

January 2006

Case Studies of Health Promotion in the Aging Network: Los Angeles County Area Agency on Aging

Final Report

Prepared for

Frank Burns

U.S. Department of Health & Human Services
Administration on Aging, Office of Evaluation
1 Massachusetts Avenue
Washington, DC 20201

Prepared by

David Brown, M.A.

Joshua Wiener, Ph.D.

Barbara Gage, Ph.D.

RTI International
Health, Social, and Economics Research
411 Waverley Oaks Road, Suite 330
Waltham, MA 02452-8414

RTI Project Number 08490.007.005



CASE STUDIES OF HEALTH PROMOTION IN THE AGING NETWORK:
LOS ANGELES COUNTY AREA AGENCY ON AGING

Authors: David Brown, M.A.
Joshua Wiener, Ph.D.
Barbara Gage, Ph.D.

Project Director: Barbara Gage, Ph.D.

Federal Project Officer: Frank Burns

RTI International*

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*RTI International is a trade name of Research Triangle Institute.

Study of the Health Promotion and Disease Prevention Services Program of the Older Americans Act

Older adult health promotion and disease prevention is one of the top priorities for the Administration on Aging. The Administration on Aging plays an important role in the larger Federal effort to promote healthy lifestyles, particularly among older populations. Although illness and disability rates increase with age, a large body of research demonstrates that health promotion and disease prevention activities can help ensure healthy and independent lives for older Americans. For example, exercise and other health-promoting behaviors have been shown to improve aerobic power, strength, balance, and flexibility, while decreasing acute medical problems such as fractures, myocardial infarctions, and cerebral vascular accidents in older persons. Screenings, such as mammograms and evaluations of stool specimens, have been shown to decrease morbidity and extend life in this group as well (Rabiner et al., 2004).¹ The Administration on Aging, along with its other Federal partners, has worked to use this evidence-based knowledge to improve the health and independence of the nation's seniors.

As part of these efforts, the Administration on Aging administers Title III-D of the Older Americans Act to support health promotion and disease prevention services. This portion of the Older Americans Act requires that disease prevention and health promotion services and information be provided at senior centers, meal sites, and other appropriate locations, giving priority to areas of the state which are medically underserved and in which there are a large number of older individuals who have the greatest economic need for these services. Designated funding for these activities is intended to provide seed money for developing health promotion and disease prevention programs with other community partners, and to serve as a catalyst in promoting health promotion and disease prevention initiatives. In 2003, Congress appropriated a total of \$21.9 million for Title III-D preventive health services as part of a Title III budget of \$1.25 billion. In addition, the Administration on Aging has supported other health promotion activities by hosting a national summit on health promotion, funding the National Resource Center on Nutrition and Physical Activity and the National Resource Center for Evidence Based Programs, and working with the Centers for Disease Control and Prevention, the National Institute on Aging, the Agency for Health Care Research and Quality, and the Centers for Medicare & Medicaid Services to develop coordinated health promotion strategies.

This report is part of a larger set of studies conducted for the Administration on Aging by RTI International to provide information on the implementation of the Title III-D programs of the Older Americans Act. The goal of this study is to assess how the Aging Network has used the limited Title III-D funds as a catalyst to develop health promotion and disease prevention programs for older Americans. This information will be important for assisting states and communities wishing to replicate these types of efforts and for assisting state and Federal decision makers in planning the future of the Title III-D program.

¹ Rabiner et al. (2004) summarized the current research on evidence-based health promotion/disease prevention activities for older people and their outcomes.

This project has seven principal research questions:

- How do health promotion and disease prevention activities fit into the overall activities of the Aging Network?
- Has the Aging Network leveraged its Title III-D dollars to develop larger health promotion and disease prevention programs?
- Have the Area Agencies on Aging developed partnerships with other organizations to create more extensive health promotion programs for older people?
- Have Area Agencies on Aging developed and chosen model programs that are evidence-based?
- How comprehensive are the health promotion and disease prevention activities of the Area Agencies on Aging?
- Have programs been implemented on a widespread basis, involving large numbers of older people?
- Is broad data about program participants and the effectiveness of the programs available and used by program managers and administrators?

These questions are addressed through three major study components:

Literature Review. The study questions were refined and potential case study sites were identified through an extensive literature review on the state of the art in evidence-based Health Promotion and Disease Prevention efforts for the elderly (Rabiner et al., 2004). This was used to refine our conceptual framework for the study and to identify areas where these programs have been effective with senior populations.

Expert Interviews. Experts in the field were interviewed to collect input on current efforts underway in the private sector, the extent to which these health promotion and disease prevention efforts are being evaluated, and the types of health promotion activities that were considered most effective with the senior population. The experts also assisted in selecting a set of eight case study sites, recommending different features that were important for inclusion. In addition, these interviews were useful for coordinating our efforts with other related efforts in the field. The experts represented national associations, such as the National Association of State Units on Aging and the National Council on the Aging staff, as well as national and local program managers and researchers. Valuable input was also provided by regional and national Administration on Aging staff.

Case Studies. Case studies of eight selected Area Agencies on Aging were conducted to gain a better understanding of the Aging Network's involvement in health promotion activities. The case studies build on the other sections of this study and represent the largest component of the assessment.

This report is one of the eight case studies that were conducted. Area Agencies on Aging are the key organizations for implementing the provisions of the Older Americans Act. They provide access, management, and direct health and social services, including health promotion and disease prevention services to older Americans. The agencies were selected based on their reputations for innovative approaches to health promotion activities, including participation in national disease prevention and health promotion programs. Additional selection criteria included variations in the type of health promotion and disease prevention activity offered, diversity in geographic location, leveraging of multiple funding sources, the type of Aging Network member that leads the initiative, and types of collaborating entities. The Area Agencies on Aging selected for study were Atlanta, Georgia; Los Angeles, California;

Seattle, Washington; Phoenix, Arizona; Cincinnati, Ohio; Orlando, Florida; Portland, Maine; and the state agency which also functions as an Area Agency on Aging for the state of Delaware.

The case studies focus on those determinants of health most amenable to impact through programmatic interventions. A person's health status is determined by a variety of factors, including individual factors such as an individual's biology, socioeconomic background, attitudes and beliefs, and his/her motivations and health behaviors (Rabiner et al., 2004). It is also determined by community factors, including the role of the social and physical environment, access to quality care, public interventions and policies, and their results. In the case studies, we concentrated on those programs and policies which intervened at those levels where change can be made on the individual level, by modifying attitudes, beliefs, motivations, and health behaviors of older persons.

Data for these case studies were collected through telephone and on-site interviews and a review of secondary sources, including program reports, evaluations, and web sites. Interviews were conducted with staff members from the selected AAAs, the State Unit on Aging, and partner health promotion providers. Area Agencies on Aging staff were interviewed to understand their approach to health promotion, funding, and other program characteristics. State program officials were interviewed to understand the relationship of the local health promotion efforts to the statewide efforts. Local providers, advocates, consumers, the education community, and other members of the Aging Network were interviewed to understand the details of the programs and the factors affecting the development of these programs. At some sites, people were interviewed solely by telephone; at other sites, in-person interviews were conducted. Data for these case studies were collected from June 2004 through February 2005.

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SECTION 1 INTRODUCTION

Health promotion and disease prevention are critical programs to ensure the health of older people. As part of that initiative, Title III-D of the Older Americans Act funds activities to keep seniors healthy. In addition to directly funding services, the goal of Title III-D is to be a catalyst for health promotion and disease prevention activities. This case study is part of a larger effort to understand what the Aging Network achieved with Older Americans Act Title III-D funds, how they these funds expanded their health promotion and disease prevention programs, characteristics of these programs, and how to assess these programs to improve them over time.

