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105TH CONGRESS
2d Session

SENATE

REPT. 105–36
Volume 3

DEVELOPMENTS IN AGING: 1996
VOLUME 3

A REPORT

OF THE

SPECIAL COMMITTEE ON AGING
UNITED STATES SENATE

PURSUANT TO

S. RES. 73, SEC. 19(c), FEBRUARY 13, 1995

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



APRIL 30, 1998.—Ordered to be printed

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47–963 WASHINGTON : 1998

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SPECIAL COMMITTEE ON AGING

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LETTER OF TRANSMITTAL

U.S. SENATE,
SPECIAL COMMITTEE ON AGING,
Washington, DC, 1997.

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

DEAR MR. PRESIDENT: Under authority of Senate Resolution 73 agreed to February 13, 1995, I am submitting to you the annual report of the U.S. Senate Special Committee on Aging, Developments in Aging: 1996, volume 3.

Senate Resolution 4, the Committee Systems Reorganization Amendments of 1997, authorizes the Special Committee on Aging "to conduct a continuing study of any and all matters pertaining to problems and opportunities of older people, including but not limited to, problems and opportunities of maintaining health, of assuring adequate income, of finding employment, of engaging in productive and rewarding activity, of securing proper housing and, when necessary, of obtaining care and assistance." Senate Resolution 4 also requires that the results of these studies and recommendations be reported to the Senate annually.

This report describes actions taken during 1995 and 1996 by the Congress, the administration, and the U.S. Senate Special Committee on Aging, which are significant to our Nation's older citizens. It also summarizes and analyzes the Federal policies and programs that are of the most continuing importance for older persons and their families.

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

Sincerely,

CHARLES E. GRASSLEY, *Chairman.*

ITEM 1—DEPARTMENT OF AGRICULTURE

AGRICULTURAL RESEARCH SERVICE (ARS)

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

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

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

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

Brief description of accomplishments

Researchers at the Jean Mayer USDA Human Nutrition Research Center on Aging (HNRCA) at Tufts University have made significant strides toward improving the quality of life for men and women as they age. These accomplishments show promise in delaying the onset of many age-related diseases and conditions.

Immune Function. The decline in immune function during aging, which increases susceptibility to infection and risk of certain cancers, is modulated by protein, vitamin, and mineral intake. Recent research at HNRCA supports the role of vitamin E in enhancing immune response:

Vitamin E supplementation enhanced T cell-mediated immune function in healthy elderly; the optimal dose was demonstrated to be 200 IU/day.

Vitamin E supplementation also significantly protected against exercise-induced oxidative damage and promotes acute phase immune responses in healthy older men.

Bone Health. Osteoporosis occurs most frequently in postmenopausal white women and in the elderly. Approximately 20 percent of American women suffer one or more fractures before age

65 and as many as 40 percent sustain fractures later in life. Almost 50 percent of these people will require long-term care services. Inadequate calcium and vitamin D intake can lead to bone loss and increased risk of osteoporosis. Research at HNRCA has shown that:

Calcium absorption has a heritable component that is apparent at low but not at high calcium intake levels, illustrating an interaction between heredity and the nutrient intake. The HNRCA identified age-related changes in vitamin D-independent calcium transport as a major determinant of intestinal calcium malabsorption during senescence. Supplementation with calcium and vitamin D to recommended levels reduced the rate of bone loss and the incidence of symptomatic fractures in healthy men and women age 65 and older.

The HNRCA identified a negative role of high dietary calcium intakes on zinc homeostasis in the elderly. Specifically, high calcium intake reduced zinc retention, a finding of substantial relevance to consumers who self-prescribe calcium supplements and may thereby put themselves at risk of zinc deficiency.

Exercise, Body Composition, and Prevention of Frailty. Sarcopenia, the loss of lean body mass as one ages, strongly influences muscle strength and mobility and contributes to falls and frailty. Studies in this area have shown that:

Home-based resistance exercise training improves function and reduces Sarcopenia and frailty in the elderly.

Total body potassium content, a measure of lean body mass, assessed by total body potassium (K–40) measurements, declined at roughly 0.5-percent in muscle per year without exercise and nutrition intervention.

Percent body fat assessed by neutron inelastic scattering increased with age for female volunteers between the ages of 20 to 50 years and throughout adult life for males.

Elderly persons find it difficult to maintain a constant body weight (some gain too much, others lose weight) due to an impaired ability to regulate food intake.

Sarcopenia is associated with increased production of several cytokines, but not with low growth hormone.

Prevention of Cardiovascular Disease and Stroke. Cardiovascular disease is the leading cause of death in the United States. Coronary heart disease (CHD) increases with age and is responsible for approximately 24 percent of total U.S. deaths. Dietary changes, particularly reducing total and saturated fat and increasing soluble fiber intake is often the first step to attempt to reduce elevated cholesterol levels. Recently, the significant impact for vitamins C, E, and other antioxidant phytochemicals, and folate and vitamins B6 and B12 has been investigated. Genetics are also a significant factor in disease risk.

Additional ARS research results included:

The carbon to oxygen ratio in tissue, measured by neutron inelastic scattering, is a measure of fat content. This method was validated against hydro densitometry and used to study the relationship between fat distribution patterns and risk for cardiovascular disease. Certain body fat distribution patterns are associated with increased risk for cardiovascular disease.

Researchers identified a genetic influence on the over-consumption of high fat diets that may help to explain why some individuals become obese.

Consumption of hydrogenated oils were found to adversely impact plasma low density lipoprotein (LDL) cholesterol levels.

Diets were developed that were adequate in essential fatty acids which reduce LDL cholesterol and promote weight loss.

Low plasma level of docosahexaenoic acid is a risk factor for dementia, as is an apoE–IV genotype. Both apoE and apoA–IV genotype determine responsiveness to LDL cholesterol lowering from diets restricted in saturated fat and cholesterol.

Nutrient factors are the primary determinants of elevated total plasma homocysteine concentrations, commonly found in older Americans. Plasma homocysteine is inversely correlated to status and intake of foliate, vitamin B12 and vitamin B6 and directly proportional to the prevalence of carotid stenosis in the elderly subjects in the Framingham Heart Study.

Cataract and Age-Related Visual Impairments. Visual impairment is common among older adults. In the United States, the prevalence of cataracts which impact vision is about 40 percent of people over 75 years. Age-related macular degeneration is the primary cause of incurable blindness in the United States. Approximately 25 percent of people 65 years and older have signs of age-related maculopathy. There is a growing body of evidence that the onset of cataract and age-related macular degeneration can be retarded in many cases by behavior and nutrition factors.

Clinical/epidermiologic studies suggest a protective effect of dietary vitamin C against cataract formation. Use of vitamin C supplements for 10 or more years was associated with an 80% lower prevalence of age-related lens opacities in women aged 55–71 years. Use of supplements for less than 10 years was without significant effect.

Cancer in the aging population. The total incidence of cancer each year is increasing for both men and women in the United States. It has been estimated that at least a third of cancer mortality is related to dietary factors. Research in this area has found that:

> Folic acid supplementation in human subjects who harbor colonic polyps leads to an improvement in a purported intermediary marker of colon cancer, DNA hypomethylation of the colonic mucosa.
>
> The protection that fruits and vegetables provide against disease, including cancer and cardiovascular diseases and stroke has been attributed to their antioxidant content. The total antioxidant capacity of fruits and vegetables has been measured using the automated oxygen radical absorbance capacity (ORAC) assay. Adults who consumed of a meal containing 3400 mol Trolox equivalents of ORAC from spinach, strawberries, red wine phenolics or vitamin C increased serum ORAC by 10–15 percent indicating significant absorption of antioxidant phytochemicals from these food sources.

Food and Diet Studies. Eating foods which are rich in vitamin K rapidly improves vitamin K status. Epidemiologic studies are underway to examine the relationship between vitamin K status and

chronic diseases, such as cardiovascular disease and osteoporosis. In order to adequately assess dietary intake of the vitamin, scientists have developed and validated a comprehensive vitamin K food composition database.

High prevalences of disability, diabetes, depression and obesity were found among a representative group of Hispanic elders in Massachusetts. Puerto Rican elders, had higher rates of these conditions than did other Hispanics or non-Hispanic whites. A food frequency questionnaire developed for this population found that their diets tend to be high in refined starchy foods and low in variety and micronutrients.

The Framingham Heart Study revealed that diet patterns of subjects predicted blood folate, homocysteine, vitamin B12 concentrations and bone status. Studies also indicated that:

> Fruits, vegetables and breakfast cereal appear to be protective of folate and homocysteine status; vitamin B12 supplements and fortified breakfast cereal appear protective of vitamin B12 status; and potassium, magnesium, and fruits and vegetables were significantly associated with greater bone mineral density in elderly men and women and with lower losses in bone mineral density over time in elderly men.

Long-term feeding of rats with a defined diet containing extracts of strawberries or spinach or high in vitamin E retarded the onset of several parameters of aging including; loss of brain cell receptor sensitivity, and cognitive behavior.

Antioxidants Research Laboratory. The Antioxidants Research Laboratory works to understand the role of dietary antioxidants and factors such as drugs and exercise on free radical reactions and changes in oxidative stress status during aging.

Oxygen free radicals generated during cellular metabolism and by certain lifestyle factors appear to play a critical role in the aging process and in the development of chronic diseases common among the elderly. Diets characterized by high intakes of foods rich in antioxidant vitamins and other phytochemicals are associated with better maintenance of physiologic function and a lower prevalence of many chronic diseases. An understanding of how antioxidants reduce oxidative stress status and impact the pathogenesis of chronic disease will enable us to improve health promotion and the treatment of chronic disease among other adults.

Body Composition Laboratory. The Body Composition Laboratory evaluates the effect of nutrition on the dynamic interactions between the body's protein, water, fat and bone and studies the relationship of these changes to the aging process. This laboratory works to understand the mechanisms leading to loss of muscle mass with age, and develop appropriate interventions that reverse this decline; develop new techniques of measuring muscle mass accurately in vivo; develop and validate methods for assessing body composition and nutrition status of non-institutionalized elderly in epidemiologic studies; and evaluate the efficacy of anti-cachexia and anti-obesity treatments.

Calcium and Bone Metabolism Laboratory. The Calcium and Bone Metabolism Laboratory conducts research to improve the scientific basis for understanding and establishing the intake requirements for calcium, vitamin D, and other nutrients that influence

bone health in adult men and women. This requires an understanding of how demographic, endocrine, genetic, racial, seasonal, and physical factors influence bone mass and affect nutrient requirements. It also requires an understanding of the absorption and metabolism of these nutrients. In this clinical research laboratory, volunteers are recruited to participate in both long-term, randomized, placebo-controlled intervention trials as well as smaller, more intense, shorter metabolic studies.

Energy Metabolism Laboratory. The Energy Metabolism Laboratory examines how body weight is normally regulated and why many people gain weight as they grow older. The importance of genetic and environmental factors in determining body composition and energy regulation, and quantifying optimal dietary energy requirements are under investigation. Whole-body physiology studies examine the importance of energy expenditure and energy intake in determining body fat gain during adult life. Hormonal and cellular investigations are also underway to identify the underlying metabolic cause of individual differences in body composition and energy regulation.

Gastrointestinal Nutrition Laboratory. A major focus of the Gastrointestinal Nutrition Laboratory is to determine how aging and associated factors, such as medication use, effect the intestinal absorption and metabolism of micronutrients, including carotenoids. Human volunteers, experimental animals, and cell culture models are studied to investigate whether changes in the requirements for vitamins A, B6, B12, and niacin are warranted in aging. Research is conducted in elderly subjects with atrophic gastritis or hypochlorhydria, representing a sub-population of elderly at risk for impaired nutrient absorption and metabolism.

The chemopreventive effects of carotenoids against cancer are also explored. The biologic activity of carotenoid metabolites in gene expression is examined as a mechanism to explain both chemopreventive (when present in low concentrations) and cancer promoting (when present in high concentration) properties. The functions of carotenoids in preventing light damage to the macula of the eye and in promoting intestinal immunity are studied in collaboration with other HNRC laboratories.

Genetics Laboratory. The Genetics Laboratory studies reactive oxygen species produced by cellular metabolic reactions that have been implicated in the pathogenesis of numerous diseases including atherosclerosis, cancer and Alzheimer's disease. The laboratory focuses on the molecular mechanisms, by which reactive oxygen species are used as signaling molecules in the regulation of cellular function and gene expression. Interestingly, clinical and epidemiologic studies have, in some cases, indicated that antioxidant nutrients may be effective in disease prevention. Recently molecular and cellular approaches have demonstrated that reactive oxygen species and antioxidants can directly affect the cellular signaling apparatus, and consequently the control of gene expression. The new research provides the link between reactive oxygen species and antioxidant chemistries, and the mechanisms of disease processes and prevention.

Laboratory for Nutrition and Vision Research. The Laboratory for Nutrition and Vision Research seeks to determine the primary

causes of eye lens cataract and degeneration of the macula and to apply this knowledge to extend the useful life of these organs. Current clinical/epidemiologic approaches and laboratory tests aim to define adequate nutrient levels during various life stages which will ultimately result in delayed accumulation of damaged lens and retinal proteins and delayed lens opacification and age-related maculopathy. Human and other mammalian lens tissue, a variety of animal models, whole lenses in culture, and cultured lens epithelia cells are studied. Since the lens is primarily composed of protein, a significant effort is being made to understand interrelationships between aging, regulation of lens protein metalobism, protease function and expression, and nutrition.

Lipid Metabolism Laboratory, Cardiovascular disease (CVD), including coronary heart disease (CHD) and stroke, remain the leading causes of death and disability in our society. In addition to age and gender, significant CHD risk factors include an elevated level of low-density lipoprotein cholesterol, a decreased level of high-density lipoprotein cholesterol, cigarette smoking, hypertension, and diabetes. Hypertension and age are significant risk factors for stroke. Dietary intake and exercise level have a significant impact on cardiovascular risk, as do genetic factors. The Lipid Metabolism Laboratory focuses on defining the interrelationships between lipoprotein metabolism and consumption of various dietary fatty acids, cholesterol another dietary constituents, genetics, and aging. Other studies are designed to identify lipid and lipoprotein abnormalities and genetic mutations associated with CHD, stroke, and dementia risk. Scientists are developing nutritionally-adequate optimal diets for fatty acids, cholesterol, and other dietary constituents in the elderly to minimize the risk of CVD and dementia.

Mineral Bioavailability Laboratory. The Mineral Bioavailability Laboratory examines the biochemical and physiologic basis for changes in absorption and utilization of minerals with aging and determines the effects of aging on mineral requirements in the elderly. Research focuses specifically on understanding calcium, zinc, and iron metabolism in the elderly, and the effects of nutrient and hormonal changes on the expression of genes that modulate mineral metabolism.

Neuroscience Laboratory. Although the primary focus of a great deal of research in neuronal aging is directed to identifying the mechanisms involved in age-related neurodegenerative disease, e.g., Alzheimer's disease and Parkinson's disease, many of the neurologic deficits seen in aging occur in the absence of neurodegenerative disease. In fact, these diseases are superimposed upon an already declining nervous system. These deficits may include decreases in both motor and memory functions which could, in many cases result in hospitalization and/or custodial care. Research has suggested that both the changes that occur in Alzheimer's disease and Parkinson's disease, as well as those in aging, may involve increases in vulnerability to oxidative stress. Research in the Neuroscience Laboratory is directed to toward identifying factors that increase vulnerability to oxidative stress with a view toward identifying nutrient antioxidant regimens to restore these behaviors or prevent their decline.

Research in the Neuroscience Laboratory is directed toward determining the membrane and neurotransmitter receptor characteristics that increase vulnerability to oxidative stress, alter calcium homestatis, and ultimately, cell viability in neuronal aging. Studies examine the expression of the behavioral deficits in aging using assessments of cognitive and motor behavior. Other studies examine the effects of dietary supplementation with fruits and vegetables high in antioxidant activity, as well as other antioxidants on retarding to age-related cellular, neuronal, and behavioral deficits.

Nutritional Epidemiology Program. The Nutrition(al) Epidemiology Program uses the epidemiologic approach and methods to investigate the role of nutrition in healthy aging. Epidemiology allows for the study of complex interactions between genetic, behavioral, and environmental factors in a community setting. It is also the bridge between basic science and public policy. This program identifies nutrition related factors that influence the progressive loss of physiologic function and genesis of the major chronic, degenerative conditions associated with aging, such as cardiovascular disease and visual impairment. Studies assess the possible modification of these nutritional relations by personal behavioral, and genetic factors. This information is used to assist in determining the nutrient requirements necessary to obtain optimal function and well being for a maturing population. The research focuses on identifying the determinants of nutrition status and intake in the elderly, relating nutrition status and intake to measures of health and well-being, and improving methodology for research relating nutrition and aging.

Nutritional Immunology Laboratory. The Nutrition(al) Immunology Laboratory has demonstrated that increased production of suppressive factors free radicals, and enzymatic products of lipid peroxidation, such as PGE2, play an important role in the dysregulation of the immune response in older adults, which contributes to increased incidence of infectious, inflammatory, and neoplastic diseases. Antioxidant and prooxidant nutrients modulate immune and inflammatory responses. This laboratory investigates the role of dietary components (antioxidants and prooxidants in particular) and their interactions with other environmental factors in age-associated changes of the immune and inflammatory responses. Research is designed to develop a means to reverse and/or delay the onset of these immunological and age-related changes by appropriate dietary modifications and to determine the molecular mechansim(s) by which antioxidant and prooxidant nutrients modulate immune cell functions. Methods are being developed to use the immune response as a biologically meaningful in determining specific dietary requirements.

Nutrition, Exercise Physiology, and Sarcopenia Laboratory. The mission of the Nutrition, Exercise Physiology, and Sarcopenia Laboratory is to understand the interaction of nutrition, hormonal and immunological factors in sarcopemia (the loss of muscle mass and function with aging) and to develop new methods of reversing and preventing these losses. Studies are conducted in healthy humans, in animals, and in vitro experimental systems. Over the past decade this laboratory has demonstrated the safety and effectiveness of progressive resistance exercise training (strength training) in re-

versing sarcopenia and frailty. Current projects are designed to better understand the mechansims causing sarcopenia, including changes in various hormones and in the immune system with age, and how exercise and diet can improve or prevent these changes.

Phytochemical Laboratory. The Phytochemical Laboratory investigates the bioavailability, metabolism, and potential health benefits of various phytochemicals with antioxidant activity. Specific antioxidants currently under investigation include vitamins C and E, and the flavoniod family of compounds, including flavones, flavanones, anthocyanins, etc. The Oxygen Radical Absorbance Capacity assay and various High Performance Liquid Chromatography methods are used to characterize these antioxidants. In vivo nutrition studies are conducted in human volunteers to asses biological activity and function.

