an extended acute care hospital stay. Since there is a strong incentive under Medicare's prospective payment system to discharge patients from the hospital earlier than in the past, Medicare utilization of and costs for skilled nursing facilities and home health agencies can be expected to increase in the future.

Skilled Nursing Home Facilities (SNFs). The Medicare skilled nursing benefit covers only short-term, post-acute care (3 days prior hospitalization required) for persons needing skilled nursing or rehabilitative services in an inpatient setting. The Medicare SNF benefit, as mandated by statute, sets specific and relatively stringent requirements for the levels of skilled care necessary for Medicare coverage.

The Medicare SNF benefit is relatively small both as a percentage of Medicare expenditures and as a proportion of total national nursing home revenues. In 1980, the average Medicare coverage of a SNF stay was 30 days, much less than the average of 456 days for all nursing home patients. Medicare SNF expenditures totaled \$545 million in Fiscal Year 1984.

Home Health. Since the home health care benefit under Medicare is designed to be part of the continuum of care for an episode of acute illness, it is generally unavailable for long-term care needs which persist over a period of time. The Medicare law permits payment for home health services to those beneficiaries whose conditions are of such severity that the individuals are under the care of a physician, confined to their homes (homebound), and in need of part-time skilled nursing care or physical or speech therapy on an intermittent basis.

Under the Medicare home health benefit, the following types of services may be covered in certain situations: part-time or intermittent nursing care provided by or under the supervision of a registered professional nurse; physical, occupational, or speech therapy; medical social services which contribute significantly to the treatment of a patient's health condition; part-time or intermittent services from a home health aide; and medical-supplies (other than drugs and biologicals) and medical appliances.

Passage of the Omnibus Reconciliation Act (P.L. 96-499) in 1981 expanded the home health benefit by removing the limit on the number of covered home health visits, eliminating the requirement for a prior hospital stay, eliminating the deductible, and allowing more proprietary home health agencies to participate in the Medicare program.

In 1984, Medicare home health expenditures totaled \$1.9 billion. About 50 enrollees per 1000 received home health benefits, and the average number of home health visits provided to recipients in 1984 was 27 visits.

2. Medicaid

Medicaid is a joint Federal-State program established in 1966 to provide medical assistance to certain groups of low-income individuals. About one-half of Medicaid expenditures nationwide for 1984 were for long-term care. There is, however, wide variation among States in the proportion of Medicaid expenditures devoted to long-term care services, the types of long-term care services which are available, and the characteristics of recipients. This inter-State variation is the direct result of the very structure of the Medicaid program, which permits States considerable flexibility to determine who participates, what is covered, and how services are reimbursed.

Eligibility. Eligibility for Medicaid is based on a welfare orientation which requires people to meet poverty standards before assistance can be obtained. Medicaid eligibles include the low-income aged, the blind, the disabled, and those eligible for Aid to Families with Dependent Children.

However, most State Medicaid programs have expanded the traditional welfare definitions of poverty to permit the provision of Medicaid services to persons who, because of severe medical impairments, need more than the ordinary levels of income provided by welfare programs. Thirty States have exercised this "medically needy" option which encompasses long-term care services. Other States, while not having a medically needy provision, permit higher income persons to "spend down" to Medicaid levels if they face medical bills beyond their means.

The term "spend down" refers to the process of exhausting one's income and assets (including savings) in the course of paying for medical expenses (including nursing home expenses), thus becoming eligible for Medicaid coverage. Finally, some States without medically needy provisions have elected to cover persons who exceed Medicaid income restrictions if they are in an institution. (A more extensive discussion of "medically needy" and "spend down" is contained in Chapter 4.)

It is estimated that approximately half of all Medicaid recipients in nursing homes were not initially poor, but "spent down" their income and resources as a result of the high cost of nursing home care (an average annual cost of \$22,000). All Medicaid nursing home recipients must contribute all of their income to the cost of their care except for a small personal-needs allowance (\$25 per month in most States).

Coverage. For eligible individuals, States must cover services provided in Skilled Nursing Facilities for persons 21 years of age or older. In addition, States may cover the following optional services: Intermediate Care Facilities (ICFs), a less intensive form of nursing home care (49 States and the District of Columbia); and Intermediate Care Facilities for the Mentally Retarded (ICFMRs) (48 States and the District of Columbia); and Institutions for Mental Diseases for persons 65 years of age or over (41 States and the District of Columbia).

In addition, for eligible adults, States must cover home health services. States may also cover the following optional services: private-duty nursing (25 States and the District of Columbia), and personal care (25 States and the District of Columbia).

Growth in Medicaid Long-Term Care Expenditures. Medicaid long-term care (SNF, ICF, ICFMR, mental hospital, and home health) expenditures were \$16.7 billion in Fiscal Year 1984, accounting for 49 percent of total Federal and State Medicaid vendor payments (Table 2-6 and Table 2-7). Medicaid long-term care services are overwhelmingly for institutional care. The proportion of Medicaid expenditures attributable to long-term care varies substantially from State to State, from a low of 18 percent in the District of Columbia to a high of 73 percent in New Hampshire.

The rate of growth of Medicaid long-term care expenditures has historically been a major concern to Federal and State officials because it has risen faster than the expenditure growth rate for Medicaid acute care. The rate of increase has moderated in recent years.

For Fiscal Years 1974-1980, the average compound rate of growth for Medicaid long-term care services was 17 percent per year, compared to 15 percent for all Medicaid services. This higher rate of increase is largely due to expenditures for ICFMRs (Table 2-7). Without ICFMR's the annual rate of increase for Fiscal Years 1974-1980 was 15 percent.

The rate of increase for total Medicaid long-term care services for Fiscal Years 1980-1984 was 11 percent, compared to 9.8 percent for total Medicaid services. Without ICFMRs the Medicaid long-term care rate of increase was only 8.5 percent.

Preadmission Screening Programs. At least 34 States and the District of Columbia have some form of preadmission screening requirement for Medicaid recipients applying for nursing home admission. Some of these States also require preadmission screening on all applicants who would likely qualify for Medicaid within 180 days of their admission. Minnesota, for example, expanded its preadmission screening program in 1985 to include all applicants to nursing and certified boarding care homes, and in 1986, passed a law requiring these homes to help finance the cost of the preadmission screening program for these non-Medicaid applicants.

No comprehensive evaluation of preadmission screening programs has been conducted since 1981; hence, little can be stated conclusively about the effect of these programs in reducing inappropriate placements or on saving Medicaid expenditures.

Home and Community Waivers. As part of optional home health care services, States have been granted waivers to provide various forms of noninstitutional long-term care services of a nonmedical nature (e.g., case management, homemaker/chore, adult day care). The home and community-based waiver program, started in 1981, allows funding only for noninstitutional long-term care services targeted to persons who would otherwise require Medicaid-financed nursing-home care. Importantly, average per

capita costs with the waiver must not exceed average per capita costs without the waiver. States have generally proceeded cautiously with their initial waiver applications.

There were a total of 91 active approved Medicaid waivers in 42 States as of February, 1986. Thirty-six States had active approved waivers to provide benefits to the aged and disabled. Thirty-four States had active approved waivers to provide benefits to the MR/DD population. Three States had active approved waivers to provide benefits to the mentally ill. (Since some States have separate waivers to cover the different populations, the figures are not additive.)

Forty-one of the 91 active approved waiver programs are targeted to provide services statewide. The most frequently provided service is case-management (provided under 77 waivers), followed by respite care (60), homemaker/home health aide (45), adult day care (40), personal care (40), home modifications (32), and transportation (31). For waivers targeted to the MR/DD population, habilitation services are the most frequently provided service (34).

In FY 1984, about \$96.8 million in expenditures were reported by States under the home and community-based waiver program. An evaluation is now underway of the impact of the waiver program in November 1986 substituting community care for nursing home care.

3. *Other Federal and Federal-State Programs*

Older Americans Act Programs. Under Title III of the Older Americans Act, the Administration on Aging (AOA) provides financial assistance to the States to develop greater capacity and to foster the development and implementation of comprehensive and coordinated service systems to serve older individuals. Specifically, the program's goals are to: 1) secure and maintain maximum independence and dignity in a home environment for older individuals capable of self-care with appropriate supportive services; 2) remove individual and social barriers to economic and personal independence for older individuals; and 3) provide a continuum of care for the vulnerable elderly.

In Fiscal Year 1985, three separate allocations were made to States for 1) supportive services and senior center operations (\$265 million); 2) congregate nutrition services (\$336 million); and 3) home-delivered meals (\$67.9 million). State Units have the authority to transfer limited amounts of funds among the three Title III allotments in order to better reflect their local needs and priorities. States are required to match these funds by at least 15 percent--from State and local sources, philanthropic sources, and/or charges and donations from clients.

Supportive services under Title III (Part B) are designed to provide assistance to those older persons in need. Most supportive services fall in four broad categories:

- Access services are transportation, outreach, and information and referral.

- In-home services are usually housekeeping, personal care, chore and 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. Most social services and congregate meals are provided at multipurpose senior centers, many of which have been designated as community focal points.
- Services to individuals in long-term care institutions include ombudsman services for complaint resolution, transportation to activities outside the institution, and "individual friendly visiting" and counseling.

In-home services represent an expenditure priority for the Title III program. According to the National Data Base on Aging in 1984, about one-quarter of funds (including Older Americans Act funds as well as non-Older Americans Act funds) controlled by area agencies were directed at in-home services.

Services delivered under the Title III (Part B) program are currently reaching an estimated 9 million elderly clients. Data are not available to determine what proportion of these services are focused on the impaired elderly. In Fiscal Year 1984, 18 percent of all participants were racial and ethnic minorities, and 47 percent were low income.