The Los Angeles County Area Agency on Aging (LA County AAA) serves the County of Los Angeles outside the City of Los Angeles. Its mission is to be a vehicle for change by stimulating “progress toward the creation of a home and community-based long-term care system that maximizes consumer independence and dignity and is responsive and accessible to Los Angeles County’s diverse populations of older adults and functionally-impaired adults, as well as their families and caregivers.” (<http://dcss.co.la.ca.us/AAA/AAAdeftxt.htm>). The LA County AAA was selected as one of the sites for this study of health promotion and disease prevention programs of the Aging Network because of its work in nutrition- and exercise-related health promotion programming, specifically:

- **The Effective Nutritional Health Assessments and Networks of Care for the Elderly (ENHANCE) program**, which provides seniors with individualized nutritional counseling for seniors at nutritional risk and disease prevention/health promotion preventive clinics.
- **The Be Well exercise and nutrition pilot program** which provides seniors with a coordinated program of light exercise and nutritional education, both of which are made available in the context of congregate nutrition programs.

During September and October 2004, 12 telephone interviews were conducted with LA County AAA staff, state officials, senior center administrators, special project coordinators, public health providers, and health care administrators who were knowledgeable about the various health promotion and disease prevention activities for older persons in Los Angeles County. In this report, we provide an overview of the LA County AAA site, a general description of the health promotion and disease prevention programs being supported by the Aging Network, and a detailed description of key health promotion/disease prevention activities.

This case study examines:

- How health promotion and disease prevention activities fit into the overall activities of the Los Angeles County Area Agency on Aging.
- The leveraging efforts of the LA County AAA using Title III-D dollars to develop larger health promotion and disease prevention programs.
- Partnerships which the LA County AAA has developed with other organizations to develop health promotion programs for older people.
- How the LA County AAA developed and chose the programs it supports.
- The degree to which the LA County AAA has developed a comprehensive set of health promotion and disease prevention activities.
- How comprehensively these LA County AAA programs have been implemented in its service area.
- What data are available on program participants and the effectiveness of LA County AAA programs, and how these data are used by program managers and administrators?

SECTION 2 OVERVIEW OF THE LOS ANGELES COUNTY AREA AGENCY ON AGING

The Los Angeles County AAA is responsible for planning, coordinating, and administering programs for older adults in Los Angeles County outside the City of Los Angeles, which contains 87 incorporated cities and over 100 unincorporated communities. The Los Angeles County AAA contracts with 51 community-based organizations, and provided services to over 150,000 clients during fiscal year 2003-2004 (LA County AAA, unpublished data). The Los Angeles County AAA is a separate division within the Aging and Adult Services Branch of the County of Los Angeles Department of Community and Senior Services.

Organization and Sources of Funding

The LA County AAA was established in 1975. In addition to its Older Americans Act programs, it provides several other programs, including:

- **Integrated Care Management Project** provides case management services, such as screening, assessment, care planning, service authorization, and monitoring, to enable functionally-impaired adults to obtain long-term care services. Persons with impairment of one or more activities of daily living or two or more instrumental activities of daily living, or an emotional/cognitive impairment, are eligible for services. The program began in 1999 and is operated in cooperation with Adult Protective Services, the Los Angeles County Department of Public Social Services, the California Departments of Social Services and Aging and a network of 24 community-based case management provider agencies who implement the project

services. The project is partially funded with 20 percent of the fines assessed in the county for traffic violations involved with improper use of parking spaces reserved for people with disabilities.

- **Geriatric Evaluation Networks Encompassing Services, Information, and Support (GENESIS) Program** provides physical and mental health services to homebound older and frail adults, utilizing a team of psychiatric social workers, registered nurses and a geropsychiatrist to bring a multidisciplinary approach to working with these adults. The program is offered in cooperation with and jointly funded by the Los Angeles County Departments of Community and Senior Services and Mental Health.
- **In-Home Services Registry Program** screens and matches potential in-home service workers with functionally impaired older adults. The registry recruits, screens, and refers home care attendants to seniors free of charge under OAA Title III-B. The senior is then responsible for hiring and paying the worker unless this cost is covered by some other program. The registry also provides instruction and assistance to seniors on how to be an employer and choose workers, and conducts quality assurance services. These workers provide services including housekeeping, personal care, meal preparation, transportation and companionship.
- **Alzheimer's Day Resource Centers** in Los Angeles County are administered by the Los Angeles County. These centers provide adult day care for persons for Alzheimer's disease or related dementias; respite care for caregivers; counseling; support groups and training for families and caregivers; training for center staff, professionals, students and the public; and public information concerning Alzheimer's disease and other dementias. This program is supported by the California State General Fund.
- **Health Insurance Counseling and Advocacy Program** is administered by the AAA and funded by the State General Fund and provides Medicare beneficiaries and those soon to become eligible for Medicare with counseling, advocacy, and assistance with Medicare, private health insurance, and related health care coverage plans. This program also educates the public on Medicare and health coverage issues.

The LA County AAA FY 2003-2004 operating budget was \$39,434,464 (*Exhibit I*).

Approximately 43 percent of Los Angeles County AAA revenue came from Federal Older American Act funding. Federal dollars are leveraged by contributions from contractors and grant funding. State funds for OAA programming accounted for 6 percent of the overall budget. State funding has been flat in recent years, but has not declined. Of the 47 percent of total program revenues from other sources, most came from matching funds, primarily from provider agencies. The most recent available strategic plan of the Los Angeles County Department of Community and Senior Services (June 2003) reports that Los Angeles County AAA programs provided 2.5 million meals, more than 200,000 hours of care management service, and 55,000 hours of in-home support (County of Los Angeles, 2003).

Exhibit 1. Los Angeles County AAA Operating Budget for FY 2003-2004

Source of Revenue	Amount (in \$)	Percent of Operating Budget
Older Americans Act	16,518,851	42
Older Americans Act III-D	353,596	1
State	2,212,329	6
Local, Private Grants and Participant Contributions	18,677,224	47
Medicaid and Other Programs	1,672,464	4
Other Sources	0	0
Total	39,434,464	100

SOURCE: Financial Closeout Budget Reports from the Los Angeles County AAA for FY 2003-2004.

The Los Angeles County AAA received \$353,596 in federal OAA support and \$15,531 in state funding for health promotion activities in FY 2003-2004. In addition, the senior centers also provide considerable support for health promotion and disease prevention activities, through the provision of facilities and cooperation in the development, management and monitoring of classes and other activities, but data on these expenditures is not reported to the LA County AAA.

Demographics

Statewide, 14 percent of the total state population was 60 years of age or older in 2000; a decline of 0.2 percent since 1990 (U.S. Census Bureau, 2000). See *Exhibit 2* for further statewide data. The total aged 60 or older population of the Los Angeles County AAA planning area in 2000 was 760,644 persons, an increase of 85,075 seniors since 1990 (U.S. Census Bureau, 1990, 2000). The area is predominantly urban.

The total population of the Los Angeles County AAA service area in 2000 was 45 percent of Latino heritage, with a Caucasian population of 31 percent. The remainder of the population is largely Asian (12 percent) and African American (10.0 percent) (U.S. Census Bureau, 2000). AAA staff report that the Latino and Asian populations are growing more rapidly than other groups.