Vitamin Metabolism Laboratory. The Vitamin Metabolism Laboratory examines the relationship between aging and B vitamin status with emphasis on requirements and long-term effects of inadequate status. The relationship of plasma homocysteine levels to intake and status of the vitamins folic acid, B12, B6 and B2 and cardiovascular disease, thrombosis and stroke, cognitive dysfunciton, certain cancers e.g., breast, colorectal, prostate and cervical are studied. The polymorphic mutations in the gene encoding enzyme of folate metabolism such as the thermolabile methylenetetrahy-drofolate reductase mutation are under investigation. The epidemiologic component of this research is conducted with a variety of outside collaborators including the National Cancer Institute, Johns Hopkins School of Public Health, Harvard School of Public Health, Hadasah Hospitals and the Farmingham Heart Study. Basic laboratory research includes the development of new methods for the study of small human specimens and animal model studies.

Human Nutrition Research Center on Aging—Research Projects Related to Nutrition and the Elderly

	Funding Level fiscal year dollars
Functional Capacity and Nutrient Needs of Aging—HNRC, 1/11/95–1/10/00. Objective: To examine the effects of increased physical activity, body composition and diet on the following: (1) Peripheral insulin sensitivity and glucose metabolism; (2) Functional capacity and nutrition status of the frail elderly; (3) Whole body and skeletal muscle protein metabolism; (4) Total energy expenditure and its relationship to physical activity level and body composition	940,560
Function and Metabolism of Vitamin K and Vitamin K Dependent Proteins During Aging—HNRC, 1/11/95–1/10/00. Objective: Molecular, biochemical and functional assays of vitamin K nutritional status and dietary tools for the assessment of vitamin K intakes will be developed and validated. In vivo studies with rats will determine dietary sources of vitamin K and requirements related to the synthesis of matrix gla protein (MGP). The effects of aging and gender on the expression of MGP will be studied in relationship to dietary sources of vitamin K (phylloquinone or menadione) and vitamin K antagonists	904,769

Human Nutrition Research Center on Aging—Research Projects Related to Nutrition and the Elderly—Continued

	Funding Level fiscal year dollars
Absorption & Metabolism of Phytochemicals: Enhancement of Antioxidant Defense Mechanisms in Aging—HNRC, 10/1/96–9/30/99. Objective: Determine (1) extent of absorption and metabolism of flavonoids in fruits and vegetables high in antioxidant activity, (2) usefulness of Oxygen Radical Absorbing Capacity (ORAC) assay as an indicator of antioxidant capacity of fruits and vegetables and status in animal models exposed to increased oxidative stress, and (3) possible health related outcomes	370,184
Dietary Antioxidants, Aging, and Oxidative Stress—HNRC, 11/1/94–10/31/99. Objective: To determine the effect of enhancing antioxidant status on oxidative status, immune responsiveness, and other physiologic functions; interactions between vitamin E, other dietary antioxidants and/or polyunsaturated fatty acids; the effect of dietary antioxidants on the generation of eicosanoid and cytokine products and oxidized lipid, protein, and nucleic acid targets; the value of measures of antioxidants and oxidative stress status as biomakers of aging and health	670,700
Regulation of Gene Expression in Nutrient Metabolism—HNRC, 1/11/95–1/10/99. Objective: The major areas being explored are aimed at defining the molecular mechanisms which contribute to metabolic dysfunction in diabetes and obesity. Specifically, we are examining the role of oxidants in nutrient and hormonal signal transduction and gene expression. Secondly, we are exploring how aging influences nutrient and hormonal signalling and gene expression	432,679
Mineral Bioavailability in the Elderly—HNRC, 1/11/95–1/10/00. Objective: To define the dietary factors that influence the bioavailability, requirements, and status of minerals, especially Ca, Mg, Fe, and Zn in humans. To define the relationship between restriction fragment length polymorphisms in the vitamin D receptor gene and calcium metabolism in humans. To define the mechanism of age-associated intestinal calcium malabsorption	610,334
Bioavailability of Nutrition in the Elderly—HNRC, 1/11/95–1/10/00. Objective: To study the bioavailability of water soluble vitamins in the aging population and determine the effect of aging on vitamin requirements. To examine the basis for the absorption utilization and excretion of water soluble vitamins from food in the maturing and elderly population. To assess vitamin status and its relationships to drug intake and chronic diseases. To study the impact of subclinical vitamin deficiencies on the integrity and function of body physiology	901,017
Dietary Assessment of Rural Older Persons—HNRC, 2/1/96–12/31/00. Objective: (1) Test dietary assessment methodologies (24-hr phone recalls and written food records) in a rural population of older persons; (2) seek confirmation of dietary findings using doubly-labeled water and indirect calorimetric procedures; and (3) correlate dietary findings with biomarkers of nutritional status (i.e. measures of visceral protein, folate, B12, pyridoxine, homocysteine and iron). Investigate nutrition knowledge and practices (use of dietary supplements and reduced calorie foods) of rural older persons	186,857
Maintaining Bone Health in the Elderly—HNRC, 11/1/94–10/31/99. Objective: We will define the intake of calcium and vitamin D above which skeletal mineral is maximally spared. This requires an understanding of how hereditary, demographic, endocrine, and physical factors (e.g. race, sex, age, years since menopause, weight, and activity level) affect the absorption and utilization of these nutrients. Race differences in bone metabolism will be sought in an effort to understand why blacks have less osteoporosis	1,100,401
Dietary Effects on Neurological Function—HNRC, 10/1/96–9/30/99. Objective: Identify selected food components that affect neurological function and determine their mechanisms of action	633,579

Human Nutrition Research Center on Aging—Research Projects Related to Nutrition and the Elderly—Continued

	Funding Level fiscal year dollars
Lipoproteins, Nutrition and Aging—HNRC, 1/11/95–1/10/00. Objective: Our objectives are to develop optimal diets in terms of fat and cholesterol content which are effective in reducing LDL cholesterol, as well as favorably affecting other heart disease risk factors, to study nutritional regulation of plasma lipoproteins in animals, and to study the interrelationships between aging, nutrition, genetics, and to examine ways to prevent diet-induced atherosclerosis, lipoproteins, and heart disease risk in populations	1,285,299
Effect of Nutrition and Aging on Eye Lens Proteins, Proteases, and Cataract—HNRC, 1/11/95–1/10/00. Objective: One-half of the eye lens cataract operations and savings of over $1 billion would be realized if we could delay cataract by only 10 years. We are attempting to use enhancement of dietary antioxidants, such as vitamin C, and other nutrients, such as carotenoids or tocopherol, to delay damage to lens-proteins and proteases and to maintain visual functions in elderly populations. This should delay cataract-like lesions in eye lens preparations, cataracts in vivo, and age-related maculopathy	958,286
Epidemiology Applied to Problems of Aging and Nutrition—HNRC, 1/11/95–1/10/00. Objective: To define diet and nutritional needs of older Americans; to advance methods in nutritional epidemiology; and to develop indices which reflect nutrient intake and which predict health or disease outcomes in aging populations	1,316,167
Gastrointestinal Function and Metabolism in Aging—HNRC, 11/1/94–10/31/99. Objective: To delineate the pathways of intestinal carotene metabolism, and to determine if any metabolic intermediate can transactivate nuclear receptors; to determine if beta-carotene or cryptoxanthin can prevent gastric cancer in the ferret/model; to determine relative bioavailabilities of different carotenoid compounds in the human. To determine niacin requirements in elderly humans. To study the effect of antioxidants in gut immunity in young and elderly adults.	1,684,467
Nutrition, Aging and Immune Response—HNRC, 11/1/94–10/31/99. Objective: Investigate the role of nutrients and their interactions with other environmental factors in age-associated changes of the immune response, to reverse and/or delay the onset of these immunological changes by dietary modification and to use the immune response as an index in determining the specific dietary requirements for older adults.	1,033,933
The Role of Aging in Energy and Substrate Regulation and Body Composition—HNRC, 1/11/95–1/10/00. Objective: To examine the extent and causes of changes in energy metabolism, energy regulation and body composition with aging, and to investigate optimal values for dietary energy intake and expenditure in the aging population. In particular, to determine the (1) roles of genetic inheritance and environment factors in the determining body fat content, (2) extent to which changes in body fat and protein with aging are inevitable, and (3) molecular regulation of proteins involved in fat metabolism in adipocytes.	1,879,726

COOPERATIVE STATE RESEARCH, EDUCATION, & EXTENSION SERVICE (CSREES)

Programs and Accomplishments

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

The Cooperative State Research, Education, and Extension Service (CSREES) in its mission advances research, extension, and higher education in the agricultural, environmental, and human sciences to benefit people, communities, and the Nation. As a major research and education arm of USDA, CSREES through its Land-Grant institution network has conducted educational and research

programs that have benefited older persons, their adult children, and caregivers. The vision is for older persons to maintain and continue a quality lifestyle while aging; have a greater opportunity to be financially secure; experience positive human relations; and to have the knowledge necessary to access health care options.

CSREES and its state partner institutions collaborate with a variety of national, state, and local organizations and agencies such as the American Association of Retired Persons, the National Association for Family and Community Education, the Administration on Aging, the Area Agencies on Aging, American Society on Aging, American gerontological Society, and State/local departments of human/family services and health. This collaboration provides more well-coordinated programs for consumers and extends the resources of each collaborator to better serve the clientele.

As a component of the CSREES National Initiative on Children, Youth, and Families at Risk, human and electronic networks are addressing targeted issues identified by professionals and user groups throughout the system. One of those networks, the National Network for Family Resiliency (NNFR), provides leadership for acquisition, development, and analysis of resources that foster family resiliency. Family resiliency is defined as the family's ability to cultivate strengths to positively meet the challenges of life. The NNFR brings together educators, researchers, agency personnel, families, advocates for families, and practitioners who share an interest in strengthening families that face multiple risks to their resiliency. Collaborators from CSREES and 42 Land-Grant institutions share leadership for maximizing expertise, bringing research to bear on significant family issues, and guiding research based on evaluation of programs and practices. The network provides access to resources through multiple avenues including electronic media, training and education, and community development. Within the network, a special interest group has formed to address intergenerational issues. The work group is composed of 35 multistate and multi-institutional members. Currently their focus is on "grandparents raising grandchildren." An Internet web site is in development that will highlight resources for grandparents as primary caregivers and promotion of positive intergenerational relationships for educators and the general public.

Through the Cooperative Extension System at Land-Grant institutions, administrators and specialists in such fields as aging/gerontology, housing, financial management, nutrition, health, human development, family life, community development, and the agricultural sciences; plus the county extension educators serving 3,150 counties have designed, implemented, and evaluated numerous programs in the field of aging/gerontology. Below are highlights of these programs.

Brief description of accomplishments

GEORGIA

The University of Georgia Cooperative Extension Service produces a quarterly newsletter entitled, "Senior Sense Putting Knowledge to Work for Older Georgians." The newsletter is distributed to 2,700 persons and is also available on the College of Family

and Consumer Sciences web page, where it is accessed and read worldwide. Topics covered in the newsletters include health issues, financial management, and care giving tips.

IDAHO

In Idaho, the rapid growth in the numbers of elderly citizens has produced the need for more people trained with an understanding of aging development and a wide variety of approaches to serving the elderly. an Idaho extension/research specialist joined forces with a teaching/research colleague to develop an interdisciplinary minor in aging in the School of Family and Consumer Sciences at the University of Idaho. A team of professionals from academic programs in psychology, sociology, architecture, family and consumer sciences, communications, and a representative from the library developed a proposal and submitted it to the Idaho Board of Education. The program has been approved. A minor in Aging will be an important career complement to majors as the student develops expertise in a subject matter support area like aging.

The University of Idaho Cooperative Extension Service (CES) and vocational education staff identified a need for additional trained home health aides by the year 2005. They discovered that 890 people were employed as aides in 1994 but by the year 2005, 1244 would be needed to meet the demand. The CES and the Idaho Department of Vocational Education collaborated to plan a secondary and post-secondary program for Geriatric Home Care Aides. They compiled a curriculum to be used to train home care aides, piloted the program, established sites for student clinical experience and internships, and established a system for graduate placement. Upon completion of the program including the internship, the student will be eligible to take the examination for Certified Nurse Assistant certification. In Idaho, these positions command approximately $8.00 per hour and prepare people for a wide variety of career paths.

MICHIGAN

Michigan State University Cooperative Extension Service is in a partnership with Blue Cross and Blue Shield of Michigan, Kirtland Community College, Michigan Rural Aging Institute, Office of Services to the Aging, Michigan Department of Community Health, and the Michigan Family Independence Agency to provide caregiver training that will prepare caregivers to improve the care provided to older persons. Annually 4,000 caregivers of older adults are trained on such topics as financial and legal issues of older adults, dementia, understanding difficult behaviors, working with the frail elderly, and financial abuse of the elderly. The training is provided statewide using distance learning technology. Caregivers obtain certification for completion of the training.

MISSOURI

The Center on Aging Without Walls is a unique way to bring information on age-related issues to the University Outreach and Extension network, to the older adults of the State of Missouri, and the many caregivers who provide care for older citizens. The Center

is a web site made possible through a partnership between the Center on Aging Studies at the University of Missouri-Kansas City and the University of Missouri Outreach and Extension. Care giving issues have been addressed in this initial phase of the web site. Topics covered include burdens and rewards, care giver resources, ethics, health concerns, family relations, and mental health. The web address is <http://cei.haag.umkc.edu/casww>.

NEW YORK

A Cornell University program that has young people and senior citizens interacting in ongoing activities has become a national model. A detailed handbook for group leaders who want to replicate the program is available nationally. Geared for children ages 9 to 13, but easily adaptable for other ages, Project EASE—Exploring Aging through Shared Experiences—is ideal for groups of scouts, 4–H groups, religious youth groups, after-school programs and other youth organizations. It can also be utilized in the classroom. The project is based on current research on the effectiveness of intergenerational programs to develop activities and projects that youth and senior citizens can share for mutually satisfying, meaningful and goal oriented interaction. Three years in development, Project EASE has been field tested and evaluated by more than 70 4–H clubs in New York, involving about 600 participants. The youth and seniors may plan a joint community service project in which children and elders work together on an activity that the community will value; shared group activity projects that both groups enjoy but are not community service; and one-on-one programs, in which each youth is paired with a senior in activities such as arts and crafts, sharing oral histories, grooming pets, playing board games, etc. This project is supported in part with grants from the Charles Stewart Mott Foundation, the Public Welfare Foundation, and the College of Human Ecology at Cornell.

In another innovative program, Cornell University researchers, Cooperative Extension Service faculty, and State/local volunteers, and community agencies are addressing housing options for senior citizens. Twenty counties in New York have provided multi-faceted educational programs about community-based housing options for the elderly for both professionals and the public. Professionals, housing and human service agency staff, municipal officials, and residents have new capacity to respond to the housing needs of an increasing older population. As a result of this project, they are knowledgeable about low-cost community-based housing options such as shared housing, accessory apartments, and elder cottages. As a result of Cornell's research and extension outreach, state legislation was passed to provide capital funding for the creation of these new types of housing units. Municipal land-use and zoning regulations have been changed to permit the development of this housing in approximately 25 communities. Technical assistance is provided to attorneys and community planners about zoning and land-use regulations. There are now 12 shared living residences in communities throughout the State. A not-for-profit organization has received $375,000 from the State to develop and operate an elder cottage lease program for low-income elderly.

NORTH CAROLINA

The North Carolina Aging with Gusto program has been adopted in more than half of North Carolina's 100 counties. This program is believed to be unique nationally because it focuses on the positive aspects of aging in how to achieve optimum financial, physical, and mental well-being in later years. Older adults learn how to prepare for and cope with problems related to finances, legal issues, health, care giving, housing and self-care. Recent figures suggest that the program has reached more than 35,000 people directly.

North Carolina Cooperative Extension Service (CES) and the North Carolina Division of Aging have collaborated to pilot a new approach by distributing nutrition education materials with the Meals on Wheels food deliveries. This is one way to reach homebound elderly that are especially difficult to reach and who are at greater risk of malnutrition and chronic disease. Sixteen different learn-at-home lessons have resulted in positive changes in the stages of change for fruit and vegetable consumption as evidenced in the pre- and post-test from 177 participants in five counties.

To address another important issue for seniors, North Carolina CES and the North Carolina State Attorney General's Office worked together to educate older adults about consumer scams. In one county, 785 seniors were reached with 80 percent reporting they would be more cautious about telephone and mail solicitations and 77 percent stated that the program motivated them to change some of their consumer practices such as avoid sharing credit card information on the telephone, making financial donations to known charities and organizations, and checking on offers that are "too good to be true."

OREGON

Oregon State Cooperative Extension Service (CES) has a grant to study Behavioral Changes in Dementia Patients; Relationships to Caregiver Well-Being. Currently data is being collected on caregivers to Alzheimer's patients. The goal of the research is to expand the understanding of later life care giving to dementia patients and its consequences on caregivers' mental and physical health. Extension curricula will be developed as a result of this research.

Dissemination of research-based information is the hallmark of the Cooperative Extension System. A network of professional educators provide such information in community-based settings. For example, Oregon State University is in a four university consortium to provide geriatric education with a special emphasis on reaching rural areas. A grant from the Geriatric Education Center Training Grant, Department of Health and Human Services, Public Health Services makes this program possible. A special focus is on reaching rural health care professionals to update and expand their knowledge of geriatric health issues. Oregon CES has disseminated 13 health guidelines for consumers relevant to older populations to 2,700 English and over 625 Spanish consumers. In addition, Extension sponsored four teleconferences on a variety of women's health

issues in later life with satellite downlinks in 27 sites throughout the State.

PENNSYLVANIA

Pennsylvania State University Cooperative Extension Service (CES) has a preventive health program for people over age 75 and their family caregivers. The program provides independent living through lifestyle changes, nutrition, and regular exercise. Developed in rural Pennsylvania in Tioga, Bradford, Sullivan, and Susquehanna counties, this program reaches an extremely high-risk population. Ninety percent of the participants had annual household incomes below $20,000, and 84 percent had only a high school or less education. High percentages had nutrition risk, low levels of physical activity, and losses in daily living activities. This program will be expanded statewide.

Pennsylvania CES has also provided a program entitled "Medicare Managed Care: What Does It Mean for You?" More than 190 senior citizens and health care professionals in Centre County, Pennsylvania, participated. The six sessions were organized by Penn State's College of Agricultural Sciences and the Pennsylvania Office of Rural Health, in collaboration with Centre County CES, American Association of Retired Persons, Centre County Office of Aging Apprise Program, and the Brookline Village.