Social Services Block Grant. The Social Services Block Grant provides funds to States for social services. These social services must be directed at the goals of achieving economic self-sufficiency; preventing or remedying neglect, abuse, or exploitation of children or adults; preventing or reducing inappropriate institutionalization; and securing referral for institutional care, where appropriate. Typical services include protective services for children and adults, home-based services, and day care. Each State determines the eligibility requirements for services and the type and scope of services it provides.

In Fiscal Year 1985, Federal funding for social services under the Social Services Block Grant (SSBG) amounted to \$2.7 billion. At their discretion, States may match these funds with their own monies. However, since there is no required match rate and few reporting requirements, no reliable data are available on the total amount of State social services funding.

According to data compiled by the American Public Welfare Association under its Voluntary Cooperative Information System, home-based services were provided in 1983 to 11 percent of total SSBG service recipients, or about 307,000 persons of all ages. These services accounted for about 14 percent of total expenditures, or \$555 million (out of a total estimated amount of Federal and State funds of \$4 billion). Utilization and expenditure figures for services provided specifically to the elderly are not available.

The principal long-term care service funded under the SSBG is "home-based services". These include any or all of the following (at State option): homemaker, chore, home health, companionship, or home maintenance services. Fifty-five States and independent jurisdictions included these services in their Fiscal Year 1985 plans. Twenty-six States also planned to offer adult day care and 24 States planned to offer home-delivered or congregate meals.

Veterans Administration. The Veterans Administration (VA) finances several different types and levels of nursing home care and home health care for veterans--both veterans with service-connected disabilities and elderly veterans. VA nursing home benefits for elderly veterans without service-connected disabilities are limited to 6 months. The VA also finances a cash disability program that serves veterans (many of whom are 65 and older) with service-connected disabilities.

In Fiscal Year 1985, VA nursing homes served 20,442 veterans at a total cost of about \$395 million and an average per them payment, per beneficiary of \$113.52. Community nursing homes (private facilities with which the VA contracts) served 38,907 veterans at a total cost of about \$265 million and an average per them of \$63.48. State-run nursing homes served 13,540 veterans at a total cost of about \$48 million, with an average per them payment of \$16.64 contributed by the VA. (VA per them subsidies are established by statute and do not necessarily reflect the total per them costs.)

Domiciliary care, that is, non-medically oriented residential care, was provided to 13,126 veterans at a total cost of about \$96 million, and an average per them rate of \$34.89 in VA-run facilities. State-run facilities provided care to 8,440 veterans for a total cost of about \$12 million at an average per them of \$7.30.

The VA also financed hospital-based home care for 9,851 veterans, at a total cost of about \$14 million, and an average per them of \$13.07. Although the VA has recently developed an adult day care program, the program is so new that data on utilization and expenditures are not yet available. Finally, the VA paid families to care for their disabled members. In 1985, such payments were received on behalf of 220,000 veterans.

4. State Programs

This section contains a brief review of selected long-term care programs initiated by the States. The goals of these diverse programs are to: support families in order to prevent exhaustion of resources; prevent or delay institutionalization; check inappropriate placement of individuals in nursing homes; promote private financing of long-term care; and create special programs for victims of Alzheimer's disease.

Tax Incentives for Care of the Elderly at Home. At least four States provide tax subsidies to families who care for their elderly relatives at home. Oregon, Idaho, Arizona, and Iowa permit state individual income tax deductions, credits, or exemptions for taxpayers who pay more than a certain amount towards the cost of caring for elderly

relatives at home. For example, in Oregon, if family care at home prevents a nursing home admission, a tax credit can be taken of \$250 or 8 percent of incurred allowable expenses (whichever is less).

In other States, direct subsidies to families are utilized to encourage family care of chronically ill elderly. Florida, under its Home Care for the Elderly program, provides subsidy payments to persons who care for elderly relatives/friends in their homes. In California, under its In-Home Support Services program, funded by Title XX of the Social Security Act and Community Services Block Grant funds, family members can be paid for providing homemaker and chore services to eligible elderly.

There are many questions regarding the effectiveness of direct payments to families, particularly with respect to their impact on delaying institutional placement and the administrative burdens imposed by having to determine care responsibilities. Previous studies suggest that caregivers strongly prefer services such as respite or subsidized care for their family members rather than tax or other financial incentives (Doty, 1986a).

State Activities in Encouraging Private Financing of Long-Term Care. Long-term care insurance and other private financing options are increasingly viewed by States as a promising approaches for easing both the public and out-of-pocket burden of financing long-term care. For example, States have devoted attention in the past two years to encourage or mandate insurance carriers to cover skilled nursing and home health care. By the end of 1985, at least four States (West Virginia, Colorado, Georgia, and New York) had laws requiring insurers to provide optional riders on group policies covering nursing home stays or home health care. At least five other States had legislatively authorized studies on private options for financing long-term care (Georgia, Illinois, North Dakota, Texas, and Virginia) with many other States conducting similar studies through gubernatorial or executive branch task forces (e.g., Alaska, Arizona, Connecticut, Florida, and Ohio).

In 1986, several States passed or are considering legislation requiring their own studies of the need for alternative options to stimulate the development of private long-term care insurance. Kentucky passed a law requiring health insurance companies to offer long-term care insurance, and Washington enacted a law establishing minimum standards for private long-term care insurance policies and their marketing. Colorado enacted two laws this session: one reduces the premium tax of long-term care insurance policies which conform to minimum standards and allows a tax deduction for purchasers of qualifying policies; and a second law--the first State law of its kind--permits the interest on Individual Medical Accounts (IMAs) to be exempt from Colorado State taxes.

Demonstration and Statewide Community Care Programs. States have been involved in the enactment or funding of a number of alternatives to institutionalization since the late 1970s, initially through demonstration programs. Many State programs

establish eligibility criteria to target low-income elderly and many programs require the clients served to be "at risk" of entering a nursing home.

Legislatively created programs include such approaches as volunteer credit programs providing respite and chore services for homebound or disabled elderly (Missouri, Florida); respite programs providing relief for full-time caregivers at home or in community-based settings such as adult day care centers (e.g., Michigan, Washington, Arizona); case management services which provide help in coordinating the numerous services a disabled or chronically ill aged person needs to remain at home (e.g., Georgia, Maryland, New Jersey, California); residential housing assistance or boarding home care (e.g., Arizona, Ohio); and a variety of other comprehensive service programs designed to delay or prevent institutionalization (e.g., New York's Nursing Home Without Walls, Vermont's Independence Fund). At this point, many of the original demonstration programs have been integrated into the States' ongoing health, aging, or social services programs.

Alzheimer's Disease. Beginning in 1984, many States have enacted legislation intended to help the victims of Alzheimer's disease. California and Illinois have been particularly active in enacting legislation. For example, California established an Alzheimer's Disease Task Force in 1984 to guide the development of training programs, program and research priorities, and public education efforts. In the same year, California also appropriated \$1 million to create diagnostic and research centers. In 1985, California legislators requested a study on the feasibility of making private insurance coverage available to Alzheimer's disease patients and their families in need of respite care.

Illinois enacted a package of laws in 1985 establishing a State task force, making Alzheimer's disease patients eligible for State-funded home and community-based care and respite programs, providing incentive payments to nursing homes which develop specialized Alzheimer's disease programs, creating regional comprehensive diagnostic and treatment centers projects, permitting contributions to a special Research Fund through tax return checkoffs, and establishing a pilot program to determine the feasibility of authorizing Medicaid payments for the diagnosis and treatment of Alzheimer's disease. Many other States, including Massachusetts, Virginia, Delaware, Kansas, and Connecticut have legislatively established special commissions or task forces. Florida, Wisconsin, and Texas allocated funds to support research projects, training and information centers, or support and education programs.

A larger number of bills and laws have been proposed or passed in 1986. For example, in Maryland, legislation was enacted covering the complete spectrum of issues, from insurance coverage to specialized curricula. One of the laws requires health insurers to offer an optional rider for care related to Alzheimer's disease. Arizona, Missouri, Nebraska, and Tennessee legislatively established special advisory committees or task forces. California and Kansas created additional programs and services. No doubt the trend will continue even as State health departments initiate

their own special projects and services within existing programs (e.g., Connecticut, Maine).

G. THE IMPACT OF HEALTH, SOCIAL, AND ECONOMIC TRENDS ON THE DEMAND FOR LONG-TERM CARE

As noted earlier, population projections for older persons highlight three trends: an impressive increase expected in the absolute number of older persons; an increasing proportion of the total population which is age 65 and over; and increasing growth (in absolute numbers and proportionality) of the population which is age 75 and above (Table 2-8).

But demographic trends are not the entire story. The health status, the social environment and the financial status of the elderly are undergoing change. These factors, and their impact on the nature and demand for long-term care, are discussed in this section.

1. Trends in Chronic Disease and Disability

Those diseases which cause disability, and thus may require long-term care, are generally not the diseases which lead to high mortality. Over 30 percent of persons aged 85 and older report disabling conditions (defined as limiting one or more daily activities). The major reported causes (totaling over 72 percent of disability) are dementia, arthritis, peripheral vascular disease, cerebrovascular disease (strokes), and hip and other fractures. Conversely, major killers, such as ischemic heart disease and cancer, cause less than two percent each of the chronic disability (Table 2-9).

If current age specific rates of disability continue into the next century, the numbers of disabled Americans living in the community will almost triple. In absolute numbers, there is projected to be an increase from an estimated 3.7 million in 1984 to an estimated 10.2 million disabled individuals in 2040. These numbers are actually underestimates of the true level of disability as they rely on available statistics which reflect disability levels only in noninstitutionalized elderly.