Exhibit 2. Statewide Demographic Characteristics, 2003

Demographic Characteristic	Number	Percentage
Population age 60+	5,073,517	14.3*
Population distribution		100.0
Age 60-64	1,308,647	25.8
Age 65-74	1,918,869	37.8
Age 75-84	1,357,427	26.8
Age 85+	488,574	9.6
Race of population 60+:		100.0
Caucasian (Alone)	3,353,889	66.1
African American (Alone)	271,795	5.4
American Indian/Alaska National (Alone)	23,246	0.5
Asian (Alone)	570,855	11.3
Native Hawaiian/Pacific Islander (Alone)	9,868	0.2
Hispanic/Latino (may be of any race)	795,198	15.7
Two or More Races	48,666	1.0
Growth of Population Age 60+ Since 1990	+838,646	19.8

Source: Census 2003 Population Estimates: July 1, 2003. <http://www.census.gov/popest/datasets.html>

* Percentage of total population.

The age 60 and older population of Los Angeles County numbered 1,229,410 in 2000, and was 57 percent female and 43 percent male. The predominant racial/ethnic groups for those age 60 and older in the county were Caucasians (65 percent), Asian Pacific Islanders 13 percent), Blacks (10 percent), and American Indians (0.5 percent), with the remainder being of other race or two or more races, and 21 percent of the population is Hispanic (Administration on Aging; Los Angeles Strategic Plan for Aged and Disabled, January 21, 2003). The LA County AAA indicated that demographic data for clients currently receiving services is not available.

Role of the Provider Agencies and Senior Centers

A significant element for the Los Angeles County AAA in implementing its programs is the cooperation and support of a network of 51 provider agencies who service clients through 160 senior centers and community centers (County of Los Angeles, Contractors' Directory, April 5, 2005). These agencies and centers provide a range of social, recreational, and health promotion/disease prevention activities for older adults, and they have been supportive in introducing health promotion programming into their programs. For example, the Dickison Community Lighted School Senior Center in Compton took a leadership role in seeking grant support for the Be Well pilot project described below. The Los Angeles County AAA provides leadership and funding in helping the centers to develop health promotion/disease prevention programs, and has worked with provider agencies, notably the Food and Nutrition Management Services, Inc., to evaluate health promotion/disease prevention activities, while the senior centers provide facilities, administration and monitoring functions, recruitment, and fundraising support. Because the senior centers are administratively independent of the AAA, the actual services offered at the centers depend to some extent on the decisions of the local center boards and management. The senior centers are organized and operated by a number of different organizations, including community-based organizations and agencies of county and township governments. The financial support of these organizations and governments, along with local center fundraising activities, gives these centers a measure of autonomy from the AAA.

Relationship of the LA County AAA to the City of Los Angeles AAA

The Los Angeles County AAA is relatively unique in that its service area completely surrounds the service area of another Area Agency on Aging, which serves the City of Los Angeles. The Los Angeles City AAA is a very large agency itself, second only in California to the Los Angeles County AAA in Older Americans Act funding, receiving \$10,475,612 for FY 2003-2004. Despite their proximity, the two AAAs have few programs and no health promotion initiatives in common, although the Integrated Care Management Program administered by the Los Angeles County AAA also serves city residents. However, both agencies are interested in working together on more projects. For example, they are cooperating on a project to encourage elders to place a "vial of life," a container holding vital medical information, in the refrigerator to be available to emergency medical personnel. The two AAAs held joint informational events explaining the new Medicare drug benefit, and joint staff training sessions. The potential for cooperation is at present enhanced because the administrators of the two AAAs share a long-time working relationship in the Aging Network.

The City of Los Angeles AAA offers its Older American Act services through sixteen Multipurpose Senior Centers. Its health promotion activities include a city-wide health fair, a program of free health screenings at senior centers, and an Administration on Aging grant-supported pilot program in physical activity. They are also cooperating with Partners in Care, a local non-profit philanthropic and service organization, in activities under two Administration on Aging grants providing medication management services and a physical activity program. Partners in Care is also a partner of the LA County AAA on other projects. These projects and programs are:

- **Festival of Fitness**, the first city-wide health fair to be held by the City AAA, took place on June 12, 2004, and corporate and nonprofit groups involved in fitness, caregiving, and preventive health participated. The event also provided the opportunity for more than 20 community organizations to publicize their health promotion activities. Offerings for seniors included the opportunity to try low impact exercises, such as yoga and chair-based activities, and a dance activity which included a talent show. Other offerings included information about health promotion, support opportunities for caregivers, and free health screenings provided by local hospitals. Over a year was spent in planning this event, and the City AAA is planning to hold other such fairs every other year in various locations around the city to make information available to seniors. The event drew about 2000 older adults and family members. The LA City AAA spent \$50,000 to stage this event, financed through a combination of agency funding, corporate sponsors, and in-kind donations.
- **Healthy Elders Lifestyle Project** is the Los Angeles City AAA program of free health screenings at senior centers, offered in cooperation with the Charles R. Drew University of Medicine and Science. The program places physicians of various medical specialties in the senior centers to provide free health screening, examination, follow-up, and referrals.
- **Evidence-Based Disease Prevention Pilot Physical Activity Program** operates under a grant from the Administration on Aging which began in September, 2003 and runs until September 2006. The local OASIS Institute center is implementing the program which is based on the HealthStages program of behavior modification.² The program also employs the Active Living Every Day course developed for the Robert Wood Johnson Foundation initiative Active for Life, which teaches participants lifestyle skills to develop and sustain a healthy lifestyle. As with Active for Life, this project seeks to reach sedentary older adults, and provides participants with a weekly hour of behavioral change instruction using the Active Living Every Day curriculum, in conjunction with a ninety-minute exercise class, Exerstart!, which provides light to moderate physical activity. The program has been established at one senior center, with plans for expanding it to other locations. An evaluation will be conducted at the end of the pilot project by the CDC-funded Prevention Research Center at Saint Louis University, utilizing pre- and post-participation surveys and fitness level testing. Another community partner is Tenet California, a health provider organization

² OASIS is a national nonprofit educational organization designed to enhance the quality of life for mature adults. Offering challenging programs in the arts, humanities, wellness, technology and volunteer service, OASIS creates opportunities for older adults to continue their personal growth and provide meaningful service to the community.

which will provide health services and monitor the quality and appropriateness of the health components of the program. The program has graduated two classes to date, with a total of twenty participants, and is scheduled to be implemented in four or five centers during fall, 2005, and an additional five centers during 2006.

The City AAA is also a partner in two grants awarded to Partners in Care in Burbank, California.

- **A Community Based Medication Management Intervention** is funded by a September 2003 grant to test the efficacy of a medication management program implemented through the care management program operated by the City AAA as part of a three-year Administration on Aging-funded Evidence-Based Disease Prevention program. The services being offered by the project include a structured medication review for high-risk participants, conducted by a consultant pharmacist or pharmacy intern and including a screening, assessment, consultation, and follow-up. The program seeks to resolve four high-risk medication problems: unnecessary therapeutic duplication, cardiovascular medication problems, use of psychotropic drugs in patients with a reported recent fall or confusion, and the use of nonsteroidal drugs in patients at high risk of peptic ulcer complications.
- **Healthy Moves for Aging Well**, which began in October 2003, is a physical activity program disseminating a model called Lifespan: A Physical Assessment Study Benefiting Older Adults which was developed at California State University, Fullerton. Although a part of the Administration on Aging Evidence-Based Disease Prevention project, the Partners activities are in addition to the original grant project and are funded by the Archstone Foundation. The program, which is offered through the City AAA care management program, utilizes volunteer peer coaches who are trained in behavioral change techniques. The project focuses on building upper leg strength, flexibility, and fall prevention for frail homebound elderly using six exercises, each of which is tied to a specific function. Participants are evaluated by a care manager at six month intervals and an overall evaluation, including a satisfaction survey and follow-up functional fitness test, will be conducted at the conclusion of the grant in September 2006.