In Allegheny County the Extension Service assisted residents of Carnegie Towers public housing in Pittsburgh to organize and take leadership for a fledgling community. Originally built for low income elderly citizens, a predominantly young population now occupies the project. Most of the households are headed by single, low-income females. Intergenerational conflicts existed between elderly residents and children, partly because the housing area did not include recreational facilities for youth. After Extension leader training workshops were completed, residents organized and elected a tenant council of eight adults and one youth. Since organizing, the council has sponsored a Community Day Celebration, supported by various fund raising activities. They have established a computer room with computer training classes, an outdoor play area, Extension educational programs related to 4–H youth development and nutrition, and a program highlighting guest speakers who provide useful and practical information.

SOUTH CAROLINA

Clemson University Cooperative Extension Service (CES) specialist Katherine Carson has developed a program entitled, Learning, Innovation, Networking, and Celebration (LINC) nutrition program. LINC focuses on the elderly and preschool children, as well as pregnant and parenting adolescents. Changes in attitude, skills, knowledge, and behavior are documented. LINC has reached 2,407 elderly South Carolinians. LINC is a collaborative effort between the Clemson University CES, the South Carolina Department of Social Services, and the State Department of Health and Environmental Control Center for Health Promotion. South Carolina Governor David Beasley has recognized Carson for developing a nutrition program that reaches senior citizens by presenting her with the Governor's Health Promotion for Older South Carolinians

Award. This program will be expanded with the assistance of a $759,000 grant from USDA Food and Consumer Services. One phase of the expansion will include a Nutrition Education and Resource Center on the Internet for people who want information rapidly.

ECONOMIC RESEARCH SERVICE (ERS)

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

The ERS identifies research and social policy issues relevant to the elderly population from the perspective of rural development. Ongoing research looks at demographic and socioeconomic characteristics of the elderly by metro-nonmetro residence. Current research examines the poverty status of the elderly across the rural-urban continuum, and changes in the concentration of the older population by residential area, based on 1990 census data and Current Population Survey data. We actively participate in the Interagency Forum on Aging-Related Statistics at the National Institutes of Health, and served on the Forum's work group on Population and Vital Statistics.

Brief description of accomplishments

The following publications on the rural elderly have been prepared by our staff in 1995 and 1996:

Beale, Calvin L., "Nonmetro Population Rebound Continues and Broadens," *Rural Conditions and Trends,* Vol. 7, No. 3 (1996).

Beale, Calvin L., and Kenneth M. Johnson, "Nonmetro Population Continues Post–1990 Rebound," *Rural Conditions and Trends,* Vol. 6, No. 3 (Spring 1996).

Fuguitt, Glenn V., Richard M. Gibson, Calvin L. Beale, and Stephen J. Tordella, "Recent Elderly Population Change in Nonmetropolitan Areas," unpublished paper (1996).

Rogers, Carolyn C., "Aging-Related Policy-Making; Demographic Data Needs and Recommendations," a joint report prepared as part of a working group of the Interagency Forum on Aging-Related Statistics (February 1996).

Rogers, Carolyn C., "Health Status Transitions of the Elderly, by Residential Location," *Family Economics Review,* Vol. 8, No. 4 (Fall 1995).

Rogers, Carolyn C., "More Nonmetro Elderly Rate Their Health as Fair to Poor", *Rural Development Perspectives,* Vol. 9, No. 3, June 1994 (released Fall 1995).

FOOD AND NUTRITION SERVICE (FNS)

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

The Food Stamp Program (FSP) provides monthly benefits to help low-income families and individuals purchase a more nutritious diet. In fiscal year 1996, $22 billion in food stamps were provided to a monthly average of 25 million persons.

Households with elderly members accounted for approximately 16 percent of the total food stamp caseload. However, since these households were smaller on average and had relatively higher net income, they received only 6 percent of all benefits issued although 7 percent of participants are elderly.

Brief description of accomplishments

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

In response to recommendations for joint processing improvements, FNS and SSA have stepped up efforts to ensure that SSI applicants are counseled on their potential eligibility to receive food stamps. Additionally, a joint Supplemental Security Income/Food Stamp processing demonstration—the South Carolina Combined Application Project (SCCAP)—was begun in the fall of 1995. Approximately 10,000 SSI households in South Carolina receive food stamp benefits through this project. An independent evaluation of SCCAP is underway and is scheduled to be completed in 1999.

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

The Commodity Supplemental Food Program (CSFP) provides supplemental foods, in the form of commodities, and nutrition education to infants and children up to age 6, pregnant, postpartum or breast-feeding women, and the elderly (at least 60 years of age) who have low incomes and reside in approved project areas.

Service to the elderly began in 1982 with pilot projects. In 1985, legislation allowed the participation of older Americans outside the pilot sites if available resources exceed those needed to serve women, infants, and children. In fiscal year 1996, approximately $51 million was spent on the elderly component.

Brief description of accomplishments

About 57 percent of total program spending provides supplemental food to approximately 219,000 elderly participants a month. Older Americans are served by 18 of 20 State agencies.

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

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

Brief description of accomplishments

This program serves approximately 46,000 households with elderly participants per month.

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

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

The adult day care component permits adult day care centers to receive reimbursement of meals and supplements served to functionally impaired adults and to persons 60 years or older. An adult day care center is any public or private nonprofit organization or any proprietary Title XIX or Title XX center licensed or approved by Federal, State, or local authorities to provide nonresidential adult day care services to functionally impaired adults and persons 60 years or older. In fiscal year 1996, $25 million was spent on the adult day care component.

Brief discussion of accomplishments

The adult day care component of CACFP served approximately 23 million meals and supplements to over 46,000 participants a day in fiscal year 1996.

In 1993, the National Study of the Adult Component of CACFP was completed. Some of the major findings of the study include: overall, about 31 percent of all adult days care centers participate in CACFP; about 43 percent of centers eligible for the program participate. CACFP adult day care clients have low incomes; 84 percent have incomes less than 130 percent of poverty. Many participants consume more than one reimbursable meal daily; CACFP meals contribute just under 50 percent of a typical participant's total daily intake of most nutrients.

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

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

As estimated $16 million in commodities were distributed to households including an elderly person. (This figure is estimated using a 1986 survey indicating that about 38 percent of TEFAP households have members 60 years of age or older.)

Brief description of accomplishments

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

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

The Nutrition Program for the Elderly (NPE) provides cash and commodities to States for distribution to local organizations that prepare meals served to elderly persons in congregate settings or delivered to their homes. The program addresses dietary inadequacy and social isolation among older individuals. USDA cur-

rently supplements the Department of Health and Human Services' Administration on Aging with approximately $140 million worth of cash and commodities.

Brief description of accomplishments

In fiscal years 1995 and 1996, over 245 million meals were reimbursed at a cost of almost $150 million. On an average day, approximately 925,000 meals were provided.

FOOD SAFETY AND INSPECTION SERVICE (FSIS)

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

FSIS is continuing a consumer education campaign targeted to older Americans, one of several groups of people who face special risks from food-borne illness. The goal is to reduce the incidence of food-borne illness caused by consumer mishandling of food. Food-borne illness can lead to serious health problems and even death for someone who is chronically ill or has a weakened immune system. The elderly, with more than 35 million people in their ranks, are the largest group at risk and are increasing in number because of longer life expectancies.

Brief description of accomplishments

FSIS continues to distribute food safety information to this group through direct mail of publications and liaison work with the Administration on Aging.

FOREST SERVICE (FS)

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

Senior Community Service Employment Program (SCSEP)—Program Year 1996, July 1, 1996—June 30, 1997, the USDA Forest Service's Senior Community Service Employment Program (SCSEP) provided training and work experience in research, budget and finance, clerical/administrative, computer, forestry, building/recreational maintenance, visitor interpreters, and communication.

Brief description of accomplishments

The FS Senior Community Service Employment Program provided an opportunity for 5,055 participants, age 55 and above, to upgrade their work skills by receiving training and part-time employment opportunities while providing community service to the general public.

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

Volunteers in the National Forests—Volunteers continue to contribute to the management of the Nation's natural resources that are administered by the FS.

Brief description of accomplishments

During fiscal year 1997, 112,384 participants assisted in the management of National Forest System lands including 13,392 participants are 55 years and above. Volunteers participated in recreation, resource protection and management, cooperative/international forestry, and research. Typical positions included campground hosts, administrative, recreation, wildlife, and fisheries assistants, fire lookouts, and information specialists.

RURAL HOUSING SERVICE (RHS)

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

Each person experiences the aging process differently. Some people are able to maintain lifelong health and independence, while others find that they face increasingly more difficult challenges to their abilities to take care of themselves. The difficulties that aging can bring are felt not only by elderly people but also by their children and grandchildren, making the question of how to address these difficulties one of intergenerational importance. Adding urgency to this question is the fact that America's elderly population is growing rapidly: the US Census Bureau forecasts a growth in the proportion of people ages 65 and older from 12.5 percent in 1990 to 17.7 percent in 2020, a 41.6 percent increase.

The Rural Housing Service (RHS) recognizes the importance of providing rural seniors with a wide range of living options. We invest heavily in programs that help elderly people live with as much independence and dignity as possible. These include the Section 504 loan and grant programs, which make vital home repairs for very low-income seniors; the Section 515 Rural Rental Housing program, which provides affordable rental housing to seniors and people with disabilities (as well as families); the Section 521 Rental Assistance program, which makes rents in the Section 515 program affordable to tenants with very low incomes; and the Community Facilities program, which among other things finances a variety of elder care facilities. Following are descriptions of how each of these programs serves elderly people.

Section 504 Loan and grant programs. The Section 504 loan and grant programs allow elderly people with very low to maintain their independence by remaining in their own homes. The loan program is available to any rural person with a very low income, but most program beneficiaries are elderly: incomes the average age of borrowers between 1991–1996 was 58, and the median age was 61, which means that half of all borrowers were 61 or older. The grant program is available exclusively to very low-income rural seniors. Both programs provide funds to make such major repairs of renovations as removing electrical and fire hazards, replacing roofing, installing or improving water and waste-water disposal systems, and installing weatherization.

Brief description of accomplishments

In 1996, the Section 504 loan program lent a total of $35.1 million to 6,861 very low-income borrowers; in 1995, it lent $29.5 million to 6,116 borrowers. In 1996, the Section 504 grant program

provided $29.5 million to 6,179 very low-income elderly people; in 1995, it provide $27.8 million to 6,964 people. The average income of Section 504 borrowers between 1991–1996 was $11,652; the median income was $8,055. Average and median incomes for Section 504 grant recipients are not available but are likely very similar.

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

Section 515 Rural Rental Housing program and Section 521 Rental Assistance program. Many relatively independent rural seniors find that they cannot keep up with the yard work and structural maintenance that home ownership requires. Others find that they need to live closer to vital services such as doctors, pharmacies, and grocery stores. For these elderly people, the Section 515 Rural Rental Housing program is an attractive option. In addition to being virtually maintenance-free, our apartments for elderly and disabled people are equipped with special amenities such as strategically placed handrails and emergency call buttons or lights with which to signal for help. Many of them are wheelchair accessible. Managers of these complexes often arrange services such as transportation, grocery and pharmaceutical delivery, Meals on Wheels, health screenings, and entertainment, and they make sure that the community rooms stay in constant use. In addition, a small percentage of our Section 515 complexes offer congregate facilities in which seniors receive two cooked meals per day.

Brief description of accomplishments

In 1997, we invested $45.4 million dollars (47 percent of the total funds we lent) to build 49 complexes and approximately 1,200 units for elderly people and people with disabilities. In addition, we lent $6.9 million to make repairs to 47 existing complexes. The previous figures are not available for 1995 or 1996. In our existing portfolio of approximately 18,000 complexes, 6,765 complexes (38 percent of the portfolio) serve elderly or disabled people. Another 375 complexes (2 percent) serve "mixed" tenant populations of both families and elderly people. You and apply these same percentages to 1995 and 1996—the portfolio did not grow much and it's safe to assume that the percentage did not change. In 1995 (the last year in which we conducted a complete nationwide tenant survey), 41 percent of our tenants were elderly people, and a majority of these were women. The average tenant adjusted income was $7,280.

1995 letter from then 82-year-old Betty C. McAfee of Belfast, Maine. *Before moving (to Section 515 rural rental housing) I lived alone in a 2-room cabin (with) no foundation, no plumbing and (which was) heated by a small wood-burning stove. I had a long walk to the rural mail box over a rough dirt lane. If this (Section 515) complex did not exist, I would still be living there. Many other low-income elderly people in Maine are living under these conditions, or worse.*

To make Section 515 housing available to tenants who cannot afford market rents, RHS provides assistance through its separately appropriated Section 521 Rental Assistance program, which brings tenants' rent down to 30 percent of their adjusted incomes and makes up the difference to the landlords. In 1996, RHS provided

more than $540 million worth of Rental Assistance to approximately 47 percent of Section 515 households, while in 1995 it provided $523 million. While we lack demographic information on beneficiaries of Rental Assistance, it is safe to assume that at least 25 percent of the beneficiaries are seniors and that in 1996 seniors received approximately $135 million in RHS Rental Assistance while in 1995 they received approximately $131 million.

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

Community Facilities Loan and Grant Program. Through our Community Facilities loan and grant program, we finance a range of service centers for elderly people, including nursing homes, boarding care facilities and assisted care, adult day care, and a few intergenerational care facilities which serve both elderly people and children at the same time.

Brief description of accomplishments

From its inception in 1974 to the end of 1996, the Community Facilities program has made 535 loans and guarantees worth $547 million facilities that directly benefit seniors. In 1996, the Community Facilities program invested $44.4 million—17 percent of its total funding for the year—to either build or make improvements to 32 senior facilities. In 1995, the program invested $32.4 million—14 percent of its funding—in 27 seniors facilities. In addition, the program invested heavily in hospitals, clinics, and emergency services, which benefit people in every generation.

ITEM 2—DEPARTMENT OF COMMERCE

ORGANIZATION OF THIS REPORT

This report provides short descriptions and listings of products that contain demographic and socioeconomic information on the elderly population, 65 years of age and older, here and abroad. All of the items included in this report were released by the Census Bureau during calendar years 1995 and 1996.

The items mentioned are available to the public in a variety of formats including print, electronic databases, microcomputer diskettes, and CD–ROM. Many of these products can also be found on the Intent at the Census Bureau's web site (http://www.census.gov).

1. Population, Housing, and International Reports.—Three of the Census Bureau's major reports series (*Current Population Reports, Current Housing Reports, International Population Reports*) are important sources of demographic information on a wide variety of population-related topics. This includes information on the United States' elderly population, ranging from their numbers in the total population, to their income, health insurance coverage, need for assistance with daily living tasks, and housing situation. Additionally, data on elderly around the world, including such facts as the decreasing age of death among Russian adults, are also found in this series of reports.

Much of the data used in *Current Population Reports* are derived from the Current Population Survey (CPS) and the Survey of Income and Program Participation (SIPP). The *Current Housing Report* series presents housing data primarily from the American Housing Survey, a biennial national survey of approximately 55,000 housing units. The *International Population Report* series includes demographic and socioeconomic data reported by various national statistical offices, such as the National Institute on Aging (NIA), agencies of the United Nations (UN), and the Organization for Economic Cooperation and Development.

Additionally, the Census Bureau's population projection program and Special Studies Report series also contained information about the future estimated size of the elderly population and information pertaining to statistical methods, concepts, and specialized data.

2. Decennial Products.—A large number of printed reports, computer tape files, CD–ROMs, and summary tape files are produced every ten years after each decennial census. Included in this is information (total numbers and characteristics) on people 65 years of age and older.

3. Database on Aging/National Institute on Aging Products.—This database provides a summary of analytical studies and other ongoing international aging projects. Reports are based on compila-

tions of data obtained from individual country statistical offices, various international organizations, and estimates and projections prepared at the Census Bureau. This work is funded by the NIA.

4. Federal Interagency Forum on Aging-Related Statistics Summary.—The Forum, for which the Census Bureau is one of the lead agencies, encourages cooperation, analysis, and dissemination of data pertaining to the older population. A summary of the activities of the Forum lists a number of aging-related statistics.

5. Other Products

I. POPULATION, HOUSING, AND INTERNATIONAL REPORTS

POPULATION

Series P–20 (Population Characteristics):

Regularly recurring reports in this series contain data from the CPS on geographical mobility, fertility, school enrollment, educational attainment, marital status and living arrangements, households and families, the Black and Asian and Pacific Islander populations, persons of Hispanic origin, voter registration and participation, and various other topics for the general population as well as the elderly population 65 years of age and older.

The Black Population in the United States; March 1994 and 1993 480
Geographical Mobility: March 1992 to March 1993 481
Household and Family Characteristics: March 1994 483
Marital Status and Living Arrangements: March 1994 484
Geographical Mobility: March 1993 to March 1994 485
The Foreign-Born Population: 1994 486
Household and Family Characteristics: March 1995 488
Educational Attainment in the United States: March 1995 489
Marital Status and Living Arrangements: March 1995 491

Series P–23 (Special Studies):

Information pertaining to methods, concepts, or specialized data is furnished in these publications. The reports in this series contain data on mobility rates, home ownership rates, and Hispanic population for the general population and the older population. The report *Sixty-Five Plus in the United States* focuses on analyses of demographic, social, and economic trends among the older population. It is a revision of a 1993 report. It expands the use of 1990 census data, incorporates updated national and state population projections, and utilizes new survey data and analytical findings from Federal agencies and numerous researchers in the aging studies field.

How We're Changing: Demographic State of the Nation; 1995 188
Population Profile of the United States: 1995 189
Sixty-Five Plus in the United States 190
How We're Changing: Demographic State of the Nation: 1996 191

Series P–25 (Population Estimates and Projections):

This series includes monthly estimates of the total U.S. population; annual midyear estimates of the U.S. population by age, sex, race, and Hispanic origin; state estimates by age and sex; and projections for the United States and states. This series also includes estimates of housing units and households for states.

National and State Population Estimates: 1990 to 1994 1127
Projections of the Number of Households and Families in the United States: 1995 to 2010 1129
Population Projections of the United States by Age, Sex, Race, and Hispanic Origin 1995 to 2050 1130
Population Projections for States by Age, Sex, Race, and Hispanic Origin: 1995 to 2025 1131

Series PPL (Population Paper Listings):

This series of reports contains estimates of population and projections of the population by age, sex, race, and origin. Other topics appear as well, some of which address issues related to aging.