Trends in the Prevalence of Mental and Behavioral Disorders

The profound impact of mental disorder on the long-term care needs of older adults is not well appreciated. In addition to being a potentially disabling force by itself, the mental status or emotional state of elderly individuals can determine how well they are able to manage serious physical disability and can determine how long such management continues in the home or community. Often this represents the difference between persons living in the community who receive skilled nursing care and those residing in nursing homes.

The results from NIMH's Epidemiological Catchment Area studies (Myers et al., 1984) reveal high prevalence rates (approximately 20 percent) of mental disorder among the population as a whole. This prevalence of chronic mental illness appears at least constant into early old age, and then rises because of gradually increasing cases of dementia associated with more advanced aging.

While precise prevalence rates for Alzheimer's disease (the most common cause of dementia) are difficult to establish due to the difficulty of diagnosis, the best general approximation based on a review of several important studies is four to eight percent among those 65 years of age and older (Katzman, 1986). With a more narrow age-specific focus, reports that have been confirmed by NIMH's Epidemiological Catchment Area study indicate that the percentage of persons at age 65 with the disorder is very low (around one percent), whereas by age 85 approximately 15 percent are believed to suffer from Alzheimer's disease (although other studies suggest these figures may be higher).

With a nearly four-fold increase during the next 40 years in the percentage of those who are 85 and older, the percentage as well as absolute numbers of those with severe cognitive impairment will soar in the absence of important research and clinical developments. Further, dementing disorders account for a disproportionately large percentage of long stay nursing home residents. Should there become available a means of preventing or curing dementia, this would substantially reduce the need for long-term care, especially in institutions.

A growing body of research has also been documenting the high degree of reactive depression in those families with Alzheimer's disease victims (Brody, 1985). The impact of such family stress is to lower the capacity of this informal support system in the provision of long-term care, with consequent shifts to demands for formal system interventions. Improved understanding of family stress and research on better interventions for this problem should enhance family capacity to deal with Alzheimer victims.

Trends in Diagnosis, Treatment and Prevention

Over the next 50 years, there is likely to be continuing significant progress in diagnostic techniques for major diseases. For example, noninvasive techniques of detecting atherosclerotic plaques may permit the identification of persons at high risk of developing symptomatic coronary artery disease or peripheral vascular disease. New techniques of measuring bone density, including dual beam photon absorptiometry and computerized tomography, may permit early detection of osteoporosis. New techniques in evaluating neuromuscular function may allow identification of older persons prone to falling, a major contributor to hip fractures among the elderly. Substantial progress is being made in methods of diagnosing Alzheimer's disease in its early stages.

The health impact of these diagnostic improvements is still uncertain. Many technical and practical problems remain to be solved before most of them can be

translated into conventional clinical practice. Even if this occurs, it is not known whether, and to what extent, earlier detection and treatment will reduce the prevalence and severity of disabling chronic disease. Further, similar advances with regard to high-mortality diseases may actually increase the prevalence of chronic disease.

Nonetheless, improved management of chronic disease is expected to lessen disability. Perhaps the most dramatic example is the continuing decline in stroke incidence which has resulted, at least in part, from improved control of hypertension. The increasing emphasis on tighter control of plasma glucose levels in diabetic patients should lead to lower incidence of retinopathy and other disabling complications of diabetes.

There is evidence that attention to health maintenance by older persons can lower the risk for diseases of later life. For example, moderate exercise and adequate intake of calcium appear to have a protective effect against osteoporosis in some older women. Stopping cigarette smoking, even after age 60, lowers the risk of heart attacks. Maintaining a balanced, nutritionally adequate diet lessens the risk of infections and other serious illnesses among older persons. The continuing decline in cigarette consumption and increasing attention to exercise and diet should lead to some reduction in morbidity from the above diseases.

Though such information is encouraging, more firm data are needed on which to base recommendations for health maintenance for older persons.

Prospects for Technological Improvements in Medical Devices

Technological advances in medical devices have led to increases in life expectancy. Continuing technological advances provide a means for dealing with the disabilities often associated with aging and which frequently lead to the need for long-term care.

For example, accidents, including falls, are one of the leading causes of death and disability in older persons. It is estimated that one out of every three persons over age 65 falls each year, and fractures resulting from falls are estimated to cost approximately \$7 billion a year in medical care. Devices to reduce the impact of falls and/or to eliminate them are being developed. Such devices can extend and complement caregivers in the home or nursing home, reduce medical costs arising from such injuries, improve patient mobility, and promote the patient's sense of independence and confidence.

Hearing loss is another one of the health problems which contributes to significant disability. Self-reported hearing loss in the elderly was documented in the Established Populations for Epidemiologic Studies of the Elderly Project. At the East Boston site, the prevalence of hearing loss rose from 6.8 percent in those 65-69 to 27 percent in those 85 and older (Cornoni-Huntly et al., 1986). In absolute numbers, these

statistics project a rise in the number of elderly with severe hearing loss from 2.4 million in 1980 to 7.8 million in 2040.

The traditional device for hearing problems has been the hearing-aid, which has not been entirely satisfactory. With the utilization of new technologies, such as implanted electrodes, there is promise of better treatments for hearing impairments. Some implants use electrodes in the cochlea (inner ear), while others use electrodes on or near the middle ear to conduct electrical signals into the cochlea.

Urinary incontinence is another major problem for many elderly people which may result in the need for long-term care. It contributes to much excess disability and is a significant risk factor for institutionalization. Until recently, this condition received little attention from medical researchers. However, within the last several years, technological advances have given rise to the development of a number of devices for the treatment of urinary incontinence. These devices and techniques range from behavioral therapies (such as "prompted voiding," exercises, and biofeedback training for voluntary control of sphincter and detrusor muscle contraction) to the insertion of prosthetic urethral valves which are controlled by the patient's voluntary elevation of bladder pressure, thus releasing urine. Another recently developed device for treating urinary incontinence is a magnetic seal which is placed over the proximal bladder opening, and voiding is controlled by the wearer through movement of a magnet over the abdominal surface to unseat the seal.

Several Federal agencies with programs in aging and the National Aeronautics and Space Agency have joined in a collaborative effort to utilize technologies developed for aerospace to meet the needs of the elderly. One planned activity is to develop a memory aid device for wandering behavior, because of the number of older people with memory deficits and the incidence of wandering behavior within these groups. The device will also have the capacity for add-on components to aid other aspects of memory deficits, such as scheduling and performance of activities, taking medication, or periodic prompting to use the bathroom. Other goals are to use existing technology to develop devices to deal with deficits in vision, hearing and mobility.

2. Societal Changes

Current and future changes in a number of important societal factors have implications for the need and demand for long-term care. These include:

- Living arrangements of the elderly;
- Availability of family support;
- Educational attainment of the elderly;
- Participation of women in the labor force; and
- Increased longevity and its impact on the health of the elderly.

Living Arrangement. One of the most striking societal shifts in the last twenty-five years is the growth in the number of elderly who live alone. Between 1960 and 1984,

the proportion of noninstitutionalized elderly living alone has increased from 19 to 30 percent.

The overall figure of 30 percent is unequally distributed by gender: Forty-one percent of elderly women were living alone compared with only 15 percent of men (U.S. Census, 1985). The major reason for this disparity is the longer life expectancy of women and that they are thus much more likely than men to be widowed. For example, in 1980, there were 67 men for every 100 women age 65 and over, and only 43 men for every 100 women age 85 and over.

Living alone can mean independence for the elderly. It can also mean that the functionally disabled elderly have no one to provide personal assistance with crucial personal and instrumental activities of daily living on an as-needed basis.

The trend in elderly living alone can be expected to continue and perhaps to expand, at least in absolute numbers. This has important implications for the demand for long-term care because this group of elderly is at higher risk of needing nursing home care (NCHS, 1981) and is five times more likely to use formal long-term care services (NCHS, unpublished). Further, as indicated earlier, living alone is the strongest predictor of having out-of-pocket expenditures on home care.

Family Support. As noted previously, families are the major source of assistance to older members needing long-term care. Over the past few decades, there have been major changes in the availability of the family to provide informal support, so future trends bear close watching.

Major sources of family support are spouse and children. For older women who are widowed, support from children increases in importance. Two gross measures of potential availability of such support are (1) rate of childlessness and (2) the number of children ever born to women with children.

With regard to childlessness, about 12 percent of white women and 25 percent of all other women aged 65-69 were childless in 1985. The drop in childlessness during the past decade is expected to continue for the next few decades. By 2000, less than 8 percent of white women and less than 15 percent of all other women aged 65-69 will be childless. However, when the baby boom generation starts reaching age 65, around 2010, indications are that there will be a new rise in childlessness among elderly women.

For those elderly women with children, the number ever born is a gross measure of the amount of informal assistance potentially available. In 1975, the average number of children ever born to women aged 65-69 was at its lowest level. White women had an average of 2.2 children and all other races of women averaged 2.5 children. Since then, the average number of children per elderly women has been rising sharply. It will continue to rise through the turn of the century when white women age 65-69 will

average 3.1 children and all other women 3.8 children. A sharp decline is projected after 2000 because of the small family sizes of the 1970's.

The availability of children to provide informal support is also affected by their geographic proximity to their elderly parents. In 1975, for those elderly with surviving children, about one of every three had children who were within 10 minutes travel time (Administration on Aging, 1983). This trend of close geographic proximity may be changing, perhaps as much because of the elderly as their families. Between the 1960's and the 1970's, the number of elderly moving from one State to another increased by 50 percent (Center for Social Research in Aging, 1984).