SECTION 3 HEALTH PROMOTION/DISEASE PREVENTION ACTIVITIES

The Los Angeles County AAA offers a range of programs under Title III of the Older Americans Act and has implemented innovative health promotion and disease prevention initiatives. The movement of the AAA into health promotion activities, which began in 1995, was in large part an outgrowth of its nutrition program. At that time, an Administration on Aging nutritional screening initiative coupled with Older American Act funding for nutritional assessment motivated the AAA to recognize that nutrition-related health promotion efforts would enhance the existing nutrition program and fill a gap in those services. The Los Angeles County AAA leverages its resources for health promotion/disease prevention planning and activities primarily through its relationship with Food and Nutrition Management Services, Inc., which implements the County AAA health promotion projects, working closely with the senior centers and case management staff.

The Los Angeles County AAA’s health promotion and disease prevention activities include:

- The Effective Nutritional Health Assessments and Networks of Care for the Elderly (ENHANCE) Program.
- The Be Well pilot program.
- Senior center-based health promotion activities.

Exhibit 3 provides an overview of these activities:

Exhibit 3: Aging and Disability Services Health Promotion/Disease Prevention Programs

Program	Program Type	Description	Lead Partners
Effective Nutritional Health Assessments and Networks of Care for the Elderly (ENHANCE)	Nutritional intervention.	<ul style="list-style-type: none"> • Individualized nutritional counseling and education, along with a review of participant medication. • Disease prevention/health promotion clinics for seniors in congregate settings. 	Food and Nutrition Management Services, Inc.
Be Well	Nutrition and exercise intervention.	<ul style="list-style-type: none"> • Semi-weekly light exercise followed by an hour of classroom instruction in nutrition topics. • Development of a healthy daily meal plan. 	Food and Nutrition Management Services, Inc.

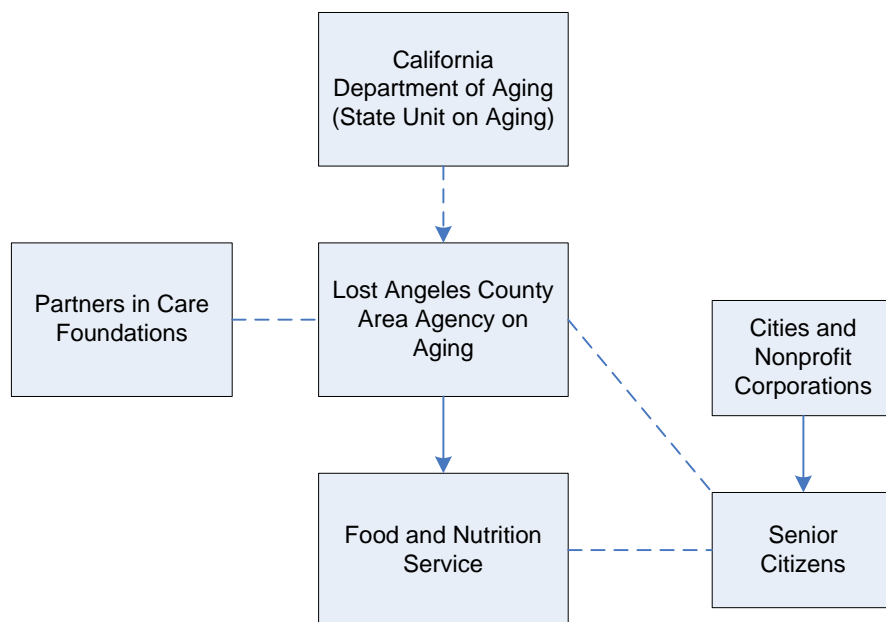
The AAA works with state agencies and community organizations in developing and evaluating its health promotion activities (see *Exhibit 4*). These partners include:

- **California Department of Aging**, the State Unit on Aging provides Older Americans Act funds and some very limited state funding. Because of the high degree of diversity across California, the Department of Aging grants AAAs extensive latitude in local programming, and generally refrains from mandating programs on the AAA to allow responsiveness to their local population. The state is particularly interested in programs relating to nutrition, and has a nutritionist who provides support to the AAAs.
- **Senior centers** are the main locus of the health promotion/disease prevention activities and actively implement many of the initiatives of the Los Angeles County AAA and provide facilities for them. In addition, the centers develop their own contacts with local health departments and other health care providers to arrange for hypertension screening, influenza immunizations, and other services, and to publicize their services.
- **Food and Nutrition Management Services, Inc.**, has worked with the Los Angeles County AAA since 1995 to coordinate its congregate and home-delivered meals program, and has been central to the implementation of the AAA’s health promotion initiatives. In addition to its activities for the AAA, this organization provides health care consulting, health education products and training, and data-based benchmarking services. Their data system has

provided the AAA nutrition program with data tracking capabilities, saving the AAA the expense of developing its own system. Food and Nutrition Management Services collected data to assess the impact of the ENHANCE and Be Well programs.

- **Partners in Care Foundation** is a non-profit philanthropic and service organization which has a major interest in areas related to life span, chronic illness, access to health care and ethnic disparities. This foundation is the contract provider for the Alzheimer’s Day Care Resource Centers, part of the leadership for a long term care coordinating council which is directing the implementation of the current AAA long-term care strategic plan and a partner in the Be Well project.

Exhibit 4. Interaction of the Los Angeles County AAA with Other Organizations on Health Promotion/Disease Prevention Initiatives



Effective Nutritional Health Assessments and Networks of Care for the Elderly (ENHANCE)

The ENHANCE program serves Los Angeles County seniors at high nutritional risk. The program has two parts. First, the program provides individualized nutritional counseling and education, along with a review of participant medication. Second, the program provides a series of disease prevention/health promotion clinics for seniors in congregate settings. The ENHANCE program builds on the nutritional health work of the Nutrition Screening Initiative (NSI), developed jointly by the American Academy of Family Physicians, and the American Dietetic Association (American Academy of Family Physicians. NSI web page <http://www.aafp.org/nsi.xml>).

A number of studies indicate that one of the primary causes of unnecessary institutional admission and hospitalization is poor nutrition. (Ammerman et al., 2003; Domelas, et al., 1998; Heaney et al., 1999; Miller et al., 2002; Rowe et al., 1998; Whelton et al., 1998). Research into the effects of counseling on health have focused on counseling for high blood pressure, cholesterol, and type 2 diabetes, and on increasing calcium intake (Rabiner et al., 2004) Most of these efforts led to health status improvements, at least in the short term.

ENHANCE is similar in some ways to one study, the Nutrition Education for Older Adults with Diabetes program (Miller et al., 2002), in its use of weekly intervention groups for older persons. ENHANCE also contains aspects from some of the other programs profiled, including improving calcium intake to prevent osteoporosis (Heaney et al., 1999), and providing appropriate intervention to reduce overall malnutrition. ENHANCE is also consistent with the Healthy People 2010 goal of promoting health and reducing chronic disease associated with diet and weight through nutritional counseling and consumption of fruits and vegetables (U.S. DHHS, 2000).