Hispanic Tabulations from the Current Population Survey: March 1994 26
The Foreign-Born Population: 1994 31

The Asian and Pacific Islander Population: March 1994 32
Child Care Costs and Arrangements: Fall 1993 34
U.S. Population Estimates by Age, Sex, Race, and Hispanic origin: 1990 to 1995 41
Population of States by Broad Age Group and Sex: 1990 and 1995 44
The Black Population in the United States: March 1995 45
Household and Family Characteristics: March 1995 46
Population Projections for States by Age, Sex, Race, and Hispanic Origin: 1995 to 2025 47
Educational Attainment in the United States: March 1995 48
Marital Status and Living Arrangements: March 1995 52

Technical Working Paper Series:

This series contains papers of a technical nature that have been written by staff of the Population Division of the Census Bureau. Topics covered are varied. Evaluation of population projections, estimates and 1990 census results, examination of immigration issues, race and ethnic considerations, and fertility patterns are some of those topics.

"Estimation of the Annual Emigration of U.S. Born Persons by Using Foreign Censuses and Selected Administrative Data: Circa 1980," Edward W. Fernandez 10
"Fertility of American Men," Amara Bachu 14
"Comparisons of Selected Social and Economic Characteristics Between Asians, Hawaiians, Pacific Islanders, and American Indians (Including Alaskan Natives)," Edward W. Fernandez 15

Series SB/CENTER (Statistical Briefs):

These are succinct reports that are issued occasionally and provide timely data on specific issues of public policy. Presented in narrative style with charts, the reports summarize data from economic and demographic censuses and surveys. In December 1996, the Statistical Brief series format was revised and became known as *Census Briefs.*

Sixty-Five Plus in United States 95–8
How Much We Earn—Factors That Make a Difference 95–17
Women in the United States: A Profile ..... [1] 95–19
Health Insurance Coverage—Who Had a Lapse Between 1991 and 1993? 95–21
The Nation's Asian and Pacific Islander Population—1994 95–24
The Nation's Hispanic Population—1994 95–25
What We're Worth—Asset Ownership of Households: 1993 95–26
Getting a Helping Hand—Long-Term Participants in Assistance Programs 95–27
Warmer, Older, More Diverse 96–1
Election '96—Counting the American Electorate 96–2

Series PE (Population Electronic):

This series comprises microcomputer diskettes or computer tapes covering a variety of topics in the population field. The information on the diskettes is, for the most part, available in printed format.

The Asian and Pacific Islander Population: March 1994 25
Population Estimates for States, Counties, MCDs and Incorporated Places: April 1, 1990 to July 1, 1994 28
Estimates of the Population of States by Age, Sex, Race, and Hispanic Origin: 1990 to 1992 29
Estimates of the Population of Counties by Age, Sex, and Hispanic Origin: 1990 to 1992 30
The Foreign-Born Population: March 1994 32
Estimates of Population for Counties and Components of Change: 1990 to 1995 34
National Population Projections by Age, Sex, Race, and Hispanic Origin: 1995 to 2050 37
Population Estimates of States by Single Years of Age and Sex for States: 1990 to 1995 38
Population Estimates of States by Selected Age Groups and Sex: 1970 to 1979 39
Population Estimates of States by Single Years of Age and Sex: 1980 to 1989 0
Projections of the Number of Households and Families: 1995 to 2010 44
Educational Attainment: March 1995 46
Estimates of the Population of States by Age, Sex, Race, and Hispanic Origin: 1990–1994 47

Estimates of the Population of Counties by Age, Sex, Race, and Hispanic Origin: 1990–1994 48
Series P–60 (Consumer Income):
This series of reports presents data on the income, poverty, and health insurance status of households, families, and people in the United States.
Income, Poverty, and Valuation of Noncash Benefits: 1994 189
Health Insurance Coverage: 1994 190
A Brief Look at Postwar U.S. Income Inequality 191
Money Income in the United States: 1995 193
Poverty in the United States: 1995 194
Health Insurance Coverage: 1995 195
Series P–70 (Household Economic Studies):
These data are from the SIPP, a national survey conducted by the Census Bureau. Its principal purpose is to provide better estimates of the economic situation of families and individuals. These reports include data on the elderly population 65 years of age and older.
Dynamics of Economic Well-Being: Health Insurance, 1991 to 1993 43
The Effect of Health Insurance Coverage on Doctor and Hospital Visits: 1990 to 1992 44
Dynamics of Economic Well-Being: Poverty: 1991 to 1993 45
Dynamics of Economic Well-Being: Program Participation, 1991 to 1993 46
Household Economic Studies, Asset Ownership of Households, 1993 47
Dynamics of Economic Well-Being: Income, 1991 to 1992 49
Beyond Poverty, Extended Measures of Well-Being, 1992 ..... [1] 50
Health Insurance, 1992 to 1993. Who Loses Coverage and for How Long? 54
Poverty, 1992–1993. Who Stays Poor? Who Doesn't? 55
Dynamics of Economic Well-Being: Labor Force, 1992 to 1993 57
Program Participation, 1992–1993. Who Gets Assistance? 58
Americans with Disabilities: 1994–1995 61

[1] Revised.

HOUSING

Series H121 (Housing Characteristics):
These reports present data from the American Housing Survey. Some characteristics shown in these reports include socioeconomic status of household, physical condition of the housing unit, and affordability of housing in relation to income.
Current Housing Report: American Housing Survey, A Quality Profile ... 95–1
Current Housing Reports: Our Nation's Housing in 1993 95–2
Series H–150 (Housing Vacancy):
This book presents data on apartments; single-family homes; vacant housing units; age, sex, and race of householders; income; housing and neighborhood quality; housing costs; equipment and fuels; and size of housing units. The book also presents data on home-owner's repairs and mortgages, rent control, rent subsidies, previous unit of recent mover, and reasons for moving. A wall chart accompanies this product.
American Housing Survey of the United States in 1993 93
Series H–151 (Supplements to the American Housing Survey):
This series provides additional information on occupied housing units. Family type, household and financial characteristics, and housing quality is included. Demographic information is available, including a separate discussion and data on the elderly.
Supplement to the American Housing Survey for the United States in 1993 93
American Housing Survey: Components of Inventory Change: 1980 to 1991, United States and Regions 91–2
Series H–170 (American Housing Survey, Selected Metro Areas):
This book presents data for selected metropolitan statistical areas for the same characteristics shown above in Series H–150. Eleven metro areas per year are produced on a 4-year rotation for a total of 44 metro areas.
American Housing Survey for Selected Metropolitan Statistical Areas, 1994 94

INTERNATIONAL

Series P–95 (International Population Reports):
The reports in this series contain demographic and socioeconomic data on the older population as estimated or projected by the Census Bureau or published by various statistical offices, several agencies of the UN, and the Organization for Economic Cooperation and Development. *Older Workers, Retirement and Pensions: A Comparative International Chart Book* provides an overview of underlying demographic and socioeconomic trends as it relates to the elderly. Graphical presentations of comparable statistics on the status of the world's older population are also included. This work is supported by the Office of the Demography on Aging, NIA.
Older Workers, Retirement and Pensions: A Comparative International Chart Book 95–2
Series PPT/IB (International Briefs):
This series of summaries covers a variety of topics, some of which relate to aging. Many of the reports present basic demographic data on a number of countries. The series is now known as International Briefs.
Population Trends: Tanzania 1995 (PPT) 92–10
Population Trends: Philippines 1996 (PPT) ..... [2] 92–11
Old Age Security Reform in China 95–1
Population Trends: Ghana 1996 96–1
World Population at a Glance: 1996 and Beyond 96–3
Series WP (World Profiles):
This series provides comprehensive demographic information for all countries and regions of the world. The information is maintained in a database and is regularly updated. In addition, each edition of the series focuses on a specific topic of interest related to the world's population.
World Population Profile: 1996 96
Series WID (Women in Development):
This new series contains information on the world's women, including elderly women. Demographic, educational, employment, and political participation data are included.
Women in Poland 5
Series SP (Staff Papers):
A variety of economic and demographic studies are included in this series of papers, some of which concern issues related to the elderly population.
Pension Reform in china: Implications for Labor Markets 83

[2] Revised.

II. DECENNIAL PRODUCTS

1. Printed Reports

Series CPH–L (Population and Housing Data):
These listings give statistics for states, counties, and places, some of which contain information on the elderly population.
Social and Economic Characteristics of Selected Language Groups for U.S. and States: 1990 194
Series CP:
This report presents social, economic, and housing census data on the Black population. It shows data on age in nine categories, each category cross-classified by social, economic and housing data.
Characteristics of the Black Population 3–6
Series CH:
This report presents statistical summaries of data on residences from the Residential Finance Survey conducted in 1991 as part of the 1990 census. The report covers owner characteristics, one of which is age.
Residential Finance 4–1

2. Computer Tape Files/CD–ROM

Series SSTF (Subject Summary Tape Files):

This CD–ROM contains sample data from the 1990 Census of Population and Housing on the older population. The file contains statistics on persons 60 years of age and older and on families with a householder 60 years of age and older.

The Older Population of the United States 19

The compact disks contain sample data from the 1990 Census of Population and Housing on the Black population of the United States. There are cross-classifications by sex and detailed age groups.

Characteristics of the Black Population of the United States 21

III. DATABASE ON AGING/NATIONAL INSTITUTE ON AGING PRODUCTS

The following papers are based on information contained in the Database on Aging and other related holdings. This work is carried out with the support of the NIA. The statistics shown in the wall chart are intended to highlight the present and future worldwide dimensions of aging and portray the diversity among nations.

"Aging Trends: Turkey," *Journal of Cross-Cultural Gerontology*, Kevin Kinsella, ed. 1995. "Demographic Imperative," Kevin Kinsella, *Cancer Control*, Vol. 2, No. 2, supplement, 1995.

"Aging and the Family: Present and Future Demographic Issues," Kevin Kinsella. In *Handbook on Aging and the Family*, Rosemary Blieszner and Victoria Hilkevitch Bedford, eds. Greenwood Press, 1995.

Global Aging Into the 21st Century [Wall Chart], U.S. Bureau of the Census, 1996.

"Demographic Aspects," Kevin Kinsella. In *Epidemiology in Old Age*, Shah Ebrahim and Alex Kalache, eds, British Medical Journal Publishing Group, 1996.

IV. THE FEDERAL INTERAGENCY FORUM ON AGING-RELATED STATISTICS SUMMARY

The Census Bureau is one of the lead agencies in the Federal Interagency Forum on Aging-Related Statistics, a first-of-its-kind effort. The Forum encourages cooperaton among Federal agencies in the development, collection, analysis, and dissemination of data pertaining to the older population. Through cooperation and coordinated approaches, the Forum extends the use of limited resources among agencies through joint problem solving, identification of data gaps, and improvement of the statistical information bases on the older population, which are used to set the priorities of the work of individual agencies. The work of the Forum is guided by the Office of Demography at the NIA, the Population Projections and Aging Studies Branches at the Census Bureau, and the Office of the Coordinator of Data on Aging, National Center for Health Statistics. Senior subject-matter specialists from the agencies are also involved in the activities of the Forum.

The Forum goals include widening access to information on the older population, promoting communication between data producers and public policymakers, coordinating the development and use of statistical databases among relevant Federal agencies, identifying information gaps/data inconsistencies, and evaluating data quality. The work of the Forum facilitates the exchange of informa-

tion about needs at the time new data are being developed or changes are being made in existing data systems. It also promotes communication between data producers and policymakers.

As part of the Forum's work to improve access to data on the older population, the Census Bureau publishes a newsletter, *Data Base News in Aging*, which includes recent developments in databases of interest to researchers and others in the field of aging. Much of the information comes from Government-sponsored surveys and products. All Federal agencies are invited to contribute to the newsletter.

The Census Bureau released *Federal Forum Report 1991–93* (May 1995). It reviews the activities of the Forum and its member agencies during 1991–1993. Various sections of the report summarize Forum work and accomplishments, cooperative efforts of members, publications by member agencies, and activities planned for the near future. An interagency telephone contact list of specialists on subjects related to aging is also included. During the 1991–1993 time period, the Forum oversaw activities of three working groups formed to address technical issues related to the elderly and disability, rural residence, and minority status. The working groups were composed of area-specific experts in the Federal Government who regularly sought advice from experts outside the Federal service. Four policy-related areas focused on were: health, retirement, population projections, and database development.

V. OTHER PRODUCTS

American Housing Survey

Computer data tapes and CD–ROM are available for the 1995 and 1996 survey efforts. The survey is designed to provide information on the housing situation in the United States. Information is available by age.

CPS and SIPP Surveys

Data for both surveys are available in electronic media.

Statistical Abstract of the United States: 1995 and 1996

As the national data book, this annual product contains an enormous collection of statistics on social and economic conditions in the United States. Selected international data are also included. The *Abstract* appears in both print and CD–ROM versions.

International Database

The International Database is a computerized data bank containing statistical tables of demographic and socioeconomic data for all countries of the world. Most of the data are obtained from censuses and surveys or from administrative records and are regularly updated. Selected information from the Database is highlighted in the International Briefs series of reports. In addition, Series WP reports, *World Population Profiles*, provide detailed data, which are taken from the Database.

ITEM 3—DEPARTMENT OF DEFENSE

The Department of Defense has several ongoing initiatives in support of older Americans. They are detailed below.

ELDERCARE SUPPORT

The Department's Family Centers reports that there is an increasing demand for information about eldercare. The Centers providing information workshops on eldercare issues describe them as well-attended and very useful. In addition to workshops and seminars on eldercare, the Centers access the national 1–800 eldercare locator to assist family members with eldercare support services in other parts of the country. The Centers also have a number of useful pamphlets and handouts on eldercare that they provide to military family members seeking assistance for a particular eldercare issue.

The Family Centers often work with the local Retired Affairs Offices across the country in sponsoring Retired Affairs Seminars that draw thousands of military retirees and their families. For these seminars, the staff brings in experts to discuss eldercare topics such as long-term care insurance, respite care, medical information, Social Security benefits, and eldercare legal issues. These seminars are an important vehicle to update the military retiree community on current eldercare issues.

The Department of Defense recognizes that eldercare is a growing issue for military personnel and their family members and will continue to be responsive to the needs of the active duty and retired community in this regard.

HEALTH CARE

The Department of Defense has nearly completed implementation of TRICARE, its new, regionally managed care program for members of the uniformed services and their families and survivors and retired members and their families. Retirees and their families are finding that this new program has increased their access to high-quality health care.

TRICARE gives beneficiaries three choices for their health care delivery: TRICARE Standard, TRICARE Extra, and TRICARE Prime. All active-duty members will be enrolled in TRICARE Prime. Those CHAMPUS-eligible beneficiaries who elect not to enroll in TRICARE Prime and Medicare-eligible DoD beneficiaries will remain eligible for care in military medical facilities on a space-available basis. The three options are described below:

TRICARE Standard—This option is the same as the standard CHAMPUS program.

TRICARE Extra—In the TRICARE Extra program, when a CHAMPUS-eligible beneficiary uses a preferred network pro-

vider, he or she receives an out-of-pocket discount and usually does not have to file any claim forms. CHAMPUS beneficiaries do not enroll in TRICARE Extra but may participate in Extra on a case-by-case basis just by using the network providers.

TRICARE Prime—This voluntary enrollment option offers patients the advantage of managed health care, such as primary care management, assistance in making specialty appointments, and having someone else to do their claims filing. The Prime option offers the scope of coverage available today under CHAMPUS, plus additional preventive and primary care service. For Prime enrollees, the new cost-sharing provisions do away with the usual standard CHAMPUS cost sharing. Of particular note, families of active duty personnel will have no enrollment fees. CHAMPUS-eligible retirees who enroll in Prime will pay an enrollment fee but will pay only $11 per day for civilian inpatient care in comparison to the $360 per day plus 25 percent of professional fees charge faced by those retirees who use TRICARE Standard. For Prime enrollees, there will be copayments for care received from civilian providers. These copayments are significantly less than for the other two options. Enrollees in TRICARE Prime obtain most of their care within the integrated military and civilian network of TRICARE providers. Additionally, under a new point of service option, Prime enrollees may retain freedom of choice to use non-network providers, but at significantly higher cost sharing than in TRICARE Standard.

Military beneficiaries over the age of 65 have traditionally relied on a combination of health care entitlements, including (1) an earned entitlement to Medicare, (2) space-available access to military hospitals, and (3) other benefits gained through non-military employment. With the post-Cold War drawdown in the military, space in military facilities is less available. The Department of Defense is seeking ways to enhance its services to its over-65 beneficiaries; one approach will be tested in a three-year demonstration program authorized in the Balanced Budget Act of 1997. The Department will enroll military Medicare-eligible beneficiaries in "TRICARE Senior Prime" and receive capitated payments from the Medicare Trust Fund. The demonstration will be conducted at six sites and includes a requirement for Defense to maintain its budgeted level of effort for Medicare beneficiaries prior to receiving payments from Medicare. An additional component of the demonstration, Medicare Partners, will enable the Department to receive reimbursement from Medicare+Choice plans for inpatient and speciality services it renders to their military enrollees.

ITEM 4—DEPARTMENT OF DEFENSE

POSTSECONDARY EDUCATION

The Office of Postsecondary Education administers programs designed to encourage participation in higher education by providing support services and financial assistance to students.

In fiscal year 1997, an estimated $43 billion was made available to students through the student financial assistance programs authorized by Title IV of the Higher Education Act of 1965, as amended (HEA). There are no age restrictions for participation in the Title IV programs. For example, the Pell Grant Program, our largest grant program, made an estimated 3.6 million awards in award year 1995–1996 (the most recent year for which this information is available). Approximately 6.2 percent of the awardees were over age 40.

The Federal TRIO programs fund postsecondary education outreach and student support services that encourage individuals from disadvantaged backgrounds to enter and complete college. Because age is not an eligibility criterion under most of these programs, data on the age of participants are not available.

In addition to these programs, the Office of Postsecondary Education's Fund for the Improvement of Postsecondary Education (FIPSE) supports innovative projects, which include some projects designed to meet the needs of older Americans. In fiscal year 1997, FIPSE funded a Dissemination Project entitled *Enhanced Intergenerational Learning* at Eckerd College in St. Petersburg, Florida. In 1984 Eckard College initiated a program that drew on the experience and wisdom of high-achieving retired men and women who would serve as "Living Library Resources" to supplement other educational resources available to professors and students. Periodic evaluations by faculty and students attest to the educational value of this program, and today an Academy of Senior Professionals at Eckard College includes some 200 high achieving individuals who offer their knowledge, perspectives, and experiences to enhance the learning experience. FIPSE is supporting Eckerd College to serve as mentor to six adapter institutions throughout the country to determine if this program can be replicated on other campuses.

Because jobs in today's workplace require an increasingly higher level of knowledge and skill, it is essential that all Americans have the opportunity for further education. The Administration is including two initiatives in its proposal to reauthorize the HEA that would encourage and assist working Americans improve their wages through lifelong learning.