The willingness of available children to provide support to their elderly parents who require assistance with activities of daily living is a major issue in projecting the need for formal long-term care. Women, especially those in their forties and fifties, have traditionally contributed their time to volunteer community service and to informal support of the elderly in their families. This tradition is changing, at least insofar as women age 45-64 have, since 1980, been increasingly participating in the labor force. This trend is projected to continue, especially for women in the age 45-54 group. In 1984, 62 percent of women aged 45-54 and 42 percent of women aged 55-64 participated in the labor force. This trend suggests that middle aged daughters may have less time to provide assistance to their elderly parents.

Families indicate that a major factor in the decision to admit their elderly parents into a nursing home is that none of them is available during the work day to provide assistance. Nonetheless, some small scale research has found that motivation to care for elderly parents is strong (Brody, 1981). Middle-aged daughters who also work will make considerable personal sacrifices to care for their elderly parents as well as their children. Young women indicate their intention to care for their parents as the need arises.

In summary, societal trends concerning family support are mixed. Until the turn of the century, more children will be available to provide support. The percent of childless women is declining and average number of children ever born is increasing. These trends will change when the baby boom cohort turns age 65, mainly because of their lower birth rate (office of Human Development Services, 1985). Children may be less available to provide care than they do now. Children and parents may not be close geographically. More middle aged women will be working and will not be available to provide assistance during the work day. In contrast, the commitment of daughters, including younger women, to assist their elderly parents remains strong.

One consequence may be an increase in the demand for formal long-term care, either in institutions or in the community--especially adult day care and similar services. Another consequence may be an increased demand for private sector approaches to long-term care financing as children fulfill all or part of their commitment by using their income to purchase various long-term care services for their parents.

Educational Attainment. Over the next 30 years, there will be a significant rise in the educational attainment of the elderly. Elderly with no high school education will decrease from 35 percent to under 10 percent (Federal Council on the Aging, 1981; U.S. Senate, 1986). The percent of elderly with a high school diploma will rise from 50 to 78 percent. Less than 20 percent of today's elderly have some college education. In thirty years, the figure is projected to increase to 37 percent.

This trend of increasing education of the elderly may result in decreasing the need for long-term care. Better educated persons may emphasize health promotion Aspects in structuring their life style. This may decrease the prevalence of chronic disease, its severity, and the accompanying disability. Increased education could lead to increased demand for private long-term care financing. Better educated elderly will have a greater understanding of their risk for catastrophic expenditures for long-term care. Better educated persons tend to have higher paying jobs, and thus may have more resources to pay for long-term care.

Participation of Women in the Labor Force. Since 1950, there has been a dramatic increase in the participation of women in the work force. The proportion has risen from 34 percent to 53 percent in 1984 (U.S. Census, in press). Increases have occurred for all age groups. In the second quarter of 1984, the proportion of women in the work force was 70 percent for those age 25-44 and 63 percent for those age 45-54. The proportion dropped to 42 percent for women age 55-64. Mothers with young children were also-major participants in the work force. In 1983, 57 percent of mothers with children under 18 worked.

The extent of participation in the work force has also changed. In 1982, 46 percent of employed women worked full time and year round. This was an increase of about 6 percent over the 1974 figure. In 1981, 26 percent of employed women had worked for 10 or more years. This is an important milestone because it is usually the point at which an employee becomes vested in a retirement plan.

This trend toward greater participation by women in the work force has major implications for long-term care. On the one hand, as earlier noted, the availability of women to provide daily assistance to elderly family members is reduced. This reduction is crucial for those elderly with personal care needs or cognitive impairments that require protective oversight and continuous care. On the other hand, increased full time, year round employment and longer work histories suggest that women, because they have income and pensions, may have more resources to contribute to their parent's long-term care needs, as well as eventually to pay for their own long-term care needs.

Increased Longevity and its Impact on the Health of the Elderly. A crucial question in forecasting the need for long-term care is: will the health of the elderly improve in the future? Specifically, will a 75-year-old in the year 2025 be healthier than a 75-year-old is today? This is a comparison of someone born in 1911 when average life expectancy was about 52 years to someone born in 1950 when average life

expectancy had increased to nearly 70 years (NCHS, 1985). The issue of whether adding years to life means a healthier old age has been hotly debated in the literature.

One position is that the elderly are going to be healthier and less disabled in the future (Fries, 1980). Fries predicts a compression of morbidity, i.e., the average elderly person will remain vigorous longer, will have a very short span of disability and then will die around the age of 85.

A different view of the future is that the elderly will be less healthy in the future than they are today (Schneider and Brody, 1983). When these investigators analyzed national data on the health of the elderly, they found that over the past ten years there had been basically no changes in the health of the elderly. They predict that the prevalence of chronic disease among the elderly will increase in the future and emphasized the increasing importance of the management of chronic disease to minimize disability.

These radically different views on future underscore the complexity inherent in interpreting current data and making assumptions for projections of the future health of the elderly and their need for long-term care.

3. *Trends in the Economic Status of the Elderly*

The economic well-being of the elderly has improved dramatically over the last two decades. Overall, the proportion of elderly living below the poverty line was cut in half in fifteen years--from one in four elderly in 1969 to one in eight in 1984. Even after adjusting for inflation, the income of elderly families increased nearly 18 percent between 1969 and 1984.

This section describes the economic status of the elderly both as a whole and, whenever possible, on the diverse sub-groups which comprise the older population. As will be noted, many differences among these groups exist, and economic gains have not been equally distributed. The information in this section refers only to the elderly living in the community because data on the economic characteristics of individuals residing in institutions, when available, are generally unreliable.

For purpose of analysis, the Census Bureau categorizes living arrangements in the community as either living in a family or living as an unrelated individual. The elderly in families live either with their spouse as a married couple (where one or both spouses are elderly) or without their spouse, but with other relatives (for example, an elderly widow living with her daughter's family.). The vast majority of the elderly who live as unrelated individuals live alone, but a few live with non-relatives.

Trends in Income. Over the past 15 years, the mean income before taxes of families with elderly members more than tripled (from \$7,800 in 1969 to \$26,000 in 1984) and increased proportionally compared to the non-elderly (Table 2-10). The mean income of elderly unrelated -individuals also more than tripled during that period

from \$2,800 in 1969 to \$10,800 by 1984. Economic improvements for the elderly are attributed to periods of rapid economic growth (particularly from 1949 to 1969 when savings accumulated), the indexation of Social Security benefits in 1972, and the implementation of the Supplemental Security Income (SSI) program in 1974 (Ross et al., 1986).

Large increases in prices during this period can make comparisons of dollar amounts misleading. However, after adjusting for inflation, increases for the elderly were still greater than for the non-elderly. The average inflation adjusted income of elderly families increased nearly 18 percent from 1969 to 1984 compared to 2 percent for nonelderly families, while the average income of elderly unrelated individuals rose 34 percent compared to 13 percent for the nonelderly. Finally, because most of the income of the elderly is not subject to income and payroll taxes, the elderly made further gains over younger persons than these figures suggest (Gordon, 1986).

Income Differences by Sex, Marital Status, and Race. Substantial differences exist in the per capita incomes of elderly men and women. Elderly women, like younger women, have considerably lower incomes than men. In 1984, the median income for elderly women was \$6,020, or 58 percent of that of elderly men, whose median income was \$10,450 (Table 2-11).

However, the distribution is not evenly distributed by marital status. Divorced, widowed, and never married elderly men (22 percent of elderly men) and women (60 percent of elderly women) have roughly similar income. However, married elderly men (78 percent of elderly men) have significantly higher income, and married elderly women (40 percent of elderly women) have by far the lowest.

To some extent, these differences in the median incomes of married older men and women are attributed to women's pattern of lifelong dependency on men's income. Perhaps, as a result of that income shifting to the women at the husbands' death, widowed elderly women have 80 percent higher median incomes than elderly married women. But as more and more married women enter the labor force, economic projections indicate that the income gap between men and women is closing.

There are significant economic differences among the elderly population by race, with white males having the highest per capita incomes and black females the lowest. Table 2-12 shows the 1984 median incomes by race and sex for ages 65 to 69 and for 70 and over. In general, whites had the highest incomes, followed by Hispanics, and then, blacks.

Poverty. Poverty rates for the elderly have dropped over the last fifteen years. The proportion of elderly individuals who lived in poverty was cut in half, falling from 25.3 percent in 1969 to 12.4 percent in 1984. At the same time, the poverty rate for the nonelderly was 10.8 percent in 1969 and 14.2 percent in 1984. However, the elderly are currently more likely than the nonelderly to have incomes right above the poverty line: In 1984, 21.2 percent of elderly versus 19.2 percent of nonelderly had incomes at

125 percent of the poverty line. For the elderly, poverty and near poverty increase with advancing age (Table 2-13).

Poverty rates for the elderly mirror the same racial and gender patterns seen in the rest of the population. Elderly whites--at 10.7 percent--are the least likely to be poor, followed by Hispanics--at 21.4 percent--and blacks--at 31.7 percent. Within every racial group, elderly women are more likely to be poor than elderly men.

Living arrangements have a profound effect on the level of poverty for all races and both sexes. Elderly persons living in families are much less likely to be poor than unrelated individuals, the vast majority of whom live alone. In the elderly white population, unrelated individuals have four times the poverty rates of persons living in families; for Hispanics, poverty rates are three times as high for unrelated individuals as for those in families; and, for blacks, unrelated individuals are two and one half times more likely to live in poverty as persons in families (Table 2-14).

Since 1979, the Census Bureau has supplemented its traditional definition and measurement of poverty (which uses only cash income) with newer approaches which include non-cash sources, such as Food Stamps, Medicare, and Medicaid. Compared to the 1984 poverty rates for the aged of 12.4 percent (when the calculations were based only on cash income), poverty rates for the elderly in 1984 using three approaches to measure non-cash benefits ranged from: 2.6 percent using the market value approach; to 7.3 percent using the reciprocity value approach; to 7.6 percent using the poverty budget share approach.