Seniors entering the LA County AAA Elderly Nutrition Program, which provides both congregate and home delivered meals, are selected for the ENHANCE nutritional counseling intervention on the basis of their scores on the National Screening Initiative (NSI) DETERMINE Checklist, which was devised to identify poor nutritional health. Generating a score of 1 – 21, the Checklist categorizes individuals with scores of six or above as being at serious nutritional risk. Because of budgetary constraints, however, ENHANCE limits eligibility for the program to seniors with a score of 9 or higher or who have a medical diagnosis of diabetes, and who are referred to the program by AAA case managers. For the NSI, a score of 6 or higher qualifies a client as being at high risk, and Food and Nutrition Management Services, Inc. estimates that as many as 24 percent of the congregate clients and 74 percent of the homebound clients of the AAA nutrition program would qualify for ENHANCE services if funding were available. A recent national survey of congregate and home delivered participants found that for home delivered nutrition services, 73 percent of respondents were at high nutritional risk and 25 percent were at moderate nutritional risk; for congregate nutrition services, 43 percent were at high nutritional risk and 48 percent were at moderate nutritional risk (Westat, 2004).

Once determined to be potentially eligible, seniors are given a second assessment by a registered dietician, with a second administration of the NSI checklist followed by an assessment of the client's body mass index, living arrangements, and functional status including activities of daily living and instrumental activities of daily living, and a 24-hour eating history. Services are provided to homebound

clients (those who receive home delivered meals), while clients who attend congregate meal sites receive the services in the congregate setting.

Every client accepted into the program then receives general nutritional counseling, meal planning and preparation guidance, and diabetes monitoring education for those with that diagnosis. The registered dietician reviews client medications for interactions and checks them for duplication, with a pharmaceutical or physician referral arranged if indicated, including a physician's order for medical nutrition therapy if warranted. The registered dietician provides education and guidance on exercise and on the dangers of dehydration, which are addressed jointly through an intervention in which the client is provided with a water bottle that also serves as a hand weight. The registered dietician also measures and helps the client to set goals for blood pressure and for blood glucose for diabetics, and records a patient history of hospitalizations, living situation, and the outcomes of past referrals. The program is limited by available resources in its ability to conduct follow-up visits with participants to assess their nutritional progress and was able to conduct a follow-up visit with only 42 percent of these clients during 2003.

ENHANCE also provides a program of prevention clinics addressing health promotion topics. From five to twelve such programs are offered at each of the LA County AAA affiliated senior centers annually, depending on the level of interest expressed by the center management. The clinics are both educational and interventional, generally meeting monthly. The program addresses a number of topics, including: diabetes support; hypertension; cholesterol and heart disease; calcium and osteoporosis; food safety and emergency preparedness; healthy eating; nutritional supplements; and general nutritional health. Within each of these topics the program offers a number of different clinics addressing specific areas. For instance, the calcium and osteoporosis topic includes separate groups for exercise, balance training, chair dancing, energizing yourself, and helping your bones last a lifetime. Many of the meetings include measurement of height and weight and of blood pressure. The meetings are led by registered dietitians who bring in professionals from other disciplines as needed.

Both elements of the ENHANCE program serve a population consisting primarily of low income and minority individuals, reflecting the population participating in the Elderly Nutrition Program. The nutritional intervention program served 1,275 clients in 2003 (Food and Nutrition Management Services, Inc., 2004). A program review of participants in 2003 found that 50 percent of clients were living alone, and that 42 percent did not have the resources to purchase the food for a healthy diet, an increase of 6 percent from 2002 (Food and Nutrition Management Services Inc., 2004). The population served was 63 percent female and 37 percent male. The population was diverse ethnically, with 42 percent being Caucasian and 58 percent being from minority groups. There are a large number of Latino clients; the

program recruits registered dieticians who speak Spanish and makes an effort to assign them to service areas which are predominately Latino. There are also a significant number of clients of Asian heritage, but there has not been a language barrier since they generally speak English. There is outreach to the Cambodian community, since it is difficult to attract those clients for services. The disease prevention clinics, which are open to all clients, served 7,126 persons in 2003, up from 5,100 the year before (Food and Nutrition Management Services, Inc., 2004).

The annual report for ENHANCE, prepared by Food and Nutrition Management Services, Inc., includes a number of “case studies” describing one or more clients from each service area, providing an insight into the impact of the program on individual clients (Food and Nutrition Management Services, Inc., 2004). A typical report of a homebound client:

S.D., female, age 78. When client was first seen she had an NSI score of 16 with a diagnosis of diabetes, hypertension, congestive heart failure, legally blind and osteoporosis. Client’s health was deteriorating. She was consuming fewer than 2 meals per day due to lack of money and access; client was not taking meds for diabetes and thus was experiencing hyperglycemia reactions on a regular basis. RD visited client providing nutrition information, and resource numbers for local transportation as well as contact with AVCOA meal program. The Registered Dietician provided supplements with each visit. S.D. now has a NSI of 7, blood pressure is within normal limits, and client is consuming at least 3 meals per day and now has regular access to food and senior center. S.D. takes medication regularly as well as self monitoring of blood glucose regularly, controlling her diabetes.

ENHANCE, which began in 1995 when the Los Angeles County AAA first issued a RFP for a contractor to provide nutritional counseling for clients at high nutritional risk, is funded through Older Americans Act Title III-D funds, with the contractor required to provide a match of 15 percent, although Food and Nutrition Management Services, Inc. provides a match of 50 percent or more in in-kind support.

The program is monitored by the AAA through the Food and Nutrition Management Services, Inc. data system which tracks the overall NSI score for all clients in the Elderly Nutrition Program and identifies the percentages of clients exhibiting the individual risk factors. The data system reports ages of clients by a range of their risk scores, with an average nutritional risk score of 9.6 at intake, to an average score at follow-up showing improvement in a range from 8.5 to 7.8 (Food and Nutrition Management Services, Inc., 2004). The system also tracks the numbers of clients reporting problems with diabetes, obesity, blood lipid levels and pressure, hospitalizations, diet, anemia, chronic obstructive pulmonary disease, osteoporosis, tooth and mouth problems, body mass index, difficulties in maintaining a proper

diet, and potential risk for cancer and for food and drug interaction problems. Among the results for FY 2003-2004, the report indicates that 58 percent of follow-up respondents experienced improved blood pressure levels during the current year (Food and Nutrition Management Services, Inc., 2004). In addition to an annual program report, the contractor provides the AAA with access to patient information through its medical information database system, and a copy of all patient intervention forms, including the problem list, goal list, plan of correction and statement of outcomes is sent to the AAA nutritionists.

Be Well

The Be Well program combines a medically supervised exercise program with an intensive nutrition education program. Two days a week, participants meet at a senior center for an hour of light exercise followed by an hour of classroom instruction in nutrition topics. Participants also are assisted in developing a healthy daily meal plan. Physical exercise has been shown to have a number of health benefits, and the literature review describes studies which illustrate the positive impact of exercise in decreasing the incidence of cardiovascular disease, increasing muscle strength and physical performance, and reducing stress and depression (Talbot et al., 2003; Castro et al., 2002; Binder et al., 2002; King et al., 2002). Nutritional education provides additional health benefits. The Be Well exercise regimen is similar to that used in a study in which the participants experienced outcomes of significantly greater improvements in physical performance, oxygen intake, and functional status than a control group (Binder et al., 2002).