(1) *Learning Anytime Anyplace Partnerships:* This program has been designed to encourage and enable working Americans to increase their levels of knowledge and skills by taking ad-

vantage of the increasing opportunities for distance education. It calls for a more innovative and comprehensive approach to lifelong learning by supporting regional or national partnerships among education institutions, state and local governments, community agencies, software and other technology developers, learning assessment specialists, and private industry to expand non-traditional learning opportunities.

(2) *College Awareness Program:* This program has been designed to provide better information on preparing for college and on the sources of financial aid to middle and high school students, and to adults who want to continue learning over their lifetimes. In addition to serving middle and junior high school students, their parents, teachers, and school counselors, this program would also address the interests of the increasing number of adults of all ages who want to go back to college.

ADULT EDUCATION

In the past, the education of persons 60 years of age and older may not have been considered an educational priority in the United States. The 1990's may well be considered the decade of growth in educational gerontology. Demographics have tended to make this development inevitable. A recent study entitled, Profiles of the Adult Education Target Population—Information from the 1990 Census, prepared by the Center for Research in Education, Research Triangle Institute, indicates that more than 44 million adults, or nearly 27 percent of the adult population of the United States, have not completed a high school diploma or its equivalent. These individuals make up the adult education target population. Of the 44 million adults in the target population, more than 18 million or 41 percent are 60 or more years old. Over 53 percent of the adults age 60 and over in the target population have completed fewer than 8 years of schooling. The high rate of under-education indicates a need for emphasizing effective basic skills and coping strategies in programs for older adults.

The U.S. Department of Education is authorized under the Adult Education Act (AEA), Public Law 100–297, as amended by the National Literacy Act of 1991, (Public Law 102–73), to provide funds to the State and outlying areas for educational programs and related supporting services benefiting all segments of the eligible adult population. The central program established by the AEA is the State-administered Basic Grant Program. The AEA has also provided funds for programs of workplace and English Literacy. In addition, the 1991 amendments established four new programs:

State Literacy Resource Centers; National Workforce Literacy Strategies; Functional Literacy for State and Local Prisoners; and Life Skills Training for State and Local Prisoners.

The above-mentioned programs are administered by the Office of Vocational and Adult Education.

In addition, amendments to the AEA State-administered Basic Grant Program include, in part:

The authorization for competitive 2-year "Gateway Grants" by States to public housing authorities for literacy programs for housing residents.

A requirement for States to develop a system of indicators of program quality to be used to judge the quality of State and local programs.

An increase in the State set-aside under Section 353 for innovative demonstration projects and teacher training from 10 to 15 percent, with two-thirds of that amount to be used for training of professional teachers, volunteers, and administrators.

A requirement in allocating Federal funds to local programs, that each State consider: past program effectiveness (especially with respect to recruitment retention and learning gains of program participants), the degree of coordination with other community literacy and social services, and the commitment to serving those most in need of literacy services.

A requirement that each State educational agency receiving financial assistance under this program provide assurance that local educational agencies, public or private nonprofit agencies, community-based organizations, correctional education agencies, postsecondary education institutions, institutions which serve educationally disadvantaged adults and any other institution that has the ability to provide literacy services to adults and families will be provided direct and equitable access to all Federal funds provided under this program.

A requirement that States evaluate 20 percent of grant recipients each year.

Generally, the purpose of the AEA is to encourage the establishment of programs for adults lacking literacy skills who are 16 years of age and older or who are beyond the age of compulsory school attendance under State law. These programs will:

(1) Enable adults to acquire the basic educational skills necessary for literate functioning;

(2) Provide sufficient basic education to enable these adults to benefit from job training and retraining and to obtain productive employment; and

(3) Enable adults to continue their education to at least high school completion.

In Program Year 1992–93, 3.9 million adult learners were served through the AEA program nationwide. Of these learners, 597,543 were 45 years of age or older.

Many of the emerging workforce participants, including a large number of older adults, lack the basic literacy skills necessary to meet the increased demands of rapid change and new technology. Thus, employers will have to make training and retraining a priority in order to upgrade the labor force.

The adult education program addresses the needs of older adults by emphasizing functional competency and grade level progression, from the lowest literacy level, to providing English as a second language instruction, through attaining the General Education Developmental Certificate. States operate special projects to expand programs and services for older persons through individualized instruction, use of print and audio-visual media, home-based instruction, and curricula relating basic educational skills to coping with daily problems in maintaining health, managing money, using com-

munity resources, understanding government, and participating in civic activities.

Equally significant is the expanding delivery system, increased public awareness, as well as clearinghouses and satellite centers designed to overcome barriers to participation. Where needed, supportive services such as transportation are provided as are outreach activities adapting programs to the life situations and experiences of older persons. Individual learning preferences are recognized and assisted through the provision of information, guidance and study materials. To reach more people in the targeted age range, adult education programs often operate in conjunction with senior citizens centers, nutrition programs, nursing homes, and retirement and day care centers.

Increased cooperation and collaboration among organizations, institutions and community groups are encouraged at the national, State and local levels. In addition, sharing of resources and services can help meet the literacy needs for older Americans.

U.S. DEPARTMENT OF EDUCATION

ENFORCEMENT OF THE AGE DISCRIMINATION ACT OF 1975

I. STATUS OF THE DEPARTMENT OF EDUCATION'S IMPLEMENTING REGULATION

The Department of Education's final regulation implementing the Age Discrimination Act of 1975 was published on July 27, 1993. The effective date of implementation was August 26, 1993.

The Department's regulation prohibiting age discrimination applies to all elementary and secondary schools, colleges and universities, public libraries, and vocational rehabilitation services. It covers age discrimination at these institutions except age discrimination in employment.

The regulation describes the standards for determining age discrimination; the responsibilities of recipients; and procedures for enforcing the statute and regulation

II. AGE DISCRIMINATION ACT IMPLEMENTATION

The Department of Education's (ED) Office for Civil Rights (OCR) is responsible for enforcement of the Age Discrimination Act of 1975 (the Age Act), as it relates to discrimination on the basis of age in federally funded education programs or activities. The Age Act applies to discrimination at all age levels. The Age Act contains certain exceptions that permit, under limited circumstances, continued use of age distinctions or factors other than age that may have a disproportionate effect on the basis of age.

The Age Act excludes from its coverage most employment practices, except in federally funded public service employment programs under the Job Training Partnership Act (formerly the Comprehensive Employment and Training Act of 1974). The Equal Employment Opportunity Commission (EEOC) has jurisdiction under the Age Discrimination in Employment Act of 1967 to investigate complaints of employment discrimination on the basis of age. OCR generally refers employment complaints alleging age discrimination to the appropriate EEOC regional office. However, the EEOC does

not have jurisdiction over cases alleging age discrimination against persons under 40 years of age. Rather than referring such a case to the EEOC, OCR would close the complaint and inform the complainant that neither OCR nor the EEOC has jurisdiction over the complaint.

The Department of Health and Human Services (HHS) has published a general government-wide regulation on age discrimination. Each agency that provides Federal financial assistance must publish a final agency-specific regulation. On July 27, 1993, ED published in the *Federal Register* its final regulation implementing the Age Act.

Under ED's final regulation, OCR forwards complaints alleging age discrimination to the Federal Mediation and Conciliation Service (FMCS) for attempted resolution through mediation. FMCS has 60 days after a complaint is filed with OCR in which to mediate the age-only complaints or the age portion of multiple-based complaints. ED's regulation provides that mediation ends if: (1) 60 days elapse from the time the complaint is received; (2) prior to the end of the 60-day period, an agreement is reached; or (3) prior to the end of the 60-day period, the mediator determines that agreement cannot be reached.

If FMCS is successful in mediating an age-only complaint or the age portion of a multiple-based complaint within 60 days, OCR closes the case or the age portion of the complaint. If mediation is unsuccessful, the mediator returns the unresolved complaint to ED for further case processing.

OCR helps its working relationship with FMCS by designating enforcement office contact persons who coordinate directly with FMCS. OCR also accepts verbal or facsimile referrals from FMCS after unsuccessful attempts at mediation, and may grant FMCS extensions of up to 10 days beyond the 60 day mediation period on a case-by-case basis when mediated agreements appear to be forthcoming.

The other statutes which OCR enforces are Title VI of the Civil Rights Act of 1964, which prohibits discrimination on the basis of race, color, and national origin; Title IX of the Education Amendments of 1972, which prohibits discrimination on the basis of sex; and Section 504 of the Rehabilitation Act of 1973 and Title II of the Americans with Disabilities Act of 1990, which prohibit discrimination on the basis of disability.

III. COMPLAINTS

(a) Receipts

OCR received 203 age complaints in FY 1997. Of these 55 were age-only complaints and 148 were multiple bases complaints. As shown on Table 1, 125 of the 203 receipts were processed in OCR and 78 were referred to other Federal agencies for processing. The most frequently cited issues in the FY 1997 age-only complaint receipts were "academic retention/dismissal," "harassment," and "retaliation." These were also the most frequently cited issues contained in multiple-based complaint receipts.

Table 1: Fiscal year 1997 age-based complaint receipts

Processed by OCR	125

Table 1: Fiscal year 1997 age-based complaint receipts—Continued

Processed by FMCS	27
Processed by EEOC	42
Processed by Other Federal Agencies	9
Total receipts	203

(b) Resolutions

During FY 1997, OCR resolved 210 age-based complaints, including 62 age-only complaints and 148 multiple-based age complaints. The resolution of the complaints are shown in Table 2.

Table 2: Fiscal year 1997 age-based complaint resolutions

Inappropriate for OCR Action	146
OCR Facilitated Change	17
No Change Required	47
Total resolutions	210

Inappropriate for OCR action

Of the 210 complaint resolutions, 146 were resolved because they were "Inappropriate for OCR Action." These would include a resolution achieved by (1) referral of a complaint to another federal agency; (2) lack of jurisdiction over recipient or allegation contained in a complaint; (3) complaint was not filed in a timely manner; (4) complaint did not contain sufficient information necessary to proceed; (5) complaint contained similar allegations repeatedly determined by OCR to be factually or legally insubstantial or were addressed in a recently closed OCR complaint or compliance review; (6) subject of a complaint was foreclosed by previous decisions by federal courts, Secretary of Education, Civil Rights Reviewing Authority, or OCR; (7) there was pending litigation raising the same allegations contained in a complaint; (8) allegations were being investigated by another federal or state agency or through a recipient's internal grievance procedures; (9) OCR treated complaint as a compliance review; (10) allegation(s) was moot and there were no class implications; (11) complaint could not be investigated because of death of the complainant or injured party or their refusal to cooperate; and (12) complaint was investigated by another agency and the resolution met OCR standards.

OCR facilitated change

There were 17 complaints resolved because "OCR Facilitated Change." These would include a resolution achieved by (1) a recipient resolving the allegations contained in the complaint; (2) OCR facilitating resolution between the recipient and complainant through Early Complaint Resolution; (3) OCR negotiating a corrective agreement resolving a complainant's allegations; and (4) settlement achieved after OCR issued a letter of findings.

No change required

In 47 complaints, there was "No Change Required." These would include a resolution achieved by (1) complainant withdrawing his or her complaint without benefit to the complainant; (2) OCR determining insufficient factual basis in support of complainant's allegations; (3) OCR determining insufficient evidence to support a find-

ing of a violation; and (4) OCR issuing a no violation letter of findings.

OLDER AMERICANS IN THE 1992 NATIONAL ADULT LITERACY SURVEY

While for some the importance of literacy derives from the increasing needs of business for literate workers, for others the importance of literacy derives from the benefits of literacy skills in the everyday life of adults. Older adults need literacy skills to live independently, to manage their health care and personal finances, and more generally, to function in society. Knowing the nature and extent of the literacy problem in the United States today is an important early step in devising effective policies to ensure adequate literacy skills for every adult and to meet our Nation's literacy goal.

The Adult Education Amendments of 1988 required the U.S. Department of Education to report to Congress on the definition of literacy and to estimate the extent of adult literacy in the nation. In response, the National Center for Education Statistics (NCES) and the Office of Vocational and Adult Education (OVAE) cooperated to fund a statistical survey that would assess the literacy of the adult population of the United States.

The 1992 National Adult Literacy Survey adopted this definition of literacy: *Using printed and written information to function in society, to achieve one's goals, and to develop one's knowledge and potential.* This definition of literacy differed from previous definitions in that it rejected such arbitrary standards as signing one's name, completing some number of years to school, or scoring above some grade level on a test of reading achievement. Further, this definition went beyond simply decoding words, to include varied uses of many forms of information.

The 1992 results are based on personal interviews with nearly 27,000 adults aged 16 and older—the oldest was 99 years old—conducted in their homes using an area-based sample of households located in 200 counties throughout the United States. The sample includes 1,100 inmates of federal and state prisons and 1,000 extra residents in each of thirteen states that paid for sample supplements (CA, FL, IL, IN, IA, LA, KY, NJ, NY, OH, PA, TX, and WA). The survey design provides nationally representative results, and for participating states, state-representative results. The literacy of adults was assessed using simulations of three kinds of literacy tasks adults would ordinarily encounter in daily life (prose literacy, document literacy, and quantitative literacy). Besides completing literacy tasks, participants answered questions about their demographic characteristics, educational backgrounds, reading practices, labor market experiences, and more.

Results from the survey have so far been published in *Adult Literacy in America, in Behind Prison Walls,* and in *Literacy of Older Adults in America,* each available from NCES. State-specific reports are available from the thirteen state offices of adult literacy. Further reports are planned in several areas: schooling and literacy; literacy in language minority communities; literacy in the labor force; and reading habits, voting and literacy.

Results for older adults were briefly covered in the initial survey report, and more extensively presented in a special report on lit-

eracy among older adults. The report included chapters on the distribution of literacy skills among older adults, comparisons of older adults with adults under 60 years old, economic issues, civic participation, and literacy and patterns of mass media usage. The results of the survey provide a factual basis for policy decisions affecting literacy programs designed for older adults or for adults with limited literacy skills.

The results of the 1992 National Adult Literacy Survey indicate that low levels of prose, document, and quantitative literacy are a significant problem for a large portion of the older adult population in the United States.

Seventy-one percent of adults age 60 and older, or approximately 29 million individuals nationwide, demonstrated limited *prose* skills, performing in the two lowest levels of prose literacy defined in the survey. This is a larger proportion than the 41 percent of adults under age 60 performing in two lowest levels.

Slightly more than two-thirds, or 68 percent, of older adults appeared to have difficulty finding and processing *quantitative* information in printed materials. In population terms, this means that an estimated 28 million persons age 60 and older across the nation have limited quantitative literacy skills. This is a larger proportion than the 42 percent of adults under age 60 performing in the two lowest levels.

The problem appears to be even more acute in the area of *document* literacy, which is associated with activities such as filling out forms, reading and following directions, and using schedules. Four of every five older adults (80 percent) demonstrated limited document literacy skills in the assessment, performing in the two lowest proficiency levels defined. This is a larger proportion than the 44 percent of adults under age 60 performing in the two lowest levels.

Notable differences in performance are also evident within the older adult population. Those age 60 to 69 performed those age 70 to 79, who in turn outperformed those age 80 and older.

Many older individuals with limited literacy skills do not seem to behave that they have a problem. The percentage of older Americans who said they perform various types of literacy activities "very well" was about the same as that of persons under 60. In actuality, however, the average literacy proficiencies of older adults were much lower than those of younger persons.

Many older adults reported receiving help from family or friends with literacy tasks such as filling out forms, writing notes and letters, doing math, and processing written information.

The cost of including older adults in the survey and preparing a report on older adults came to about $870,000, or about 8 percent of the federal share of the total costs of the survey.

National Institute on Disability and Rehabilitation Research Projects That Relate to Aging

The National Institute on Disability and Rehabilitation Research (NIDRR) authorized by Title II of the Rehabilitation Act, has spe-

cific responsibilities for promoting and coordinating research that relates directly to the rehabilitation of disabled persons. Grants and contracts are made to public and private agencies and organizations, including institutions of higher education, Indian Tribes and tribal organizations, for the purpose of planning and conducting research, demonstrations, and related activities which focus directly on the development of methods, procedures and devices which assist in the provision of rehabilitation services.

The Institute is also responsible for facilitating the dissemination of information concerning developments in rehabilitation procedures, methods, and devices to rehabilitation professionals and to disabled persons to assist them in leading more independent lives.

The Institute accomplishes its mission through the following programs:

Rehabilitation Research and Training Centers.
Rehabilitation Engineering and Research Centers.
Research and Demonstration Projects.
Field-Initiated Projects.
Dissemination and Utilization Projects.
Career Development Projects which include: Fellowships; Research Training.
State Technology Assistance.
Small Business Innovative Research.

REHABILITATION RESEARCH AND TRAINING CENTERS

The primary goals of these centers are: (1) To conduct research targeted toward the production of new knowledge which will improve rehabilitation methodology and service delivery systems, alleviate or stabilize disabling conditions, and promote maximum social and economic independence; (2) To institute related teaching and training programs to disseminate and promote the utilization of research findings, thereby reducing the usual long intervening delay between the discovery of new knowledge and its wide application in practice.

The three major activities, research, training, and service, are expected to be mutually supportive. Specifically, this synergy calls for research ideas to derive from service delivery problems, for research findings to be disseminated via training, and for new professionals to be attracted to research and service via training.

1. Rehabilitation Research and Training Center on Aging with a Disability, Rancho Los Amigos Medical Center, Downey, CA

This Center is a collaborative effort between the Rancho Los Amigos Medical Center, the University of Southern California School of Medicine and the Andrus Gerontology Center.

In ever-increasing numbers, people who acquired a disability in an earlier part of life are now reaching an advanced age. As they age, many people are developing new medical, functional, social, and psychological problems. *Little is known about the etiology, consequences, or treatment* of these problems. This RRTC investigates several of these problems and conducts training to help reduce the impact of these changes. Studies are under way that examine: (1) the natural course of aging in people with postpolio, cerebral palsy, rheumatoid arthritis, and stroke; (2) the physiological demands of

mobility; (3) the benefit of training aging individuals in the use of in-home personal assistants; (4) the feasibility of using residential care facilities for older people who have a disability; (5) ways to maintain employment through the use of job modification; and (6) how federal and state policies need to change to facilitate access to assistive devices as people age. The training programs focus on medical, allied health, and social service personnel at all levels, from student through practicing professional. The project provides information to consumers through an extensive system of linkages to consumer organizations and publication in consumer-oriented periodicals.

2. Rehabilitation Research and Training Center on Aging With Mental Retardation, The University of Illinois at Chicago, University of Illinois UAP, 1640 West Roosevelt Road, Chicago, IL

The Illinois University Affiliated Program in Developmental Disabilities (UAP), University of Illinois at Chicago (UIC) has established the Rehabilitation Research and Training Center on Aging with Mental Retardation. This center will build on the strength and continuity of the current RRTC on Aging and Developmental Disabilities and bring to it the resources of a major university with considerable commitment, applied research and clinical expertise in the fields of mental retardation and aging. The RRTC will build on the continuity of their collaboration over the last five years. The RRTC has developed a greater understanding of aging and developmental disabilities by capitalizing on large data bases, longitudinal investigations, and multi-state sites.