Distribution of Sources of Income. At the end of 1984, Social Security benefits were paid to 25 and a half million retired workers and their dependents at an annual cost of almost \$158 billion dollars. As a result, Social Security was the largest source of income for the elderly in 1984--an average of 37.6 percent of income for elderly couples and 44.5 percent for elderly individuals (Table 2-15).

Money from assets (such as savings accounts, IRAs, and stocks) was second only to Social Security as an overall source of income for the elderly (couples and individuals). Asset income comprised nearly a third of the income received by elderly couples (27.6 percent) and by elderly individuals (30.6 percent). Not surprisingly, assets, as a share of total income, were most important for the wealthiest elderly and least important for the poorest.

Pensions from private employers or from Federal, State or local governments were the third largest source of income for all elderly: 16.2 percent of the income for elderly couples and 12.5 percent for elderly individuals were from pensions.

Earnings, as the fourth largest component of income for all elderly in 1984, had the most differential effect on total income. For example, the median income of elderly men who worked full-time year round during 1984 was \$26,450 compared to the \$10,450 median income of all elderly men. Similarly, the figure for elderly female full-

time workers was \$15,230. However, most elderly do not work, especially after age 70, and of those that do, about half work part time.

Welfare, primarily from SSI or public assistance, was the smallest major component of income for the elderly and was received by only the lowest quintiles of income.

Pensions. Pension plans all have the same basic goal of providing retirement income to long time workers (and dependents), but differ considerably in benefit amounts and coverage. The major sources of pensions are, in descending order of total recipients and in ascending order of average monthly benefits: private pensions from companies or unions, State and local Government employee pensions, Federal Government employee pensions, and U.S. Military pensions.

Pension programs have grown rapidly since the 1940s and now cover almost half of the labor force as compared to Social Security which covers over 90 percent of the labor force. A significantly higher proportion of male workers (48 percent) were covered than female workers (33 percent).

Employee pensions provided about 15 percent of income for the elderly in 1984. This share has remained fairly constant over the last twenty years. Private pensions are more likely now to be received by the elderly than in the past.

However, pensions are a primary source of income for only a few elderly. In 1981, two percent of the elderly population depended on them for at least half of their total income, and private pensions represented over half the income for only seven percent of those who actually received private pensions.

Private pensions have an average first-year value of about \$6,800, while the overall average monthly pension check in 1984 was \$360. Monthly income from pensions varies more than benefits from Social Security, and is considerably higher for men than for women. In 1984, more than four-fifths of private pensioners also received income from Social Security.

Assets. Financial assets tend to be more valuable for the elderly, reflecting the financial accumulation of a lifetime. The role of assets as a share of income for the elderly is growing, but the value of these assets rises and falls with fluctuations in the market place and changing interest rates.

The proportion of households by age with specific types of assets is shown in Table 2-16 along with median amounts of these assets for those household which own assets. Most households, including elderly ones, held some type of liquid assets-- usually a checking or savings account. The elderly were more likely than younger persons to have their money in certificates of deposit or money market accounts and far less likely to have an IRA or Keogh. The median value of liquid assets held by the elderly tended to be greater than those for younger ages. Except for home equity, the

median value of all other assets listed in Table 2-16 was higher for the elderly than the nonelderly.

Home Equity. Home equity (the current market value of the property minus the amount of first mortgage debt) is the largest asset for many elderly homeowners. Estimates of home equity, presented in Table 2-17, show that the mean figure for elderly householders is \$54,667.

Almost three-fourths of the elderly own homes compared to 64 percent of the total population. Of this group, 83 percent of elderly householders aged 65 to 74, and 95 percent of those aged 75 or older, owned their homes free and clear in 1984, according to the Annual Housing Survey of 1983. There is some burden for those older persons who still have a mortgage or for those with an older home in need of expensive repairs. (A more extensive discussion of home equity is contained in Chapter 3, section C.5).

Net Worth. Net worth--a balance sheet approach--is defined as the value of all assets covered minus any debts. In general, people follow what is called the "life-cycle" pattern of net worth, in which asset holdings increase during younger working years and decrease after retirement. Although substantial variations existed by age and living arrangements among elderly households, the average net worth of elderly households was greater than that of the general population.

The mean net worth, including home equity, of elderly married couples (\$156,391) and elderly men who lived without a spouse (\$90,055) was greater than that for the general population (\$78,734). Elderly women living without a spouse are the only subgroup of the elderly with a lower net worth (\$67,778) than the general population (U.S. Census, 1986). It must be noted, however, that the statistical significance of these differences has not been determined.

Expenditures of the Elderly. According to the 1982-1983 Consumer Expenditure Survey (CES), conducted by the U.S. Bureau of Labor Statistics, elderly households spent 91 percent of their income, leaving 9 percent available for savings or investment (Table 2-18).

All households spent the largest share of their income on housing, but the greatest share -- 30 percent -- was spent by elderly households and those headed by a person under age 25. However, the distribution of housing costs differed for elderly households, with only half of housing costs going for shelter and one-third for fuel, utilities, and public services. This reflected both the fact that many elderly have paid off their homes and, thus, spend less on shelter costs, and that their homes tend to be more expensive to maintain, because of the older average ages of their homes.

After housing costs, elderly households spent the next greatest amounts on food, transportation, and health care, in that order. These four items constituted 70 percent of all expenditures for elderly households.

Health care expenditures, at 9 percent of household expenditures, were far greater than the percentage spent by other age groups. For example, the next largest proportion was four percent spent by households with a head aged 55 to 64. However, while the share of income spent by the elderly on health care is relatively great, nearly two-thirds of the total health care per capita costs for the elderly is covered by Medicare and Medicaid.

Projections of Income. Projections of income into future years are inherently difficult to make and depend on economic, social, and demographic forces influencing the economic status of the elderly as well as rapidly changing conditions in the general economy which are difficult to predict. Consequently, reliable projections are difficult to make. One set of general purpose projections of the income of the elderly through the year 2005 and is shown for illustrative purposes in Table 2-19, Table 2-20, Table 2-21 and Table 2-22 (Olson, Caton and Duffy, 1981). A set of specialized projections of the income and assets of the elderly were developed independently for Chapter 3 of this report.

The projections indicate that:

- The income of the elderly will increase;
- Gains will be greater for those aged 72 or over than for those aged 65 to 71;
- The gap between the incomes of men and women will lessen;
- Fewer elderly will be clustered at the lower end of the income scale.

In the 25 years from 1980 to 2005, the average incomes of elderly women living as unrelated individuals are projected to experience the greatest increase (31 percent), but the average incomes of these women will still be less than the average income for older men living in similar circumstances or for elderly families.

Women aged 72 or over are projected to show the greatest gains by 2005. The average income for these women in 1980 was \$6,255, but it is projected to increase 36 percent by 2005 to \$8,528.

However, these women are likely to continue to have lower average incomes than men, younger elderly women, or the elderly living in families. In contrast, increases in income for this period are projected to be 21 percent for single men over age 72, and 26 percent for families headed by a person over age 72. Income increases are expected to be lower for the elderly aged 65 to 71: 23 percent for single women, 21 percent for single men, and 24 percent for families.

Elderly women who live alone are among the poorest elderly. According to the projections, their incomes will catch up with the overall average for the elderly, although their income will still be less than that of older men or the elderly living in families. In 1980, single elderly women had an average income 15 percent lower than that of an elderly single man. By 2005, their income is expected to be 9 percent lower.

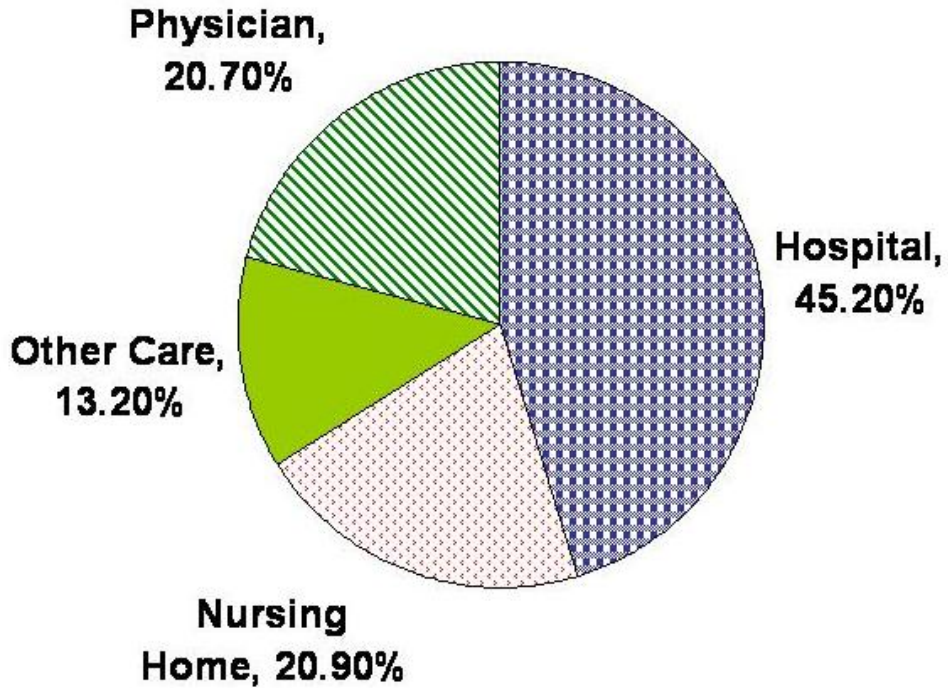
Projections suggest that the proportion of elderly with inadequate incomes (less than \$10,000 in constant 1980 dollars) will fall (Table 2-22). The greatest drop is expected for single women aged 72 or over, where the proportion with incomes under \$10,000 is projected to decrease from 59 percent in 1979 to 38 percent in 2005. Overall, while 54 percent of elderly individuals had inadequate incomes in 1979, 38 percent are projected to be in this range in 2005. Similarly, there are expected to be fewer elderly families with inadequate incomes, with the proportion falling from 35 percent in 1979 to 23 percent by 2005.