Be Well began as a pilot program, funded by a grant for \$40,000 awarded to the Los Angeles County AAA to fund a purely nutritional intervention for homebound elders based at the Dickison Community Lighted Schools Senior Center in Compton, California. The program assumed its present form when, after investigating this first approach, project organizers decided that it would be more productive to concentrate on keeping mobile elders from becoming homebound or institutionalized through combining a program of exercise with the nutritional education. Driving this decision was the observation that homebound elders were so frail that the planned nutritional intervention by itself was unlikely to achieve its goals. Food and Nutrition Management Services, Inc. which contributed a 15 percent in-kind match to the project, provided the program for the nutritional classes, and medical, pharmacological, psychological and geriatric specialists from Charles Drew University of Medicine and Science supplied the medical services.

The resulting intervention was implemented in pilot projects of six months in a Compton senior center from November 2003 until April 2004, and of three months from March 2004, with limited follow-up at a senior center in Inglewood, California. Food and Nutrition Management Services, Inc. provided

data from the ENHANCE program in support of the grant application, provided instructors for the classes, and administered the pilot programs. The Inglewood pilot was originally scheduled to last for three months, but participants are receiving support from the LA County AAA for a class therapist for an additional year while long-term funding is sought. For both parts of the pilot project, participants were recruited locally from senior center clients with moderate to high nutrition risk, as measured on the NSI, who were able to attend the sessions at the senior center. Clients chosen for inclusion passed a medical examination, including a comprehensive blood analysis including the chronic beryllium disease, lipid differential, iron, B-12 and thyroid panel reports, and administration of the mini-mental and geriatric depression scales, to certify that they were healthy enough to participate in an exercise program and to establish a baseline for health measurements during the course. Each participant also received a medication review by a pharmacist. Participants agreed to participate for the entire length of the pilot program with the classes meeting twice a week.

Each Be Well class follows a standard format. The class begins with a measurement period for weight and number of steps from the pedometer issued to each participant, which takes about a half hour. The next hour consists of a program of light exercise, followed by an hour of nutrition education. The nutrition education component, taught by a registered dietician, begins with a lecture on the nutritional aspects of a health issue, followed by individualized instruction including student workbooks. The health topics covered include diabetes, stroke risks, tobacco use, and the impact of environmental factors. The class was scheduled from 9:00 until 11:30 am so that the clients would finish these activities in time for lunch. In the Inglewood pilot, an additional instructional element was associated with the lunch, with nutritional information about the meals provided and explained to the clients at each meal.

Incentives were employed to encourage the participants to achieve their exercise goals. Water bottles and other small give-away items, along with an occasional small cash reward (e.g. \$5.00) were given for achieving exercise goals, and every participant received a pedometer to measure their walking between classes, and stretch bands for their resistance exercises. Staff support was provided to remind the participants when they needed to fast for their blood tests, and to arrange transportation, which was provided for all the participants.

The participants were predominately African-American and Latino in both pilots, reflecting the makeup of the senior center service populations. Twenty four participants attended each of the two pilot programs. The average age of the participants was 72 years. The participants in the Compton pilot were generally older than those in the Inglewood pilot, but also generally found to be healthier at their baseline medical examinations (Food and Nutrition Management Services, Inc., July 21, 2004).

The pilot programs were made possible with a 2001 grant for \$419,000 from the U.S. Department of Housing and Urban Development and the Administration on Aging, and first implemented at the Dickison Community Lighted School Senior Center located in Compton. Food and Nutrition Management Services, Inc. provided the nutrition instructional course as an in-kind contribution. Funds remaining at the completion of the six-month Compton pilot were used to support the Inglewood pilot, which was shorter due to a requirement that the grant funds be expended by June 30, 2004. Both senior centers provided in-kind support for the pilots in making space available for the class, support from center staff, and meals for the participants.

The AAA will be able to continue this program in one or two sites per year using its own Title III-D funding and has provided an extension of support to provide ongoing monthly meetings for the Inglewood participants, but would like to expand Be Well to more sites across the service area. To provide the support for such an expansion, the AAA is seeking reimbursement from Medi-Cal, the California Medicaid agency, for the program as a health promotion service and is in discussions with the local Kaiser Permanente health plan about providing coverage for their enrollees who participate in the program. The City of Inglewood is also being approached for support, and participants in future classes may be asked to make a contribution as well.

The Inglewood site, working with the AAA, has just been awarded an Administration on Aging care management grant, which will be used to provide a Spanish-language version of the program at that site, in cooperation with Food and Nutrition Management Services, Inc., Partners in Care, and Kaiser Permanente.

The ENHANCE program collected data for the 24 participants in the Be Well pilot at Inglewood. Data were collected on the medical diagnoses, NSI risk scores, anthropometric measurement, including body mass index and body fat percentage, number of steps in the walking program, blood pressure, medications, blood laboratory reports, mini-mental and geriatric depression scale examinations, and activity of daily living/instrumental activity of daily living status. Participants recorded a number of positive outcomes during the pilot, including decreased NSI risk scores, improved body mass index reports, decreased body fat, statistically significantly lower waist, hips, chest and arm measurements, lower blood pressures, and improved blood levels of lipids, blood glucose and blood urea nitrogen. Participants also showed marked improvements on depression scales and in instrumental activities of daily living. (Food and Nutrition Management Services, Inc., July 21, 2004).

Staff involved in the project also related that some participating individuals experienced major improvement in their health. They report one case in which a woman with severely high blood pressure who participated in the Inglewood pilot lowered her body mass index and blood pressure to such an extent that she was taken off corrective medications.

Health Promotion/Disease Prevention Programming at Senior Centers

Exercise has measurable physical and psychological benefits, and physical activity is an integral part of many health promotion programs (Geffken et al., 2001; Mazzeo et al., 1998; U.S. Department of Health and Human Services, 2000). The senior centers offer a range of Title III-D funded physical activities, such as walking clubs, chair volleyball, aerobics, jazzercise, Tai Chi, yoga, and tap dancing. These activities have both a social and a physical health component. Participants in these programs include a large number of Latino as well as African-American clients and a smaller number of white and other minority clients.

The centers also provide other health promotion programming. Examples of center-based programming include: a stroke program in which a trained therapist leads a support group at the center facility, conducted in cooperation with the Stroke Association of Southern California; an annual health fair held in cooperation with a local medical center, in which the senior center provides the facility for clinicians to screen older participants; classes and lectures by local health providers arranged by the centers; and services such as influenza shots and monthly hearing and blood pressure screenings. In many cases, these services are made possible by volunteer professionals, either students who are gaining experience or practicing professionals who volunteer their services.

The senior centers are an eclectic group, organizationally independent of the AAA and operated by an assortment of private organizations and city governments. The AAA contracts with them for Older Americans Act services, with the main program offerings being Title III-C meals, case management, Alzheimer's care, and transportation. The senior centers interviewed for this case study report that in addition to Older Americans Act funding from the AAA, their main sources of income are from their sponsors, particularly city governments, including regular appropriations and occasional special funding for particular projects, including providing services to a larger than anticipated number of clients, or when other agencies return unused funds. Center sponsors are required to provide a match of 15 percent of program costs, but some provide more. The centers interviewed for this study make an effort to serve anyone seeking services, often providing more services than they are budgeted for and financing this effort through economizing on center operations (e.g., utilizing partner organizations and individuals who can provide class leadership at no cost) as well as by seeking additional support from their sponsors.