Investigators from other universities in Minnesota, Ohio, Indiana, Wisconsin, Kentucky, and Hawaii contribute strengths to the RRTC in epidemiological and clinical research on age-related changes, family future planning, self-determination, cultural diversity, and public policy analysis. In addition, the RRTC has assembled a network of national, state, and local organizations to ensure that the RRTC programs are widely disseminated, have practical applications, and will stimulate public policy change.

The research is applied and examines individuals' lives in their natural settings. It is focused on outcomes in the lives of older persons with mental retardation. The main goal of the research is to translate the knowledge gained into practice through broad-based training; technical assistance; and dissemination to persons with mental retardation, their families, service providers, administrators and policy makers, advocacy groups, and the general community.

3. Rehabilitation Research and Training Center on Enhancing Quality of Life of Stroke Survivors, Rehabilitation Institute Research Corporation, 345 East Superior, Chicago, IL

The project is developing methods to prevent the occurrence and minimize the consequences of comorbid medical conditions to stroke patients during rehabilitation. It is evaluating methods of assessing, classifying, monitoring, and predicting some of the clinical functioning. It is evaluating the efficacy of procedures used to enhance social and community functioning, and studying the natural history of impairment, disability, quality of life after stroke, and the associations between each of those characteristics. The Center

trains rehabilitation professionals in new approaches, innovations, and the specialized principles and practices of rehabilitative care of individuals with stroke. The RRTC also develops and studies the effects of an ideal method or providing education to caregivers of stroke patients, disseminates information of new developments in the areas of stroke care and research to individuals with stroke and their families. Ultimately, through all these methods, the project enhances the quality of life of individuals with stroke.

4. Rehabilitation Research and Training Center on Aging with Spinal Cord Injury, Craig Hospital and the University of Colorado Health Science Center, Research Department, 3425 South Clarkson, Englewood, CO

This project is conducting longitudinal research to document the natural consequences of aging with spinal cord injury (SCI) and to identify risk factors associated with increasing medical complications, functional limitations, psychosocial concerns, and escalating costs. The project is developing, implementing, and evaluating lifetime management and intervention strategies that minimize, delay, or enable people with SCI to cope better with the problems of aging with SCI. The project disseminates management and intervention strategies and insights gained from longitudinal research and implementation strategies.

5. Rehabilitation Research and Training Center Aging with Spinal Cord Injury and Aging, Rancho Los Amigos Medical Center, Downey, CA

The Rehabilitation Research and Training Center (RRTC) on Aging with Spinal Cord Injury (SCI) is devoted to undertaking the unique problems people with spinal cord injury experience as they age. Topics of research include: the course of aging with SCI, cardiovascular and pulmonary aspects of aging with SCI, bone loss across ethnic groups, activities of daily living, employment, depression, and formal and informal care systems for people aging with SCI. The RRTC has several goals for education, training, dissemination, and utilization: to train current and future health, allied health, and rehabilitation professionals about aging with SCI; to train and develop rehabilitation research professionals in the area of aging with SCI; to have health and rehabilitation professionals adopt and use knowledge and treatment regimens developed in the RRTC; to disseminate information about aging with SCI to people with SCI and their families; and to train graduate students and medical students in advanced knowledge and techniques from studies about aging with SCI. Training and dissemination occurs through advanced and continuing education courses, local and national conferences, workshops, and the Internet.

6. Disability Statistics Rehabilitation Research and Training Center, University of California, San Francisco, Institute for Health and Aging, Box 0646, Laurel Heights, San Francisco, CA 94143–0646

The center conducts research in the demography and epidemiology fields of disability and disability policy, including costs, employment statistics, health and long-term care statistics, statistical in-

dicators, and congregate living statistics. Statistical information is disseminated through published statistical reports and abstracts, journals, professional presentations, and a publications mailing list. Training activities and resources (such as a predoctoral program) disseminate scientific methods, procedures, and results to both new and established researchers, policymakers, and other consumers, and assist them in interpreting statistical information. A National Disability Statistics and Policy Forum is conducted periodically to establish a national dialogue between people with disabilities and representative organizations, researchers, and policymakers.

7. Rehabilitation Research and Training Center in Secondary Complications in Spinal Cord Injury, University of Alabama/Birmingham, Department of Physical Medicine and Rehabilitation, Birmingham, AL

The primary goal of this RRTC is to conduct high-quality basic and applied research that improves existing methods of care for people with spinal cord injury (SCI). Current RRTC research areas include urology, pressure ulcer healing, spasticity, psychosocial adjustment, obstetric/gynecologic complications, costs of rehospitalization, and pulmonary complications. The Center's training component disseminates RRTC research results to rehabilitation professionals and consumers with SCI in useable formats such as videotapes, audiotapes, written materials, journal articles, and short-term training programs.

8. Research and Training Center on Personal Assistance Services (PAS), World Institute on Disability, Oakland, CA

Activities of this project are designed to further the understanding that Personal Assistance Service (PAS) systems design can better promote the economic self-sufficiency independent living, and full integration of people of all ages and disabilities into society. This is accomplished by exploring the models, policies, access to, and outcomes of personal assistance services, through (1) gathering perspectives of consumers, program administrators, policy makers, and personal assistants using a State of the States survey and database development; (2) a policy study on the impact of devolution; (3) a cost-effectiveness study; (4) a study of workplace PAS; and (5) a study on the supply of qualified PAS

9. Rehabilitation Research and Training Center on Blindness and Low Vision, Mississippi State University

The Center is conducting a series of research, training and dissemination projects using a multidisciplinary strategy. The project works to investigate and document employment status, identify barriers to employment and techniques and reasonable accommodations to overcome these barriers, identify training needs in the Business Enterprise Program, and develop and deliver training programs. Training and dissemination activities include an information and referral center, national conferences, in-service training and technical assistance, advanced training for practitioners, advanced training in research, and publication and distribution of a variety of materials in accessible media.

10. Missouri Arthritis Rehabilitation Research and Training Center, University of Missouri/Columbia, Multipurpose Arthritis Center

This project conducts a coordinated and advanced multidisciplinary program of arthritis rehabilitation research in a clinical service setting. Disciplinary education and training, including graduate training to physicians, health professionals, and other potential rehabilitation personnel is provided to help them provide effective rehabilitation services to people with arthritis and musculoskeletal diseases. Research projects include: (1) medication and physical therapy treatment of primary fibromyalgia syndrome, (2) early interventions to prevent disability in juvenile arthritis, (3) arthritis patient disability and physical fitness levels before and after conditioning exercise intervention, (4) a computerized exercise performance support system for osteoarthritis rehabilitation, (5) depression management as a strategy for reducing disability in rheumatoid arthritis, and (6) a rehabilitation research database in musculoskeletal disease. The Center enhances education programs on arthritis care and rehabilitation and builds awareness through Missouri's Regional Arthritis Center.

11. Rehabilitation Research and Training Center on Rural Rehabilitation Services, University of Montana, Missoula, MT

This RRTC has the following objectives for improving rural rehabilitation services: (1) identify the employment and vocational rehabilitation service needs of people with disabilities in rural areas; (2) develop interventions to improve employment outcomes; (3) demonstrate rural entrepreneurial models; (4) identify issues in rural independent living and develop interventions to improve transportation, health care, housing, and accessibility; (5) coordinate with rural independent living centers to identify or design and test alternative models of delivery of rural rehabilitation services; (6) provide training in rural rehabilitation research and practice; (7) conduct an annual meeting on the state-of-the-art in rural employment and disability; (8) conduct an annual interactive conference on disability issues in rural America; and (9) disseminate research findings to rehabilitation service-delivery personnel.

REHABILITATION ENGINEERING AND RESEARCH CENTERS

This program provides support for the Rehabilitation Engineering Research Centers to conduct programs of advanced research of an engineering or technical nature in order to develop and test new engineering solutions to problems of disability. Each center is affiliated with a rehabilitation setting, which provides an environment for cooperative research and the transfer of rehabilitation technologies into rehabilitation practice. The centers' additional responsibilities include developing systems for the exchange of technical and engineering information and improving the distribution of technological devices and equipment to individuals with disabilities.

1. Rehabilitation Engineering Center: Assistance Technology and Environmental Interventions for Older Persons with Disabilities, New York University at Buffalo, Buffalo, NY

Activities of the RERC focus on research, assistance device development, education, and information relating to assistive technology for older people in the home and beyond the home. The projects of the RERC fall into four major areas: (1) research: ten projects address assessments in the home and community, issues for minority elders, highly problematic device categories, clinical trials of effectiveness, and managed care work issues; (2) device development: six projects, including devices addressing automobiles, obesity, mobility, balance, stairs, and pubic seating; (3) education: four projects, addressing professional students, graduate students, and rehabilitation and aging service professionals; and (4) information: ten project areas, including a "Helpful Products" series of videos and booklets, training manuals, resources for hotel and motel guests, product information, national conferences, newsletter inserts, a World Wide Web site, monograph series, resource sourcebook, and a resource phone line.

2. Rehabilitation Engineering Research Center in Augmentative Communication, Applied Science and Engineering Laboratories, University of Delaware, Wilmington, DE 19899

Research in the field of augmentative communication is divided into five themes: language, speech, interface, systems, and information. Specific projects within each of the first four themes are designed to enhance accessibility of communication for individuals with communication disabilities. The project serves as a dissemination service for information on augmentative and alternative communication. All projects are designed so that technology transfer can be implemented as quickly and effectively as possible so that people with disabilities can pursue their educational, vocational, and independent living goals.

3. Rehabilitation Engineering Research Center on Universal Telecommunications Access, Gallaudet University, Washington, DC

This RERC conducts research and engineering activities with the overall goal of improving the accessibility of emerging telecommunications systems and products. The Center moves forward the available telecommunications knowledge base for access issues confronting people with all types of disabilities. The program areas of the RERC are: (1) systems engineering analysis; (2) telecommunications access research, focusing on needs assessment and development of design solutions; (3) universal design specification and review, aimed at developers of products and services; (4) development of telecommunications standards that include accessible features; (5) telecommunications applications for increased independence; and (6) knowledge utilization and dissemination. The RERC combines expertise from Gallaudet University, the Trace Research and Development Center at the University of Wisconsin, and the World Institute on Disability (WID) with the expertise of the telecommunications industry through active involvement of two noted telecommunications consultants, Richard P. Brandt and Dale Hatfield.

4. Rehabilitation Engineering Research Center on Prosthetics and Orthotics, Northwestern University, Rehabilitation Engineering Research Program and Prosthetics Research Laboratory, Chicago, IL

Activities of the Center include material science studies and applications in limb prosthesis and orthoses, biomechanical characterizations and functional design of prostheses and orthoses, state-of-the-art studies that delineate the status of the field and help organize and plan for the advancement of prosthetics and orthotics, and an information and education resource service.

5. Rehabilitation Engineering Research Center on Accessible and Universal Design and Housing, North Carolina State University School of Design, Center for Universal Design, Raleigh, NC

The RERC's mission is to: (1) conduct research in documenting problems in housing for people with disabilities; (2) identify or generate and test solutions to documented problems; (3) demonstrate the general utility of solutions to documented problems; and (4) conduct training to address skill acquisition, knowledge diffusion, and general awareness of issues related to housing for people with disabilities. The Center also provides information and referral services to address identified needs through development and dissemination of publications and other information materials and referral to other organizations and agencies who can assist with specific information requests. The Center's audience includes designers, contractors, developers, financial providers, consumer advocates, and users of residential environments.

6. Vermont Rehabilitation Engineering Research Center for Low Back Pain, University of Vermont, Vermont Back Research Center, Burlington, VT

The Vermont RERC improves the employability of people with back disorders and back disability by developing and testing assistive technology. Engineering projects include studies of lifting, posture, seating, vibration, and materials handling in connection with back pain and disability. Applied research projects include the testing of rehabilitation engineering products, evaluation of exercise programs, and the development of a statewide model program to hasten return to work of people with back injuries. The Center's Information Services Division provides toll-free assistance in locating research and rehabilitation programs, as well as bibliographic searching and fact finding. The Center also maintains an Electronic Discussion Group: BACKS–L (Send subscription request to listproc@list.uvm.edu; body of message should read: subscribe backs–l __your name__).

7. Rehabilitation Engineering Research Center on Adaptive Computers and Information Systems, University of Wisconsin/Madison, Trace Research and Development Center, Waisman Center, Madison, WI

This REFC is focused on maximizing the number of people with disabilities who are able to access directly and use the next generation of electronic devices and information systems, either with or preferably without assistive technologies. This RERC makes all

electronic products and systems more accessible to individuals with the full range of type, degree, and combination of disability, such as low vision, blindness, hearing impairment, deafness, deaf-blindness, physical disabilities, cognitive disabilities, and language disabilities. Electronic products include dedicated products (e.g., phones, faxes, ATMs, etc.), general purpose computers and operating systems, and access to information systems (e.g., Internet, television set-top boxes, kiosks, electronic directories, and information phones). The work of the Center includes basic research into more flexible interfaces; extensions to human interfaces of existing computers, operating systems, and information systems; development of design guidelines; development of prototype systems and simulations; support of industry; development of consumer awareness and education materials; training programs; and joint service-delivery programs.

FIELD INITIATED RESEARCH PROGRAM

This program is designed to encourage eligible applicants to originate valuable ideas for research and demonstrations, development, or knowledge dissemination activities in areas which represent their own interests, yet are directly related to the rehabilitation of people with disabilities.

1. Aging and Adjustment after Spinal Cord Injury: A 20-Year Longitudinal Study, Shepherd Center for Spinal Injuries, Inc., 2020 Peachtree Road, NW, Atlanta, GA

This fourth study phase will be the most extensive follow-up yet performed and will use an expanded version of the same questionnaire that was used in each of the three previous follow-ups (1973, 1984, 1988). Three types of research designs will be used for data analysis including: (1) traditional longitudinal analysis of 1973 to 1992 data from the original participant sample; (2) cross-sequential analysis of the repeated measures data from 1984 to 1992 for samples one and two; and (3) time-sequential analysis of time-lagged data comparing the 1984 data for sample two with that of the new third sample.

2. Perceived Direction and Speech Intelligibility in Sensorineural, Hearing Loss and Blindness, Smith-Kettlewell Eye Research Institute, 2232 Webster Street, San Francisco, CA 94115

Experiencing great difficulty processing speech in noise is one of the most characteristic and devastating aspects of the sensory deficit of hearing loss in aging (presbycusis). Conventional binaural hearing aids do not satisfactorily solve this problem. The digital four-channel hearing aid is innovative because of its use of temporal as well as intensity parameters, unlike any other binaural hearing aid on the market. Since sensorineural hearing loss (SNHL) and blindness may interfere with localization of potentially hazardous situations, a second goal of this project is to explore and develop the parameters for improved localization as well as improved speech intelligibility (comprehension) utilizing a new rational. According to our model, a binaural balance of interaural intensity difference (IID) and interaural time delay (ITD) across frequencies is required to restore optimum speech intelligibility and

localization ability by eliminating or lessening exaggerated dominance consequent of asymmetric hearing loss. Variations of either or both IID and ITD at different frequencies would impair directional localization and, therefore, intelligibility of one speaker in a group. This new hearing aid may permit people with SNHL and blindness, using acoustic cues, to locate and avoid a hazard. To accomplish this, the project will adjust the physical inputs of intensity and interaural delay time across frequencies to compensate for perceptual imbalances (i.e., deviations from IID and ITD) and to test for the consequent restoration of optimal localization and speech intelligibility inherent in normally balanced auditory systems.

3. Development of a Novel PC-Based Test to Aid the Rehabilitation of People with Macular Vision Loss, Smith-Kettlewell Eye Research Institute, San Francisco, CA

Patients with age-related macular degeneration (AMD) lose the ability to read and recognize faces on television. They must learn to perform these tasks using their less-detailed peripheral vision as a substitute. Research has shown that people with AMD can learn this, but a majority do so only with goal-directed instructions and training that must be based on each patient's individual vision status. For the purpose of this assessment, a new computerized test was developed at this laboratory on Amiga computers that are no longer commercially available. The overwhelmingly positive response to this new procedure warrants this special effort to transfer the test to the most common small computer, the IMB PC and its compatibles. The product of this research is an inexpensive and easy-to-run computerized test that can be performed within minutes in the eyecare specialist's office, without requiring special expertise and on widely available equipment. The results of the test can be used: (1) to help the eyecare specialist customize instructions and training procedures in order to keep the required adaptation time as short as possible, and (2) to help AMD patients understand the nature of their impairment.

4. Remote Signage Development to Address Current and Emerging Access Problems for Blind Individuals, Smith-Kettlewell Eye Research Institute, San Francisco, CA

This project is developing new, practical enhancements of remote signage technology to solve a range of specific current and emerging accessibility problems faced by people who are blind and who have other print-reading disabilities. For blind users, access to any place or facility begins with the problem of knowing it is there; then the problem of finding it must be addressed. Specific solutions are being developed for safe usage of light-controlled pedestrian crossings, identification and onboard announcements of stops for buses, identifying route number and destination of oncoming buses, locating and accessing automated teller machines and other vending information terminals, and access to signage by people with cognitive impairments. These innovative solutions are being developed from the infrared Talking Signs (R) system of remotely readable signs for people who are blind that was developed by Smith-Kettlewell. This system is currently gaining increased acceptance

as an aid to orientation and navigation for those who cannot read the print signage that fully sighted people take for granted in navigating and accessing the world.

5. Toward a Risk Adjustment Methodology for People with Disabilities, Medlantic Research Institute, National Rehabilitation Hospital Research Center, Washington, DC

The principle goal of this knowledge dissemination project is to provide its primary audiences, health care policy-makers and payers, with key information to advance the development of a risk adjustment system for working- and retirement-age people with disabilities. Risk adjustment reduces the incentive for risk selection and promotes access to needed health services. To achieve this goal, the project assembles a panel of leading experts on risk adjustment and disability to guide the development of a consensus report that: (1) details the state of science in risk adjustment, (2) evaluates the appropriateness of health care outcome indicators for people with physical and mental disabilities, and (3) provides a set of recommendations for modifying and implementing risk adjustment methodologies that enhance access to health services for people with disabilities enrolled in public and private sector health plans.