Conclusions. Economically, the elderly are much better off now than in the past and their economic status will improve in the future. However, these gains have not reached some segments of the elderly population, and it is not clear if these economic gains can offset the rising costs of long-term care as the population ages.

The income of the elderly is not only rising, but, it is becoming more complicated as assets play a greater role in determining wealth. The wealthiest elderly have many types of financial assets, for example, and receive income from more than one source, not just Social Security. It is not clear if trends towards more diversified financial holdings for the elderly will continue or if the accumulation of these assets will begin at younger ages. Persons in their fifties and early sixties may have the best opportunity to accumulate financial assets to pay for long-term care, because they are still working, and the heavy financial burden of raising a family may be over.

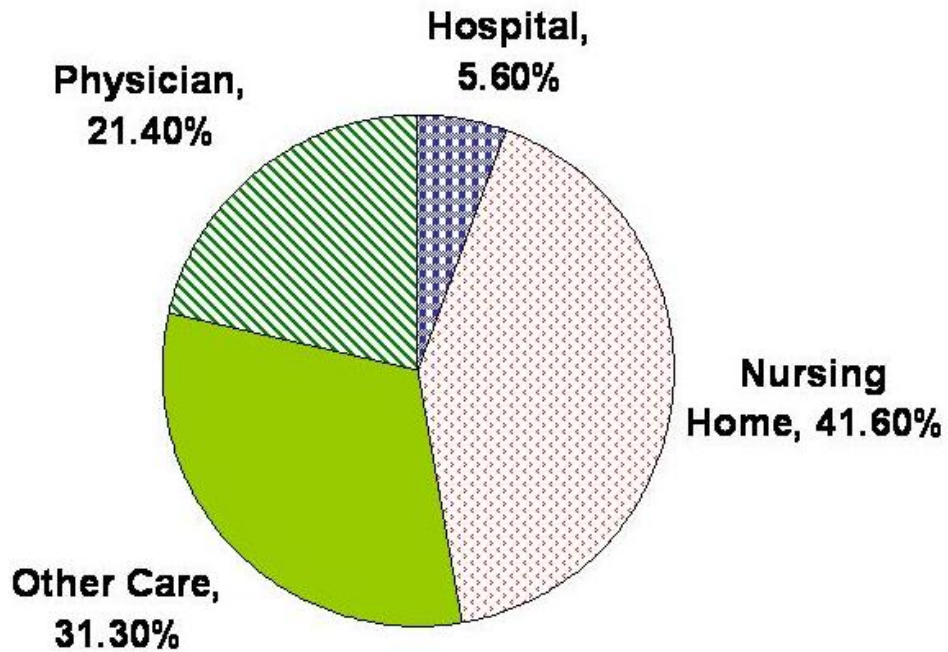
The elderly population ranges from the wealthiest to the poorest Americans. Special attention will need to be paid to those most at risk for institutionalization and most economically vulnerable: women, those over age 85 and persons who live alone. While economic forecasts seem to indicate that these groups will fare better financially by the turn of the century, they will continue to have the lowest incomes among the elderly and will be least able to pay for their own care.

FIGURE 2-1: Personal Health Care Expenditures for the Elderly by Type of Service -- 1984 (Total -- \$120 Billion)



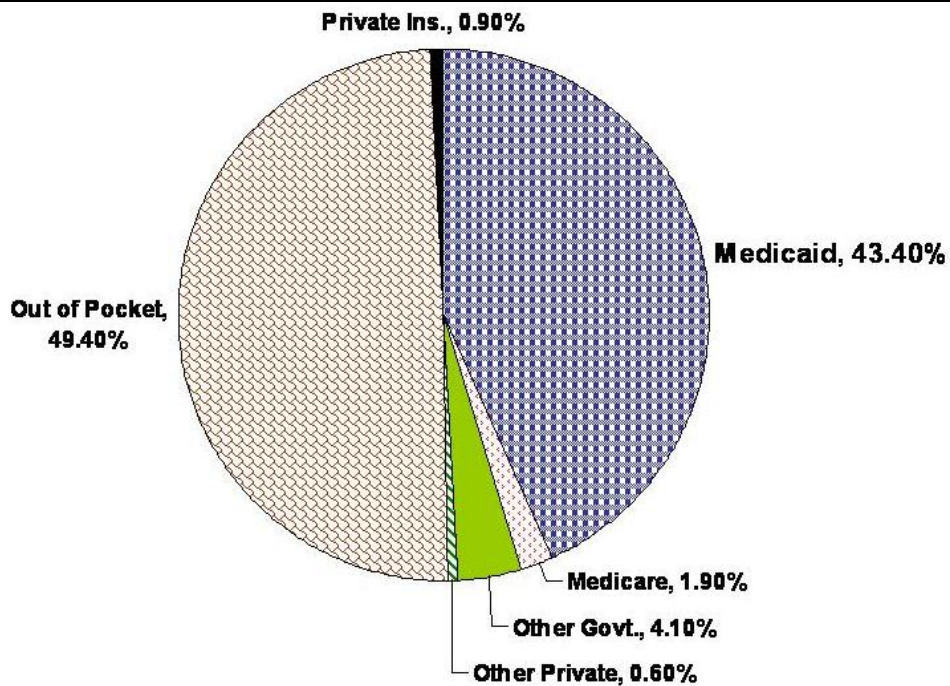
SOURCE: Waldo and Lazenby, 1984.

FIGURE 2-2: Out of Pocket Health Care Expenditures for the Elderly by Type of Service -- 1984 (Total -- \$30.2 Billion)



SOURCE: Waldo and Lazenby, 1984.

**FIGURE 2-3: Nursing Home Expenditures by Source of Payment -- 1984
(Total -- \$32 Billion)**



SOURCE: Levit et al., 1985.

**TABLE 2-1: U.S. Population 65 Years of Age or Over and Percent of Total Population:
Selected Years and Projections 1950-2030**

Year	Population 65 Years or Over in Thousands	Percent of U.S. Population
1950	12,270	8.1
1970	19,980	9.8
1980	25,544	11.3
2000	34,921	13.0
2010	39,195	13.8
2020	51,422	17.3
2030	64,581	21.2

SOURCE: U.S. Bureau of the Census.

TABLE 2-2: Percent Increases in U.S. Population for 10-year Intervals, by Age Groups: Selected Years and Projections 1950-2010				
Year	All Ages	65-74 Years	75-84 Years	85 Years or Over
1950-1960	18.7	30.1	41.2	59.3
1960-1970	13.4	13.0	31.7	52.3
1970-1980	8.7	23.4	14.2	44.6
1980-1990	10.0	13.8	26.6	20.1
1990-2000	7.1	-2.6	15.6	29.4
2000-2010	6.2	13.3	-2.4	19.4

SOURCE: U.S. Bureau of the Census.

TABLE 2-3: Projections of Long-Term Care Population in Nursing Homes and in the Community (in thousands)			
Year	Nursing Home Residents Age 65 and Above	LTC Population in the Community	
		IADL* Only	ADL** 1-6
1980	1,187	1,465	3,161
1985	1,411	1,666	3,659
1990	1,623	1,870	4,152
1995	1,861	2,061	4,652
2000	2,081	2,198	5,064
2020	2,805	3,085	7,033
2040	4,354	4,241	10,174

SOURCE: 1977 National Nursing Home Survey, Social Security Administration Projections, and the 1982 Long-Term Care Survey (Adapted from Manton and Liu, 1984).

* Instrumental Activities of Daily Living Only.
 ** Activities of Daily Living -- Individuals in this group have one or more of the six ADLs and may have IADLs as well.

TABLE 2-4: Percent Distribution of Helpers and Helper Days, by Sex and Relationship to Individuals 65 Years of Age or Over with Limitations in Activities of Daily Living (percent)				
Age and Relationship	Helpers		Helper Days	
	Male	Female	Male	Female
ALL PERSONS 65 YEARS OR OVER				
Spouse	37	10	53	17
Offspring	24	34	19	37
Other relative	23	35	18	30
Formal	16	21	11	16
65-74 YEARS				
Spouse	45	18	61	31
Offspring	21	29	15	27
Other relative	21	33	15	28
Formal	13	20	9	14
75-84 YEARS				
Spouse	35	8	53	14
Offspring	23	35	18	38
Other relative	25	36	18	32
Formal	17	21	11	15
85 YEARS OR OVER				
Spouse	20	2	31	3
Offspring	34	39	31	47
Other relative	27	36	22	30
Formal	19	23	16	19
SOURCE: Preliminary data from the 1982 National Long-Term Care Survey, Department of Health and Human Services, 1982.				

TABLE 2-5: U.S. Total Expenditures for Nursing Home Care and Annual Percent Change: Calendar Years 1960-84		
Year	Expenditures in Billions	Annual Percentage Change
1960	\$0.5	--
1965	2.1	64.0
1970	4.7	24.7
1971	5.6	19.1
1972	6.5	16.1
1973	7.1	9.2
1974	8.5	19.7
1975	10.1	18.8
1976	11.3	11.9
1977	13.0	15.0
1978	15.1	16.2
1979	17.4	15.2
1980	20.4	17.2
1981	23.9	17.2
1982	26.9	12.6
1983	29.4	9.3
1984	32.0	10.2
SOURCE: Health Care Financing Administration, Office of Financial and Actuarial Analysis.		