They also receive small contributions from program participants and conduct some fundraising activities, ranging from bake sales to a Mother's Day event bringing in \$10,000-20,000 annually and an annual wine auction that nets \$30,000. While the congregate meal program is free to qualified participants, they are given the opportunity to make a contribution. Suggested contributions at the senior centers where interviews were conducted for this study ranged from \$1.25 to \$2.25, with receipts averaging somewhat less. Nationally, for FY 2003, the average contribution was \$1.21 per congregate meal and \$0.78 per home delivered meal. For the state of California, the average contribution was \$1.41 for congregate meals and \$0.90 for home delivered meals (Administration on Aging, 2003).

The LA County AAA has a significant amount of information about the senior centers. The senior centers use a uniform intake form from the AAA to collect information for all new clients, collecting information about employment status, disabilities, marital status, contact information, physician and ethnicity. The centers do a follow-up evaluation on a monthly and quarterly basis with clients, again using a uniform AAA instrument. This data is collected on paper, however, and was not available to us in a compiled form. They also collect a record of the clients' nutritional status, particularly the number of fruits and vegetables consumed daily, although they do not record exercise activities for clients not in the Be Well pilots.

The centers have just recently begun to record information in a computer database, and a recently instituted system of electronic cards and readers allows clients to swipe their card for meal services, further automating the record-keeping process and providing a systematic record of participation in the meal portion of the Title III-C nutrition program. The swipe-card system began as a pilot for congregate and home-delivered meal services in June, 2004, and is still in the implementation stage with the twenty-three nutrition providers. When fully implemented, the pilot system will provide web-based access to system-generated service reports for the meal service program. Ultimately, the AAA plans to extend the system to its other programs.

Besides the computerized meal service record, however, the AAA at present receives this information on paper, and lacks the resources to analyze it in that form, giving it no practical way of measuring overall senior center activity. The AAA also has no uniform record of senior center budgeting, further limiting its ability to evaluate the efficiency of center programs. An expanded system of systematic data collection, particularly of attendance records, center income, and costs for the various activities, would help the AAA better assess levels of participation, productivity, and financing and help guide the allocation of AAA funding. Such records would also allow the AAA to better identify other senior center activities to initiate or disseminate in support of its health promotion efforts.

SECTION 4 DISCUSSION

The key questions for these case studies focus on the role of Title III-D of the Older Americans Act and the Area Agencies on Aging in developing health promotion and disease prevention initiatives for older people. Developing these initiatives is challenging because Title III-D is intended to be catalyst for broader development of health promotion and disease prevention activities rather than to serve as a major source of direct program funding. The Los Angeles County Area Agency on Aging has innovative programs linked to its nutrition programs, but they are limited in scope and in the number of persons participating.

1. How Health Promotion and Disease Prevention Initiatives Fit into the Overall Activities of the Area Agency on Aging

The Los Angeles County AAA has used its Title III-D funding to make health promotion and disease prevention a component of its programming, responding to demand from the current and potential participants and the growing body of research indicating that health promotion and disease prevention programs for older persons help them maintain health and independence. The AAA has worked to develop new health promotion/disease prevention activities, particularly focusing on nutrition and exercise, because it sees these activities as part of its core mission, which is to be a catalyst for the creation of a system that maximizes consumer independence and dignity.

2. Leveraging of Title III-D dollars to Develop Larger Health Promotion and Disease Prevention Programs

The LA County Area Agency on Aging relies on Older Americans Act funds, along with matching funds and the support which its senior centers receive from their sponsors, to develop its programming. Older American Act dollars are less than half of the AAA budget, but because of the size of the LA County AAA service population, this translates into a significant nominal amount of funding. However, current resources are not sufficient to provide programs like ENHANCE or Be Well on a widespread basis, which the AAA is trying to remedy by interesting other organizations supporting these activities. In addition, the LA County AAA is seeking grant support for evidence-based model programs. The successful grant-funded Be Well program gave the AAA experience in implementing grant-funded projects.

3. Partnerships Developed with Other Organizations to Develop Health Promotion Programs for Older People

The Los Angeles County AAA works through a number of partnerships which enhance its ability to provide services. To date, however, it is not a major catalyst for broader change and program development for health promotion and disease prevention. Through its relationship with the California Department of Aging, the AAA receives Older Americans Act funds and some limited state funding. The Department of Aging grants AAAs extensive latitude in local programming, and generally refrains from mandating programs on the AAAs. The state's strategy is to allow the AAAs to be responsive to their local population, while at the same time providing them with a statewide perspective and some expertise, particularly in the area of nutrition.

At the local level, Food and Nutrition Management Services, Inc., with its expertise in health care consulting, health education products and training, and data-based benchmarking, has been a key partner since 1995. As the coordinator of the AAA congregate and home-delivered meals program, it is central to the implementation of the AAA's health promotion initiatives. The data capabilities of Food and Nutrition Management Services, Inc., provide the AAA with the ability to generate supporting data to demonstrate the value of programs to potential partners and funders. Partners in Care Foundation, with its interest in the life span, chronic illness, access to health care, and health disparities, worked with the AAA as part of the leadership for the long term care coordinating council and as a partner in the Be Well project. The senior centers partner with the AAA in actively implementing AAA initiatives. The partnership with senior and community centers provides the AAA with facilities and marketing for its programs, including medication management, health screenings, behavioral health and exercise programs.

4. How Programs Were Chosen and Developed

The LA County AAA developed its health promotion programs as part of an overall effort to encourage proper nutrition among its clients. Specifically, the Los Angeles AAA began its health promotion and disease prevention activities with nutrition education to complement the AAA's meals program. While the AAA's efforts began with its Title III-D funding, the emergence of health promotion programming as a strategically important element to their activities dates to 1995. At that time, the Administration on Aging required states to report the number of older adults at high nutrition risk. In addition, funding through Title III-D made nutrition assessments financially possible and AAA saw the connection between the two initiatives. At that time, the AAA contracted with Food and Nutrition Management Services, Inc., to provide nutrition services, forming a connection with a vendor which

already was involved in health education and positioned to facilitate this health promotion programming. As an outgrowth of this approach, the Be Well program grant included physical activity programming.

5. Comprehensiveness of Health Promotion and Disease Prevention Activities

The LA County AAA's health promotion and disease prevention activities is limited in scope, focused heavily on nutrition counseling and education through the ENHANCE program and the Be Well program. In addition to these programs, the AAA offers a more general program of screenings and educational opportunities, including a program of preventive clinics as part of ENHANCE, and classes on other health promotion subjects which are offered in partnership with the senior centers. The topics of these classes and clinics include how to prevent and manage diabetes, hypertension, heart disease, osteoporosis, and stroke, as well as healthy eating and maintaining an active lifestyle through walking, chair volleyball, Tai Chi, and other activities.

6. Extent to Which Programs Have Been Implemented in the Service Area

While the LA County AAA's health promotion and disease prevention programming is expanding, implementation of this programming throughout its area and service population is extremely limited. The ENHANCE program reaches across the service area, but is only able to bring its nutrition intervention to those at the most severe risk and only those who use the senior centers, leaving out many who should be served as determined by the criteria the program uses to establish nutritional risk. The Be Well pilot, while innovative, is offered at only two pilot locations and has involved only forty-eight people to-date. The ENHANCE prevention clinics, however, while also limited to senior center participants, are more widely implemented, being available to all participants at the centers. Also more widely implemented are the classes and activities provided to all clients throughout the service area in partnership with the senior centers.