6. Cash and Counseling Models for Americans with Disabilities, The National Council on the Aging, Inc. (NCOA), Research and Development Department, Washington, DC 20024

In the "cash and counseling" model, consumers with disabilities control most elements of their service needs, normally through cash payments that allow them to purchase support services. Activities of this three-year study include: (1) continuing in-depth field research and ongoing monitoring of domestic and overseas programs that currently use cash and counseling or a similar model; (2) conducting two surveys of state administrators to identify existing cash and counseling programs, determined their level of knowledge and interest in employing cash and counseling approaches, and identify opportunities and barriers to program implementation, as well as technical assistance needs; (3) collaborating on the Cash- and Counseling Demonstration and Evaluation Project at the University of Maryland Center on Aging funded by the Robert Wood Johnson Foundation and the U.S. Department of Health and Human Services; (4) providing information and technical assistance to state administrators and policy analysts interested in advancing cash and counseling approaches, including the four states awarded cash and counseling demonstration and evaluation grants; (5) developing a series of analyses concerning the feasibility, design, and implementation issues of cash and counseling approaches; and (6) disseminating new knowledge to policy makers, administrators, and the aging and disability communities.

7. Aging; Spinal cord injuries; Ethnic groups; Women Physician Training in the Major Health Issues of Women with Disabilities: Learning to Act in Partnership, Health Resource Center for Women with Disabilities, Rehabilitation Institute of Chicago, Chicago, IL

Women with disabilities report that their health needs are often overlooked or poorly addressed by physicians, who evidence unfamiliarity with, and negative attitudes toward, people with disabilities. These subjective reports are corroborated by studies that suggest women with disabilities may find their health service options severely compromised when physicians lack information about their special needs and experience. This project designs and tests the efficacy of a training module that introduces medical students to the health issues of women with disabilities, in three phases: (1) fourth-year medical students respond to a questionnaire to assess their deficiencies in knowledge regarding the health needs and experiences of women with disabilities, (2) a training module is developed incorporating a video, a corresponding in-person educational presentation led by women with disabilities, and a handbook of supplementary readings, (3) the efficacy of the module in improving attitudes and knowledge is tested in a pretest/post-test design with a control group. Women with a broad range of disabilities, ages, and ethnic/racial/cultural backgrounds are participating in all aspects of the project, from research direction through training development to dissemination of results. Consequently, the project represents a model of consumer-physician partnership that is endorsed by women health activists with disabilities.

8. Illinois Joint Training Initiative on Disability and Abuse: Advocacy and Empowerment Through Knowledge Dissemination, University of Illinois/Chicago, Institute on Disability and Human Development, Chicago, IL

This project provides information and skills to advocates, consumers, family members, service providers, and others to empower them to enforce the rights of adults with disabilities who have been abused or neglected. It is largely a training project, with the following objectives regarding abuse-neglect: (1) develop interactive consumer-responsive materials that train consumers, family members, and service providers to recognize incidents; (2) make the social and legal system respond to cases; (3) provide referral to resources available for victims; (4) conduct state-wide training using the materials; (5) provide each training participant with the opportunity to become a local trainer on these issues; and (6) provide technical assistance, materials, and resources to local trainers hosting training events.

9. Knowledge Dissemination for Vision Screeners, University of Kansas, Institute for Life Span Studies, Parsons, KS

This project is disseminating a CD–ROM to providers of vision screening and evaluation services, in order to increase the quantity and quality of vision services available nationally to infants, toddlers, preschoolers, and older people with disabilities. These populations are sometimes considered difficult to test, and as a consequence, often do not receive traditional vision screening services.

The project addresses the training needs of a variety of personnel by providing an interactive CD–ROM program, modeled after the "knowledge on demand" technology used in industry, that can be readily delivered in a variety of settings. The program is providing a model for using CD–ROM to disseminate "knowledge on demand."

10. Secondary Conditions, Assistance, and Health-Related Access Among Independently Living Adults with Major Disabling Conditions, Massachusetts Health Research Institute, Boston, MA

Participants in this study are affiliated with six Massachusetts independent living centers (ILCs). The cross-disability sample includes people with a range of significant physical, mental, sensory, and developmental disabilities who require assistance with activities of daily living. Primary outcomes of interest are: (1) the frequency and severity of secondary conditions, including skin problems, seizures, chronic pain, spasms, falls, fatigue, respiratory tract infections, and urinary tract infections; and (2) reactions to medication, depression, anxiety, and injuries related to medical equipment. Mediating variables include: adequacy of personal assistance, assistive technology, access to health promotion and health care services, environmental barriers, transportation, employment, education, socioeconomic status, smoking, use of substances, and compliance with prescribed health care routines. The research study includes two annual cross-sectional surveys, each of 300 randomly-selected ILC consumers, to determine prevalence, distribution, frequency, and severity of secondary conditions. Focus groups of ILC consumers and others help interpret the data.

11. The Universal Bathroom, Research Foundation of State University of New York, State University of New York (SUNY)/Buffalo, Amherst, NY

While the greatest potential benefactors of a universal bathroom are non-institutionalized people with disabilities who are living independently, the new bathroom's design will be created to be safe, accessible and usable by all people regardless of their age, sex, and disabling conditions. Its assumed modular, interchangeable components will include three primary units, for bathing/showering, toileting, and grooming. Since the bathroom of the user's choice can be custom built from a large range of component units, this will be a marketable, culturally responsive one with accepted layouts and levels of privacy. Additionally, the "lifespan perspective" of the bathroom's design will allow able-bodied care-providers such as parents of young children and those assisting older individuals to make layout changes and product alterations based on their current needs. Thus the bathroom's assistive qualities will reduce temporary dependence on others and increase safety by preventing accidents that lead to disability. It will empower independent users, dependent users, and care-providers equally—the young, the old, married couples, people with children, and families with "live-in" grandparents.

12. Pressure Ulcer Prevention by Interactive Learning, MetroHealth Center for Rehabilitation, Spinal Cord Injury Unit, 2500 MetroHealth Drive, Cleveland, OH

This project assembles a set of materials for teaching pressure ulcer prevention, uses text, diagrams, animations, sound, and video; links existing material where possible with new resources where necessary; and converts the materials to digital format. Teaching programs are then written to provide access through a personal computer in a variety of interactive sequences. These sequences are customized, not only during design but also by interaction during use, for users with different learning abilities and requirements. The initial target group is people with disabilities at risk of developing pressure ulcers. However, the technology is well suited for customization for other uses such as training for nurses and other health professionals. The project plans to make the materials available to larger audiences and is producing a CD-ROM containing a set of teaching programs for institutions to train people with disabilities on how to prevent pressure ulcers. The project expects to distribute the CD-ROM nationally and to make selected portions available on computer networks.

13. Further Development of a Lower Limb Prosthetic Socket CAD System Based on Ultrasound Measurement Wright State University, Department of Biomedical and Human Factors Engineering, Dayton, OH

This project has four objectives: (1) to improve the performance of an ultrasound-based computer-aided socket design (CASD) system developed by this research team; (2) to enhance the utility of the system by developing and testing new devices and procedures for limb measurements using the system; (3) to conduct a clinical trial to evaluate the usefulness of the ultrasound-based CASD system in improving daily prosthetic socket design/fitting; and (4) to investigate applications of ultrasound measurements in finite-element modeling for the study of limb-prosthesis interaction.

14. Women's Personal Assistance Services (PAS) Abuse Research Project, Oregon Health Sciences University/Portland, Child Development and Rehabilitation Center, Portland, OR

The purpose of the project is to increase the identification, assessment, and response to abuse by formal and informal personal assistance service (PAS) providers of women with physical and physical and cognitive disabilities living independently in the community. The aims of the project: (1) develop culturally sensitive screening approaches to identify PAS abuse, (2) develop a culturally appropriate PAS abuse assessment protocol, and (3) develop culturally appropriate response strategies to prevent and manage PAS abuse. Culturally diverse participants assist in the development of these three aims. The study includes three phases, beginning with a focus group study of culturally diverse women with physical and cognitive disabilities. Phase II involves the use of findings from Phase I to develop and disseminate a survey of 260 culturally diverse females with disabilities drawn from four national organizations. Phase III involves the development and field testing of the effectiveness of the screening, assessment, and sup-

port protocols, the final product being a comprehensive package of PAS abuse prevention materials. The project plans to disseminate these materials on a national basis.

15. A Pilot Study for the Clinical Evaluation of Pressure-Relieving Seat Cushions for Elderly Stroke Patients, University of Pittsburgh, Pittsburgh, PA

This project designs and tests the feasibility of a randomized clinical trial to determine the efficacy of pressure-relieving seat cushions for immobile, elderly stroke patients. Older people with disabilities who are immobile and, thus, spend their time either in bed or seated, are at risk for developing pressure ulcers. Commercial seat cushions intended to reduce the risk of sitting-induced pressure ulcers are available. The elderly population, however, is not customarily evaluated for seating and positioning needs or provided with the benefits of this technology. Reimbursement is not available, due in part to the fact that the effectiveness of this intervention has not been sufficiently demonstrated for this high-risk population, and these services and technology are not available. If these cushions are a successful intervention for increased comfort, improved quality of life, and pressure ulcer incidence rate reduction, the project plans to disseminate the findings and provide justification for third party funding. If successful, the project plans to increase the availability of seating and positioning services and products to this deserving population.

16. Access Solutions, Vermont Center for Independent Living, Montpelier, VT

The Vermont Center for Independent Living, in conjunction with Bike Track, Inc., is developing and testing a new system for building modular, reusable, and highly durable access ramps using a newly developed, non-toxic material made from recycled plastic. The ramp system's performance, material, and elements are field tested in a variety of setting and in a wide range of climatic conditions. The results of this project are: (1) the development, testing, and evaluation of an innovative technology for building access ramps; and (2) dissemination of the findings of the project among builders, ADA compliance experts, and consumers.

RESEARCH AND DEMONSTRATION PROJECTS

These projects address rehabilitation priorities identified by NIDRR and published in the Federal Register. These priorities address a variety of problems encountered by people with disabilities. Projects are funded for up to 36 months.

1. Exercise and Recreation for Individuals with a Disability: Assessment and Intervention, Rehabilitation Institute of Chicago, Center for Health and Fitness, Chicago, IL

This project demonstrates that participation in exercise and physical activities improves function, facilitates community reintegration, and enhances the quality of life of people with disabilities. The project: (1) investigates the long-term effects of an exercise fitness program on the physiology, metabolic performance, and quality of life of people with spinal cord injury, stroke, and cerebral

palsy; (2) examines the role of self-efficacy in maintaining participation in an exercise fitness program; (3) describes the types and frequency of recreation and fitness activities among people who have had a stroke, people with spinal cord injury, and people with cerebral palsy; (4) examines the relationships between participation in recreation and exercise programs and the health status, life satisfaction, and depression in the above populations; and (5) delineates barriers and deterrents to participation in recreation and exercise programs that exist for a variety of disability groups.

2. Research and Demonstration of a Model for Successfully Accommodating Adults with Disabilities in Adult Education Programs, University of Kansas Institute for Adult Studies and Kansas State University Department of Special Education, Lawrence, KS

This project provides adult educators and adults with disabilities with validated accommodations useful in instruction and assessment. These accommodations help the individuals meet their educational needs and successfully function in employment and community settings. Also, information about their legal rights and responsibilities is made available, including handbooks on legal rights and responsibilities for both adults with disabilities and adult service providers, a "Compendium of Materials and Resources," and a "Procedural Guide." These materials are compiled through: (1) a national survey of adult education programs, (2) a state survey of enrollees with disabilities in adult education, and (3) a case study of one local program in an urban center with high unemployment and multicultural diversity. This process is aided by information gained from two symposia with adult educators and subject matter experts (proceedings and videotapes of the first symposium are available). An accommodations model that matches the functional needs of adults with disabilities to the demands of adult education programs is being developed; the accommodations model and related products are being tested using a national sample of adult educators.

3. Reducing Risk Factors for Abuse Among Low-Income Minority Women with Disabilities, Baylor College of Medicine, Department of Physical Medicine and Rehabilitation, Houston, TX

This project pursues strategies to reach women with disabilities at all stages of change in resolving abusive situations. To accomplish this purpose, the project has the following objectives: (1) identify risk factors for emotional, physical, and sexual abuse faced by women with disabilities; (2) assess the ability of rehabilitation and independent living counselors to identify women in abusive situations and refer them to appropriate community resources; (3) develop and test models for programs that reduce the risk of abuse for women with disabilities, particularly among women with disabilities from low-income, minority backgrounds where the incidence of abuse is the highest; and (4) establish an agenda for future research on women with disabilities using a national advisory panel. The project works not only with programs that help battered women, but also those that have contact with women with disabilities in various community contexts.

4. Understanding and Increasing the Adoption of Universal Design in Product Design, University of Wisconsin/Madison, Trace Research and Development Center, Madison, WI 53705–2280

This project: (1) identifies the factors that cause industry to practice, or not to practice, universal design of products; and (2) identifies ways that people outside companies can encourage and facilitate the practice of universal design of products on a more widespread basis. The project brings together experts who have been active in universal design from across the technology spectrum to work with industry in addressing these questions. Areas of expertise include housing and architecture, computers and electronic products, media and materials, telecommunications, and educational software.

UTILIZATION PROJECTS

This program supports activities that will ensure that rehabilitation knowledge generated from projects and centers funded by the Institute and other sources is fully utilized to improve the lives of individuals with disabilities.

1. Improving Access to Disability Data, InfoUse, Berkeley, CA

InfoUse's Center on Access to Disability Data is the central source for disability statistics data and related technical reports in accessible, easy-to-understand, user-friendly formats. The Center provides this information to businesses, the media, urban planners and policymakers, and the disability community. The first major product, the "Chartbook on Disability in the United States, 1996," provided updated statistical information on a range of disability topics. Material for the "Chartbook" series and related fact sheets are available to the public in a variety of published and electronic formats, including print and electronic media. The Center's Web site serves as a source for electronic documents, includes guidelines for accessible Web publishing, and provides links to major national data sources including data sites developed by other NIDRR grantees and by major national disability data suppliers.

2. National Rehabilitation Information Center (NARIC), KRA Corporation, Silver Spring, MD

The National Rehabilitation Information Center (NARIC) maintains a research library of more than 51,000 documents and responds to a wide range of information requests, providing facts and referral, database searches, and document delivery. Through telephone information referral and the Internet, NARIC disseminates information gathered from NIDRR-funded projects, other federal programs, and from journals, periodicals, newsletters, films, and videotapes. NARIC maintains REHABDATA, a bibliographic database on rehabilitation and disability issues, both in-house and on the Internet. Users are served by telephone, mail, electronic communications, or in person.

3. Abledata Database Program, Macro International, Inc., Silver Spring, MD

The project maintains and expands the ABLEDATA database, develops information and referral services that are responsive to the special technology product needs of consumers and professionals, and provides the data to major dissemination points to ensure wide distribution and availability of the information to all who need it. The ABLEDATA database contains information on more than 23,000 assistive devices, both commercially produced and custom made. Requests for information are answered via telephone, mail, electronic communications, or in person.

4. National Center for the Dissemination of Disability Research (NCDDR) Southwest Education Development Laboratory, Austin, TX

This project provides information and technical assistance to NIDRR grantees in identifying and improving dissemination strategies designed to meet the needs of their target audience. The project also analyzes and reports on dissemination trends relevant to disability research. Task force and material development activities address multicultural factors that influence dissemination and utilization. This project conducts ongoing informational network through a variety of approaches, including an interactive World Wide Web site highlighting events and other information about specific NIDRR grantees, the production of quarterly issues of "The Research Exchange," and in-person and online technical assistance support.

FELLOWSHIPS

Fellowships, named for the late Mary E. Switzer, build future research capacity. NIDRR makes awards on two levels: Distinguished Fellowships go to individuals of doctorate or comparable academic status who have had seven or more years of experience relevant to rehabilitation research. Merit Fellowships are given to persons in earlier stages of their research careers.

1. Quality Indicators for Comparative Analysis of Stroke Outcome, Bartlett, IL, Principal Investigator: Robin Turpin, PhD

The goal of this study is to develop a set of a quality indicators to assess the impact of medical rehabilitation services on the lives of stroke survivors. Development involves the World Health Organization's "International Classification of Impairments, Disability, and Handicaps" (ICIDH), as well as quality of life literature. The indicators assess the impact of rehabilitation services from health status of community integration and quality of life. Such a set of quality indicators would be useful and feasible for a wide variety of care across settings and providers.

2. Telemedicine and Neuropsychological Services: Improving Access to Care to Care for Rural Residents with Brain Injury, University of Missouri/Columbia, Department of Physical Medicine and Rehabilitation) Columbia, MO, Principal Investigator: Laura H. Schopp, PhD

Objectives of this study include: assessing telemedicine versus in-person care in consumer, family member, provider, and rehabilitation counselor satisfaction; assessing costs, psychological and neuropsychological status, and level of community integration; and providing qualitative and (to the extent possible) quantitative evaluation of racial/ethnic differences in needs and attitudes toward telemedicine.

RESEARCH TRAINING GRANTS

The purpose of this program is to expand capability in the field of rehabilitation research by supporting projects that provide advanced training in rehabilitation research. These projects provide research training and experience at an advanced level to individuals with doctoral or similar advanced degrees who have management or basic science research, in fields pertinent to rehabilitation, in order to quality those individuals to conduct independent research on problems related to disability and rehabilitation.

1. Doctoral Training in Physical Therapy University of Iowa, Physical Therapy Graduate Program, Iowa City, IA

This project supports five physical therapist trainees for three years and five other physical therapist trainees for the first two years of their doctoral program of study at the University of Iowa. the long-term goal is to increase the supply of physical therapists who have both the clinical experience and advanced skills required to conduct effective rehabilitation research. Specifically, the student must: (1) be able to perform original scholarship and research that advances the understanding of physical therapy clinical practice; (2) have comprehensive knowledge of theoretical and research literature in areas of specialization; (3) be skilled in the application of basic and advanced concepts in the area of cardiopulmonary, ergonomic, musculoskeletal, or neuromuscular physical therapy; and (4) be able to teach at the basic professional, master's degree, and doctoral levels of physical therapy education.

2. Rehabilitation Research Training in Physical Therapy, Texas Woman's University, School of Physical Therapy, Houston, TX

The purpose of this training project is to produce qualified individuals who are capable of conducting valid scientific research in rehabilitation. Participants are physical therapists who have well-defined interests in pursuing research careers in physical therapy. Four predoctoral student fellows are recruited for a three-year course of study leading to a PhD degree with a major in physical therapy. Fellows are selected on the basis of their interest in programmatic research conducted in one of the laboratories within the School of Physical Therapy. Those laboratories are actively engaged in investigating neuromuscular and musculoskeletal aspects of rehabilitation. In addition, each fellow is expected to participate in

external projects conducted in conjunction with the laboratory. A plan of both process and outcome evaluation ensures the excellence of this training program.