TABLE 2-6: Long-Term Care as Percent of Total Federal and State Medicaid Expenditures, by Type of Service: Fiscal Years 1974-84 (Percent)						
Fiscal Year	Total LTC	SNF	ICF-Other	ICFMR	Mental Hospital	Home Health
1974	40.2	2.0	13.8	20.0	4.1	0.3
1975	42.3	19.9	15.4	3.1	3.3	0.6
1976	42.6	17.6	15.7	4.5	3.8	1.0
1977	43.1	16.6	16.2	5.6	3.6	1.1
1978	46.2	17.4	17.3	6.6	3.7	1.2
1979	47.3	16.5	18.4	7.3	3.8	1.3
1980	47.0	15.8	18.0	8.5	3.3	1.4
1981	47.2	14.8	16.6	11.0	3.2	1.6
1982	48.8	15.1	16.9	11.8	3.3	1.7
1983	46.8	13.4	16.1	12.2	2.8	1.8
1984	49.2	14.2	17.2	12.5	3.1	2.3

NOTES:
LTC - long-term care
SNF - skilled-nursing facility
ICFMR - intermediate-care facilities for the mentally retarded
ICF - intermediate-care facility

TABLE 2-7: Medicaid Long-Term Care Expenditures and Percent Change, by Type of Services: Fiscal Years 1977-84								
Fiscal Year	Total Expenditures in Millions	Percent Change	Long-Term Care		SNF		ICFMR	
			Expenditures in Millions	Percent Change	Expenditures in Millions	Percent Change	Expenditures in Millions	Percent Change
1974	\$9,983	--	\$4,023	--	\$2,002	--	\$203	--
1975	12,242	22.6	5,174	28.6	2,434	21.6	380	87.2
1976	14,091	15.1	5,983	15.6	2,476	1.7	635	67.1
1977	16,239	12.0	7,011	13.5	2,691	6.9	917	34.2
1978	17,992	10.8	8,296	18.3	3,125	16.1	1,192	30.0
1979	20,472	13.8	9,681	16.7	3,379	8.1	1,488	24.8
1980	23,311	13.9	10,983	13.4	3,685	9.1	1,989	33.7
1981	27,204	16.7	12,843	16.9	4,035	9.5	2,996	50.6
1982	29,399	8.1	14,343	11.7	4,427	9.7	3,467	15.7
1983	32,351	10.0	15,611	8.8	4,621	4.4	4,079	17.7
1984	33,895	4.8	16,697	7.0	4,810	4.0	4,256	4.3
ACRG 1974-80		14.5		17.4		10.3		44.1
ACRG 1980-84		9.8		11.0		6.9		21.0
Fiscal Year	ICF-Other		Psychiatric Hospital		Home Health			
	Expenditures in Millions	Percent Change	Expenditures in Millions	Percent Change	Expenditures in Millions	Percent Change	Expenditures in Millions	Percent Change
1974	\$1,381	--	\$406	--	\$31	--		
1975	1,885	36.5	405	-0.3	70	125.8		
1976	2,209	17.2	529	30.6	134	91.4		
1977	2,637	15.2	586	8.5	180	26.6		
1978	3,104	17.7	665	13.5	210	16.7		
1979	3,373	21.6	778	17.0	263	25.2		
1980	4,202	11.4	775	-0.4	332	26.2		
1981	4,507	7.3	877	13.2	428	28.9		
1982	4,979	10.5	974	11.1	496	15.9		
1983	5,381	8.0	933	-4.2	597	20.4		
1984	5,823	8.2	1,043	11.8	765	28.1		
ACRG 1974-80				19.5		10.9		46.1
ACRG 1980-84				8.5		7.7		23.2

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy.
NOTE: ACRG - annual compound rate of growth.

**TABLE 2-8: Actual and Projected Growth of the Older Population: United States, 1900-2040
(numbers in thousands)**

Year	Total Population: All Ages	65 Years and Over		65 to 74 Years		75 to 84 Years		85 + Years	
		Number	Percent of Total	Number	Percent of 65+	Number	Percent of 65+	Number	Percent of 65+
1900	76,303	3,084	4.0	2,189	71.0	772	25.0	123	4.0
1920	10,571	4,933	4.7	3,464	70.2	1,259	25.5	210	4.3
1940	131,669	9,019	6.8	6,375	70.7	2,278	25.3	365	4.0
1960	179,323	16,560	9.2	10,997	66.4	4,633	28.0	929	5.6
1980	226,505	25,544	11.3	15,578	61.0	7,727	30.2	2,240	8.8
2000	267,990	35,036	13.1	17,693	50.5	12,207	34.8	5,136	14.7
2020	296,339	51,386	17.3	29,769	57.9	14,280	27.8	7,337	14.3
2040	307,952	66,643	21.6	29,168	43.8	24,529	36.8	12,946	19.4

SOURCE: U.S. Bureau of the Census, Decennial Censuses of Population, 1900-1980 and U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 922, Projections of the Population of the United States: 1982 to 2050 (Advance Report), U.S. Government Printing Office, Washington, D.C. 1982.

TABLE 2-9: Probability of Selected Medical Conditions as the First Reported Cause of Chronic Disability among Disabled Persons, 85 Years and Older: United States, 1982

Condition	Percent
Dementia	19.43
Arthritis	16.75
Peripheral Vascular Disease	14.88
Cerebrovascular Disease	12.86
Hip & Other Fractures	8.81
Ischemic Heart Disease	1.88
Hypertension	1.38
Diabetes	1.01
Cancer	0.91
Emphysema & Bronchitis	0.26

SOURCE: Health Care Financing Administration, 1982 National Long-Term Care Survey

TABLE 2-10: Average Incomes (Before Taxes) of the Elderly and Nonelderly, 1969 and 1984

	Family Income*	Family Income Per Capita	Income of Unrelated Individuals
1969			
Elderly	\$7,800	\$3,000	\$2,800
Nonelderly	11,500	3,500	5,600
Ratio, Elderly to Nonelderly	0.68	0.87	0.50
1984			
Elderly	\$26,000	\$10,900	\$10,800
Nonelderly	33,300	11,100	18,000
Ratio, Elderly to Nonelderly	0.78	0.99	0.60

SOURCE: Congressional Budget Office calculations based on March 1985 Current Population Survey (Gordon, 1986).

* Elderly families consist of families with two or more people that include at least one person age 65 or older. Elderly individuals include people age 65 and older who are living alone or with people to whom they are not related.

TABLE 2-11: Median Per Capita Income for the Elderly by Sex and Marital Status: 1984		
	Men	Women
MARITAL STATUS		
All Persons	\$10,450	\$6,020
Married	11,317	4,866
Divorced	6,991	6,777
Widowed	7,936	8,568
Never Married	6,833	8,654
% BY MARITAL STATUS		
All Persons	100.0%	100.0%
Married	77.8	39.8
Divorced	3.1	4.2
Widowed	14.0	50.5
Never Married	5.0	5.6
SOURCE: Developments in Aging, Volume 3, Special Committee on Aging, United States Senate. February 28, 1986.		

TABLE 2-12: Median Per Capita Income of the Elderly by Age, Race, and Sex: 1984				
Race	Men		Women	
	65 - 69 Years	70 + Years	65 - 69 Years	70 + Years
All Races	\$12,292	\$9,407	\$6,229	\$5,950
White	12,749	9,853	6,527	6,225
Black	7,545	5,679	4,446	4,304
Hispanic	8,778	5,705	4,342	4,825
SOURCE: Developments in Aging, Volume 3, Special Committee on Aging, United States Senate. February 28, 1986.				

TABLE 2-13: Percent of Older Persons in Poverty by Age and Sex: 1984				
Sex	Age			All Ages 65+
	65 to 74	75 to 84	85+	
BOTH SEXES				
Under Poverty	10.3%	15.2%	18.4%	12.4%
Under 125% of Poverty	17.3	26.4	31.5	21.2
BOTH SEXES				
Under Poverty	7.1	11.0	15.4	8.7
Under 125% of Poverty	12.7	19.0	25.4	15.2
BOTH SEXES				
Under Poverty	13.8	17.7	20.0	15.0
Under 125% of Poverty	24.5	31.1	34.7	25.9
SOURCE: Developments in Aging, Volume 3, Special Committee on Aging, United States Senate. February 28, 1986.				

Race	Living Arrangements of Persons Below Poverty		Total
	In Families	Unrelated Individuals	
ALL RACES	6.7%	24.2%	12.4%
Men	6.1	20.8	8.7
Women	7.2	25.2	15.0
WHITES	5.5	21.4	10.7
Men	5.2	17.3	7.2
Women	5.8	22.5	13.1
BLACKS	20.3	52.5	31.7
Men	19.1	43.3	26.0
Women	21.3	56.6	35.5
HISPANICS	14.9	39.8	21.5
Men	15.5	40.0	20.7
Women	14.8	39.0	22.1

SOURCE: Developments in Aging, Volume 3, Special Committee on Aging, United States Senate. February 28, 1986.