7. Data on Program Participants and Effectiveness and How these Data are Used by Program Managers and Administrators

At present, the majority of the data collected by the AAA is recorded and submitted on paper, making it difficult and expensive to process and use. The major exceptions to this pattern is the financial data provided by Food and Nutrition Management Services, Inc., for the operation of the meals program, the NSI data which Food and Nutrition Management Services, Inc., collects and stores in a database, and the reports on the ENHANCE and Be Well programs also produced by Food and Nutrition Management Services, Inc. This meal program data are used primarily for the AAA's financial reports to the State Department of Aging; the NSI database is used in selecting participants for the nutrition intervention

program, and the ENHANCE and Be Well reports are used to promote those programs. Through the data expertise of this partner, the AAA has the ability to further develop and expand its capacity to demonstrate the effectiveness of its health promotion programs. Although at present it is just beginning to take advantage of the direct data collection capacity with the introduction of the pilot swipe card system for congregate meal recipients, the AAA is actively planning to introduce the systems which will collect a wider range of information. In the future, this performance data will be available to improve the quality of the ENHANCE and Be Well programming and to show those programs' usefulness to other funding sources, such as city governments, the Administration on Aging and foundations.

Summary

In summary, the Los Angeles County Area Agency on Aging is committed to increasing health promotion and disease prevention initiatives among its older population. Its health promotion and disease prevention activities are focused in the areas of nutrition and physical activity, in support of the AAA core nutrition program; otherwise, the scope of its activities is limited. The LA County AAA chose these programs on a pragmatic basis, making use of available community partnerships and other resources to fill program gap in its nutrition program. The AAA has monitored its innovative health promotion programs carefully, with the ENHANCE and Be Well reports cited in this report providing evidence of their value. While the AAA has not leveraged much of its Title III-D funding to date, it is working to expand these health promotion and disease prevention programs through grant support and its community partnerships with its senior centers and vendors. The AAA is committed to continuing its evidence-based health promotion and disease prevention activities, and has partnered with organizations capable of collecting useful data. At present, however, the innovative programs, ENHANCE and Be Well, serve a very limited number of clients.

REFERENCES

- Administration on Aging. Census 2000 Special Tabulation on Aging (STA) Population and Housing Characteristics. <http://www.aoa.gov/prof/Statistics/Tab/aoacensus2000.html>
- Administration on Aging. FY 2003 Profile of United States OAA Programs. <http://www.aoa.gov/prof/agingnet/NAPIS/SPR/2003SPR/profiles/2003profiles.asp>
- American Academy of Family Physicians. Nutrition Screen Initiative webpage <http://www.aafp.org/x16081.xml> (accessed May 3, 2005).
- Ammerman, A.S., Keyserling, T.C., Atwood, J.R., Hosking, J.D, Zayed, H., Krasny, C. (2003). A randomized control trial of a public health nurse directed treatment program for rural patients with high blood cholesterol. *Preventive Medicine*, 36, 340–351.
- Binder, E.F., Schechtman, K.B., Ehsani, A.A., Steger-May, K., Brown, M., Sinacore, D.R., et al. (2002). Effects of exercise training on frailty in community-dwelling older adults: Results from a randomized, controlled trial. *Journal of the American Geriatrics Society*, 50, 1921–1928.
- Castro, C.M., Wilcox, S., O’Sullivan, P. Baumann, K., King, A.C. (2002). An exercise program for women who are caring for relatives with dementia. *Psychosomatic Medicine*, 64, 458–468.
- County of Los Angeles Department of Community and Senior Services. Area Agency on Aging – Program Details. <http://dcss.co.la.ca.us/AAA/AAAdettxt.htm> (accessed May 3, 2005)
- County of Los Angeles Department of Community and Senior Services. Area Agency on Aging. Contractors’ Directory 2004-2005. April 5, 2005.
- County of Los Angeles Department of Community and Senior Services. Strategic Plan 2003-2005. June, 2003.
- County of Los Angeles Department of Community and Senior Services. Strategic Plan for Aged and Disabled 2003-2006. January 21, 2003.
- Domelas, E.A., Wylie-Rosett, J., & Swencionis, C. (1998). The DIET study: long-term outcomes of a cognitive-behavioral weight-control intervention in independent-living elders. *Journal of the American Dietetic Association*, 98(11), 1276–85.
- Food and Nutrition Management Services, Inc. City of Inglewood Be Well Program Final Report. July 21, 2004.
- Food and Nutrition Management Services, Inc. Enhance Fiscal Year 2003-2004 Final Report. 2004.
- Geffken, D., Cushman, M., Burke, G., Polak, J.F., Sakkinen, P.F., Tracy, R.P. (2001). Association between physical activity, and markers of inflammation in a healthy elderly population. *American Journal of Epidemiology*, 153, 242–250.
- Heaney, R.P., McCarron, D.A., Dawson-Hughes, B., Oparil, S., Berga, S.L., Stern, J.S., et al. (1999). Dietary changes favorably affect bone remodeling in older adults. *Journal of the American Dietetic Association*, 99(10), 1228–36.

- King, M.B., Whipple, R., Gruman, C.A., Judge, J.O., Schmidt, J.A., & Wolfson, L. (2002). The Performance Enhancement Project: improving physical performance in older persons. *Archives of Physical Medicine and Rehabilitation*, 83, 1060-1069.
- Mazzeo R., Cavanagh, P., & Evans, W. (1998). American College of Sports Medicine Position Stand: Exercise and physical activity for older adults. *Journal of Medical Science Sports Exercise*, 30, 992-1008.
- Meredith, S, Feldman, P, Frey, D., Giammarco, L., Hall, K., Arnold, K., et al. (2003). Improving medication use in newly admitted home healthcare patients: A randomized controlled trial. *Journal of the American Geriatrics Society*, 50, 1484-1491.
- Miller, C.K., Edwards, L., Kissling, G., Sanville, L. (2002). Nutrition education improves metabolic outcomes among older adults with diabetes mellitus: Results from a randomized controlled trial. *Preventive Medicine*, 34, 252-259.
- Rabiner, D., Brown, D., Bandel, K., Maier, J., and Gage, B. (2004). Conceptual Framework and Literature Review for the Evaluation of the Disease Prevention and Health Promotion Services Program of the Older Americans Act. Research Triangle Park, NC: RTI International.
- Rowe, J.W., & Kahn, R.L. (1998). *Successful Aging*. New York: Pantheon Books.
- Talbot, L.A., Gaines, J.M., Huynh, T.N., Metter, E.J. (2003). A home-based pedometer-driven walking program to increase physical activity in older adults with osteoarthritis of the knee: A preliminary study. *Journal of the American Geriatrics Society*, 51, 387-392.
- U.S. Census Bureau (1990 and 2000). DP-1. Profile of General Demographic Characteristics: 1990, 2000. Data set: Census 1990 and 2000 Summary Files 1 (SF1) 100-Percent Data. Geographic Areas: Los Angeles County.
- U.S. Department of Health and Human Services (2000). *Healthy People 2010: Understanding and improving health* (2nd ed.) Washington, DC: U.S. Government Printing Office.
- Westat (2004). Highlights from the Pilot Study: First National Survey of Older Americans Act Title III Service Recipients - Paper No. 2. <http://www.gpra.net/surveys/2ndhighlights.pdf>
- Whelton, P.K., Appel, L.J., Esperland, M.A., Applegate, W.B., Ettinger, W.H. Jr., Kostis, J.B., et al. (1998). Sodium reduction and weight loss in the treatment of hypertension in older persons. *Journal of the American Medical Association*, 279, 839-46.
- Yates, S.M., & Dunnagan, T.A. (2001). Evaluating the effectiveness of a home-based fall risk reduction program for rural community-dwelling older adults. *Journal of Gerontology: Medical Sciences*, 56A(4), M226-230.