Income Source	All Income Groups	Income Quintiles (in percents)				
		Lowest 20	20 to 39	40 to 59	60 to 79	80 to 100
		Elderly Couples*				
		Income Range (in dollars)				
		Less Than 10,100	10,100-14,449	14,450-20,099	20,100-30,099	30,100 and Above
Social Security	37.6	82.2	69.2	55.5	37.4	17.8
Government Pensions	8.5	1.8	4.7	5.7	10.5	10.4
Private Pensions	7.7	2.9	7.7	11.5	9.9	6.2
Income from Assets	27.6	6.1	10.4	17.9	26.7	38.4
Earnings	16.9	2.2	6.0	7.9	14.7	25.7
Means-Tested Cash Transfers	0.3	3.3	0.6	0.1	0.0	0.0
Other Income	1.3	1.5	1.4	1.4	0.8	1.5
Total	100	100	100	100	100	100
		Elderly Individuals**				
		Income Range (in dollars)				
		Less Than 4,200	4,200-5,799	5,800-8,049	8,050-13,699	13,700 and Above
Social Security	44.5	75.0	81.6	74.2	52.9	21.7
Government Pensions	7.8	0.6	1.1	3.6	7.9	11.1
Private Pensions	4.7	0.4	1.0	4.2	7.4	5.0
Income from Assets	30.6	3.5	4.7	10.0	21.6	48.5
Earnings	8.1	0.6	1.3	2.5	7.1	12.3
Means-Tested Cash Transfers	2.3	17.8	7.2	3.1	0.2	0.0
Other Income	2.1	2.1	3.1	2.4	2.9	1.4
Total	100	100	100	100	100	100

SOURCE: Congressional Budget Office calculations based on the March 1985, Current Population Survey.

* Elderly couples include those in which the older spouse is age 65 or older and the younger spouse is age 62 or older.
 ** Elderly individuals include all unmarried people age 65 or older.

TABLE 2-16: Asset Holdings, by Type of Asset and Age of Family Head; United States: 1983						
	Percent of Families with Specific Asset Type					
	All Ages	Less Than 35	35-44	45-54	55-64	65 and Over
LIQUID ASSETS						
Checking Account	79.0%	72.0%	83.0%	81.0%	83.0%	80.0%
Savings Account	62.0	63.0	68.0	65.0	58.0	53.0
Certificate of Deposit	20.0	9.0	16.0	18.0	30.0	37.0
Money Market Account	14.0	8.0	16.0	12.0	18.0	18.0
IRA or Keogh Account	17.0	9.0	19.0	25.0	33.0	8.0
NONLIQUID FIN. ASSETS						
Savings Bonds	21.0	20.0	27.0	23.0	21.0	14.0
Stocks	19.0	13.0	22.0	22.0	25.0	21.0
Bonds	3.0	1.0	3.0	3.0	5.0	4.0
Nontaxable Holdings	3.0	1.0	3.0	3.0	5.0	5.0
Trusts	4.0	4.0	4.0	6.0	4.0	3.0
HOME EQUITY	60.0	34.0	66.0	75.0	73.0	70.0
PROPERTY	19.0	10.0	20.0	22.0	30.0	20.0
BUSINESS ASSETS	14.0	7.0	13.0	11.0	12.0	7.0
	Median Amount of Assets by Age Group (1983 dollars)					
	All Ages	Less Than 35	35-44	45-54	55-64	65 and Over
LIQUID ASSETS						
Checking Account	\$500	\$300	\$500	\$600	\$995	\$987
Savings Account	1,151	500	1,194	1,400	1,588	2,412
Certificate of Deposit	8,000	4,388	6,000	15,250	7,400	11,156
Money Market Account	10,000	4,000	8,717	8,250	12,255	19,892
IRA or Keogh Account	4,000	2,000	3,000	3,790	4,000	6,000
NONLIQUID FIN. ASSETS						
Savings Bonds	325	200	300	330	750	846
Stocks	4,016	1,200	3,300	3,623	7,250	10,150
Bonds	10,000	7,511	5,272	8,400	12,500	20,500
Nontaxable Holdings	14,125	2,747	8,673	16,500	17,500	21,932
Trusts	10,000	2,957	8,000	10,000	15,500	20,791
HOME EQUITY	41,261	25,985	40,600	50,000	55,000	41,857
PROPERTY	35,000	25,000	40,000	27,000	40,000	40,000
BUSINESS ASSETS	50,000	13,500	40,000	52,500	55,000	83,202

SOURCE: Emily S. Andrews, *The Changing Profiles of Pensions in America*, Table V.7, p. 126-127. (Washington, D.C., Employee Benefit Research Institute), 1985.

TABLE 2-17: Home Equity Among the Elderly: 1984	
Age	Mean Home Equity
65+	\$54,667
65-69	\$56,747
70-74	\$56,812
75+	\$51,374

SOURCE: U.S. Census, Current Population Reports Series P-70, No. 7: Household Wealth and Asset Ownership: 1984. U.S. GPO, Washington, D.C., 1986.

Budget Item	Age of Householder (in years)					
	Under 25	25 to 34	35 to 44	45 to 54	55 to 64	65 and Over
Income	\$11,537	\$28,835	\$29,718	\$31,198	\$24,450	\$13,583
Total Expenditure	101%	67%	82%	79%	80%	91%
Food	16	10	14	13	14	17
Alcoholic Beverages	3	1	1	1	1	1
Housing	30	22	25	22	22	30
Shelter	19	14	15	12	11	15
Fuel, Utilities and Public Service	6	5	6	6	7	10
Household Operations	1	1	1	0.7	0.9	2
House Furnishings	4	3	3	3	3	3
Apparel and Services	7	4	5	4	4	4
Transportation: Gasoline and Motor Oil	6	4	4	5	5	4
All Other Transportation*	16	10	12	11	10	10
Health Care	3	2	3	3	4	9
Other Expenditures**	14	8	11	12	11	12
Life Insurance	0.6	0.7	1	1	1	1
Retirement Pension,	6	5	6	7	7	2
Personal Taxes	11	10	11	13	11	6

SOURCE: U.S. Bureau of Labor Statistics, Consumer Expenditure Survey: Interview Survey, 1982-1983, bulletin 22246, 1986.

Totals may not sum due to rounding.
 * Includes other private and public transportation.
 ** Entertainment, personal care, reading, education, tobacco and smoking supplies, cash contributions, and miscellaneous expenditures.

Age Group	1980	1985	1990	1995	2000	2005
MEN						
65 to 71	8,369	8,697	9,078	9,369	9,780	10,094
72 and Over	7,454	7,754	8,101	8,375	8,750	9,042
All Elderly	7,850	8,169	8,537	8,822	9,214	9,517
WOMEN						
65 to 71	7,297	7,646	7,989	8,276	8,676	8,998
72 and Over	6,255	6,464	6,885	7,392	7,981	8,528
All Elderly	6,658	6,916	7,303	7,724	8,240	8,703
FAMILIES						
65 to 71	18,019	19,032	19,925	20,637	21,549	22,270
72 and Over	14,984	15,878	16,675	17,314	18,186	18,874
All Elderly	16,608	17,585	18,452	19,144	20,037	20,746

SOURCE: Olson, L., Caton, C. and Duffy, M. *The Elderly and the Future Economy*, Lexington Books, 1981.

TABLE 2-20: Projections and Income Distribution for Families and Singles Aged 65 to 71: Baseline (percentage within real 1980 income classes)						
Income Distribution	Families of Two or More			Singles		
	1980	1990	2005	1980	1990	2005
\$0 to \$2,500	0.236	0	0	6.589	2.008	0
\$2,500 to \$5,000	5.918	2.250	0.288	40.251	39.958	32.737
\$5,000 to \$7,500	12.268	9.936	5.977	21.610	22.955	25.976
\$7,500 to \$10,000	13.594	12.979	11.461	11.348	12.168	13.998
\$10,000 to \$20,000	38.099	39.936	41.679	15.268	16.818	19.528
\$20,000 and Over	29885	34.628	10.595	4.935	6.092	7.760
Number (thousands)	4,618,359	5,487,917	5,872,101	3,140,664	3,879,170	4,269,474
SOURCE: Olson, L. Caton, C. and Duffy, M. <u>The Elderly and the Future Economy</u> , Lexington Books, 1981.						

TABLE 2-21: Projections of Numbers and Income Distributions for Families and Singles Aged 72 and over: Baseline (percentage within real 1980 income classes)						
Income Distribution	Families of Two or More			Singles		
	1980	1990	2005	1980	1990	2005
\$0 to \$2,500	0	0	0	8.109	2.530	0.144
\$2,500 to \$5,000	8.790	3.428	0.225	46.093	46.783	31.713
\$5,000 to \$7,500	19.702	17.388	11.591	22.002	23.588	30.160
\$7,500 to \$10,000	17.289	17.881	17.652	10.238	11.128	14.906
\$10,000 to \$20,000	34.833	38.494	43.055	10.403	12.099	17.616
\$20,000 and Over	19.387	22.809	27.477	3.155	3.872	5.461
Number (thousands)	4,014,170	4,548,314	4,784,306	4,771,709	6,022,728	6,747,424
SOURCE: Olson, L. Caton, C. and Duffy, M. <u>The Elderly and the Future Economy</u> , Lexington Books, 1981.						

TABLE 2-22: Projections of Elderly with Inadequate Income, by Family Status and Age: Baseline (percent)			
Age/Status Group	1979	1990	2005
INDIVIDUALS			
Men, 65-71	44.6%	42.1%	36.4%
Women, 65-71	49.6	45.8	38.8
Men, 72 and Over	49.8	46.6	39.3
Women, 72 and Over	59.0	52.1	38.1
All Elderly Individuals	53.7	48.7	38.3
FAMILIES			
Head, 65-71	29.1	24.1	18.6
Head, 72 and Over	41.4	35.5	28.5
All Elderly Families	34.8	29.3	23.0
SOURCE: Olson, L. Caton, C. and Duffy, M. <u>The Elderly and the Future Economy</u> , Lexington Books, 1981.			

REPORT TO THE SECRETARY ON PRIVATE FINANCING OF LONG-TERM CARE FOR THE ELDERLY

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