SMALL BUSINESS INNOVATIVE RESEARCH

New ideas and products useful to people with disabilities and the rehabilitation field are encouraged with small business innovative research grants. This three-phase program takes an idea from development to market readiness.

1. Development of a Lightweight, Portable, Easily-Assembled Scooter Lift-Carrier for Automobiles and Other Vehicles, ACCESS/ABILITIES, Mill Valley, CA

ACCESS/ABILITIES, in collaboration with the Veterans Administration Rehabilitation Research and Development Center, is developing a portable, lightweight, easy-to-assemble lift/carrier for 3-wheeled scooters that can be used with automobiles. Design selection is based on technical feasibility, commercial viability, physical practicality for users, and cost efficiency, using technical data on scooter specifications gathered from manufacturers. Three design approaches are considered.

2. Hiking Trails Web Site with Universal Access Information, Beneficial Designs, Inc., Santa Cruz, CA

Although many people with disabilities enjoy visiting outdoor parks and recreational areas, obtaining information about the accessibility of outdoor trails is currently difficult. The goal of the Trails Web site is to provide universal access information for trails throughout the United States that is useful to all hikers, regardless of their ability. The Universal Trails Assessment Process enables trail managers to assess specific trails objectively with regard to grade, cross slope, width, surface characteristics, and obstacles. The collected trail data is processed to create Trail Access Information in a format similar to the Nutritional Facts food label. The objectives of Phase I are to develop the Web site and trail access information database, to collect and enter trail access information, and to evaluate its effectiveness through online evaluations. The Web site allows users to search for trails that meet their specific access needs. The site also contains links to other Web sites with related information. Trail access information obtained remotely allows Web site users to plan appropriate outdoor travel by being able to determine in advance where they can hike.

3. Alternative communication; Computer applications; Communication; Hearing impairments; Deaf blindness; Sign language; The Adaptive Device Locator System on the World Wide Web, Academic Software, Inc., Lexington, KY

This project's goal is to save the Adaptive Device Locator System (ADLS), a unique and valuable national resource, by transforming the entire Locator System database content and program code into a World Wide Web site on the Internet. The planned state-of-the-art, multilevel format is universally accessible to teachers, health professionals, and consumers with disabilities. The site lists computer access products the company provides; vendor links allow

ADLS visitors to jump directly to other commercial sites once appropriate assistive technology devices are located. On the Web, ADLS will be an export leader, focusing on international trade in this field. ADLS on the WEB will feature monthly infomercials, new product announcements, and other information of interest to consumers.

4. Broadcast Radio for Individuals Who Are Deaf: Gaining Equity (BRIDGE), Associated Enterprises, Inc. (AEI), TeleSonic Division, Annapolis, MD

Talk radio reaches large audiences of people and is a significantly less expensive medium than television. Yet radio broadcasts are inaccessible to deaf and certain hard of hearing people. In project BRIDGE, TeleSonic's goal is to broadcast information via the radio simultaneously in multiple transmission forms to delivery both audio and visual information. Users of TTYs, for example, receive "closed captioned" broadcasts of radio programs. The Phase I hypothesis is: it is feasible to transmit multimedia signals over commercial radio to be received by special decoder devices. Phase I includes: (1) defining technical trial test approaches, (2) developing test transmitter/receiver devices, (3) producing a brief radio talk show, (4) organizing focus group feedback sessions, (5) conducting trials, (6) developing preliminary product design specifications, and (7) documenting results. Anticipated long-term results include development of a commercially marketable radio transmission and receiving device.

5. Miniature, Voice Output Independent Reading Device (IRA), Ascent Technology Inc., Boulder, CO

This project is developing and testing an innovative reading device that interprets and speaks along the printing found in books, labels, and other everyday items, this device enhances the abilities of people with visual impairments in schooling, employment, and independent living. The unique optical character recognition and voice synthesis device requires only one hand for operation and can read food and pharmacological packaging, including curved surfaces. The simplicity of the device allows the user to acquire functional reading capability after only a few minutes of training. In addition to serving people with visual impairments, this technology is applicable to the needs of people with cognitive impairments, such as people who have had a stroke, and to the needs of people who cannot read and non-native language readers. The prototype is being tested using 15 people with visual impairments aged 55 and older and four adults under the age of 45 to determine its applicability to the tasks of independent living.

STATE TECHNOLOGY ASSISTANCE PROGRAMS

This program, funded under The Technology-Related Assistance for Individuals with Disabilities Act of 1988, as amended, supports consumer-driven, statewide, technology-related assistance for individuals of all ages with disabilities.

States and territories are eligible to apply for one 3-year development grant, a first-extension grant for year 4 and 5, and a second-extension grant for years 6–10. The purpose of these grants is to

establish a program of statewide, comprehensive, technology-related assistance for individuals with disabilities of all ages.

INDEPENDENT LIVING SERVICES FOR OLDER INDIVIDUALS WHO ARE BLIND, CHAPTER 2 OF TITLE VII

Section 752 of the Rehabilitation Act of 1973, as amended, authorizes discretionary grants to State vocational rehabilitation (VR) agencies for projects that provide independent living services for persons who have severe visual impairments and who are aged 55 and older. Each designated State unit that is authorized to provide rehabilitation services to blind individuals may either directly provide independent living services or it may make subgrants to other public agencies or private non-profit organizations to provide these services.

The services most commonly provided are: (1) training for activities of daily living, (2) the provision of adaptive aids and appliances, (3) low vision services, (4) orientation and mobility services, (5) training in communication skills, (6) family and peer counseling, and (7) community integration, which includes outreach and information and referral.

During FY 1996, the most recent year for which we have analyzed data, 26,846 older individuals with significant visual impairment or blindness received services. Of these consumers, 64.4 percent were at age 76 or older and 45 percent were age 81 or older. The individuals served by this program represent approximately one-half of the individuals with significant visual impairments or blindness who receive rehabilitation and independent living services through public and private rehabilitation programs as estimated by the Mississippi State University and the New York Lighthouse for the Blind.

ITEM 5—DEPARTMENT OF ENERGY

INTRODUCTION

The Department of Energy (DOE) is a major government enterprise. If included among the Nation's Fortune 500 firms, it would rank in the top 50. It funds the largest environmental cleanup in history as well as research and development that supports the Nation's defense and its energy and economic security. The Department employs more than 11,000 Federal workers and 100,000 contract employees. It owns and manages over 50 major installations located on 2.4 million acres in 35 States and is the fourth largest Federal landowner in the United States.

The Department of Energy is an energy policy, supply, and technology enterprise. It invests in developing a secure, clean, and sustainable energy system. It helps the Nation meet its environmental challenges by administering the largest pollution prevention and energy efficiency program in the world, with partners from every sector of the economy. It enhances the Nation's energy security by increasing the diversity of energy sources and fuel choices: bringing renewable energy sources into the market, strengthening domestic production of oil and gas, maintaining the U.S. nuclear energy option, and increasing the efficiency with which we use energy and generate electricity. The Department also maintains the Strategic Petroleum Reserve and operates Power Marketing Administrations that sell and distribute over $3 billion of electric power generated at Federal hydroelectric plants.

The Department of Energy is a national security enterprise. It is a key player in the Administration's furtherance of the Comprehensive Test Ban Treaty and its overall goal of reducing the global danger from nuclear weapons. DOE ensures the safety and reliability of the U.S. nuclear weapons stockpile without underground testing. At the same time, it manages and safely dismantles excess nuclear weapons, disposes of surplus fissile nuclear materials, and ensures the security of vital Departmental nuclear assets. It provides policy and technical assistance to curb global proliferation of weapons of mass destruction, emphasizing U.S. nonproliferation, arms control, and nuclear safety objectives in the states of the former Soviet Union and world-wide. Further, DOE develops and ensures the safety and reliability of nuclear reactor plants to power U.S. Navy warships.

The Department of Energy is an environmental remediation enterprise. It cleans up the 50-year environmental legacy left at the industrial complexes where nuclear weapons were designed and manufactured. It manages the problems associated with the large quantities of various types of radioactive wastes, surplus nuclear

materials, and spent nuclear fuels that remain at the sites of the Nation's nuclear weapons facilities and at nuclear energy research and development sites. In addition, DOE must address the growing inventory of spent nuclear fuel from commercial nuclear reactors that is awaiting disposal. These wastes must be dealt with responsibly to ensure the safety and health of the public.

The Department of Energy is a science and technology enterprise. At the center of all we do are our 27 laboratories, our additional scientific user facilities, and our researchers at the Nation's universities. These form the backbone of U.S. scientific leadership by conducting and facilitating breakthrough research in energy sciences and technology, high energy physics, global climate change, genomics, superconducting materials, accelerator technologies, environmental sciences, and supercomputing in support of DOE's mission. The laboratories, described as the crown jewels of the Nation's science establishment, and the Department's funding of research at universities have resulted in 70 Nobel prize winners. The Department is also an investor in the Nation's most precious resource—its youth—by supporting science and mathematics education in our schools through grants, educational programs, and fellowships.

The Department of Energy is a global enterprise. The outcome of our work is the technology that stimulates the private market for the expansion of clean energy to meet national and global energy requirements of almost 500 quadrillion Btu's by the year 2010—a staggering 36 percent increase over 1995. Overseas energy market needs include coal, nuclear power, oil and gas exploration, energy efficiency, and renewable energy technologies that are available for export now or that will soon be available for the international marketplace. The Department of Energy supports the export of U.S. energy services and technologies by assisting the nations in Asia, South America, Eastern Europe, and Africa, and the states of the former Soviet Union in developing private markets for environmentally responsible, sustainable energy. These alliances support U.S. competitiveness in a global economy of growing energy infrastructure requirements and create jobs in the United States at all skill levels.

ENERGY EFFICIENCY PROGRAMS

Weatherization Assistance Program.—The program's mission is to make energy more affordable and improve health and safety in homes occupied by low-income families, particularly those with elderly residents, children, or persons with disabilities. Elderly residents make up approximately 40 percent of the low-income households served by this program. As of September 30, 1996 about 4.5 million homes had been weatherized with Federal, State, and utility funds; of these, an estimated 1.8 million were occupied by elderly persons.

Low-income households spend an average 15 percent of income for residential energy—more than four times the proportion spent by higher income households. The weatherization program allows low-income citizens to benefit from energy efficiency technologies that are otherwise inaccessible to them. Alleviating the high energy cost burden faced by low-income Americans helps them increase

their financial independence and their flexibility to spend household income on other needs.

The program has become increasingly effective due to improvements in air-leakage control, insulation, water heater systems, windows and doors, and space heating systems. A low-income household now saves approximately $193 per year, about one-third of its space heating costs. Program benefits are further described in *Progress Report of the National Weatherization Assistance Program* that features 90 photo illustrations of specific benefits. The report is available through the National Technical Information Service, 703/487–4650, 5285 Port Royal Rd., Springfield, VA 22161.

The program is implemented by states through community-based organizations. The Department of Energy and its State and community partners weatherize approximately 70,000 single- and multi-family dwellings each year. The program awarded $214.9 million in Fiscal Year 1995 and $111.7 million in Fiscal Year 1996 for grants to the 50 States, the District of Columbia and six Native American tribal organizations. In addition to DOE appropriations, State and local programs receive funding from the Department of Health and Human Services Low Income Home Energy Assistance Program, from utilities, and from States.

State Energy Program.—The program provides grants to State energy offices to encourage the use of energy efficiency and renewable energy technologies and practices in states and communities through technical and financial assistance. In FY 1995 $53 million was appropriated and $25.9 million was appropriated in FY 1996. States have broad discretion in designing their projects. Typical project activities include: public education to promote energy efficiency; transportation efficiency and accelerated use of alternative transportation fuels for vehicles; financial incentives for energy conservation/renewable projects including loans, rebates and grants; energy audits of buildings and industrial processes; development and adoption of integrated energy plans; promotion of energy efficient residences; and deployment of newly developed energy efficiency and renewable energy technologies.

There have been some projects that specifically target the elderly such as Louisiana's low-income/handicapped/elderly/Native American outreach program that provided energy-related assistance through a joint venture with utilities. The elderly also benefit from programs that provide energy audits, hands-on energy conservation workshops, and low-interest loans for homeowners that can result in significant energy savings. Energy efficiency improvements in local and state buildings and services also benefit the elderly by freeing up state and local government tax revenues for non-energy expenses. Energy efficient schools can be less of a burden on property taxes.

An emerging issue is the restructuring of the electric utility industry. The State Energy Program has supported workshops with States and local communities to ensure that homeowners and disadvantaged groups are not overlooked or denied the economic benefits of lower-cost sources of energy after deregulation. Utility deregulation workshops for public officials have emphasized techniques and negotiating strategies, e.g. franchising, to ensure that

vulnerable populations such as the elderly are not excluded from energy pricing competition.

Information Collection and Distribution

The Energy Information Administration collects and publishes comprehensive data on energy consumption in the residential sector through two surveys: the Residential Energy Consumption Survey (RECS) and the Residential Transportation Energy Consumption Survey (RTECS). The RECS is now collected every 4 years and the RTECS was discontinued after the 1994 survey. The Residential Energy Consumption Survey includes data collected from individual households throughout the country, along with the actual billing data from the households' fuel suppliers for a 12-month period. The data include information on energy consumption, expenditures for energy, costs by fuel type, and related housing unit characteristics (such as size, housing type, and major energy-consuming appliances). The Transportation Survey collected information on characteristics of household vehicles and annual miles traveled for a subsample of the RECS respondents. Both surveys contain data pertaining to older Americans.

The results of these surveys are analyzed and published by the Energy Information Administration. The most recent household survey for which reports have been published is the 1993 RECS. Results of the 1993 RECS are published in two reports: *Housing Characteristics 1993* (published in June, 1995) and *Household Energy Consumption and Expenditures 1993* (published in October, 1995). The data file for the 1993 RECS is available on PC diskettes. The reports and data file are also available on the Internet at http://www.eia.doe.gov/emeu/recs/contents.html. The RECS file contains demographic characteristics of the elderly such as age, employment status, marital status and family income, as well as estimates of consumption and expenditures for electricity, natural gas, fuel oil, kerosene, and liquefied petroleum gas used in the elderly households.

In the 1993 RECS, 27.8 million, or 29 percent of all U.S. households, were headed by a person 60 years of age or older. Of these elderly households, 42 percent were one-member households (11.7 million people living alone) and 45 percent contained 2 people. In the 2-member elderly households, 78 percent of the second persons were also at least 60 years old.

Analysis of the 1993 RECS data shows that consumption patterns differed between the elderly and nonelderly for some uses of energy. The elderly used more energy to heat their homes, for example, but used less energy for air conditioning, water heating, and appliances. Expenditures followed the same pattern. Specifically,

> The average expenditures per household member in elderly households was $681. This amount was higher than the comparable amount for all other households, due to the fact that households headed by persons 60 years or more of age tend to be smaller than those headed by persons under 60 years of age.
>
> About 61 percent of total energy consumption and about 38 percent of total energy expenditures in elderly households were for space heating.

The most recent triennial Residential Transportation Energy Consumption Survey was conducted for the calendar year 1994 and the results reported in *Household Vehicles Energy Consumption 1994 (*published August, 1997).

This report and the RTECS data files are also available on the Internet at http://www.eia.doe.gov/emeu/rtecs/contents.html. Data in this publication, vehicle miles traveled, gallons of motor fuel consumed, expenditures for motor fuel, and number of vehicles, are categorized by household characteristics and type of vehicle. These data show that for calendar year 1994, elderly households drove fewer miles and used less fuel on average than did all households. For example, elderly households with one adult and no children drove an average of 8,600 miles and consumed an average of 435 gallons of motor fuel. Elderly households with 2 or more adults and no children averaged 17,000 miles and 907 gallons of motor fuel. These averages are below the corresponding averages for all U.S. households, 21,100 miles and 1,067 gallons of motor fuel. Elderly households may travel fewer vehicle miles because they make relatively less use of their vehicles for commuting to work or earning a living.

RESEARCH RELATED TO AGING

In 1995 and 1996, the Office of Environment, Safety and Health (EH) sponsored research to further an understanding of the human health effects of radiation. As part of this research program, the Department of Energy sponsored epidemiologic studies concerned with understanding biological changes over time. Lifetime studies of humans constitute a significant part of EH's research; because the risks of various health effects vary with age, these studies take age into consideration. EH supports research to characterize late-appearing effects induced by chronic exposure to low levels of physical agents and some basic research concerning certain diseases that occur more frequently with increasing age.

Because health effects resulting from chronic low-level exposure to energy-related toxic agents may develop over a lifetime, they must be distinguished from normal aging processes. To distinguish between induced and spontaneous changes, information is collected from both exposed and nonexposed groups on changes that occur throughout the life span. These data help characterize normal aging processes and distinguish them from the toxicity of energy-related agents. Summarized below are specific research projects that the Department sponsored in 1995–1996.

Long Term Studies of Human Populations.—Through EH, DOE supports epidemiologic studies of health effects in humans who may have been exposed to chemicals and radiation associated with energy production or national defense activities. Information on life span in human populations is obtained as part of these studies. Because long-term studies of human populations are difficult and expensive, they are initiated on a highly selective basis.

The Radiation Effects Research Foundation, sponsored jointly by the United States and Japan, continues to work on a lifetime followup of survivors of atomic bombings that were carried out in Hiroshima and Nagasaki in 1945. Over 100,000 persons are under observation in this study. An important feature of this study is the

acquisition of valuable quantitative data on dose-response relationships. Studies specifically concerned with age-related changes are also conducted. No evidence of radiation-induced premature aging has been observed.

Multiple epidemiologic studies involving about 400,000 contractor employees at DOE facilities are being managed by the Department of Health and Human Services through a Memorandum of Understanding between the two agencies. These studies include assessments of health effects at older ages due to ionizing radiation and other industrial toxicants. Several of the studies will look closely at workers who were first exposed at age 45 or older, assessing the impact of these late exposures in relation to the burden of chronic diseases that are common among older people. The average age of workers included in these studies is greater than 50 years.

The United States Uranium/Transuranium Registry, currently operated by Washington State University, collects occupational data including work, medical, and radiation exposure histories and information on mortality among workers exposed internally to plutonium or other transuranic elements. Most of the workers participating in this voluntary program are retirees.

In response to the Defense Authorization Act of 1993, EH has established a program involving a number of ongoing projects across the DOE weapons complex to identify former workers whose health may have been placed at risk as a result of occupational exposures that occurred from the 1940s through the 1960s. These projects provide medical screening and monitoring for former workers to identify those at high risk for occupationally related diseases and to identify workers with diseases that may be reduced in severity by timely interventions.

In addition to its epidemiologic research and health monitoring programs, EH has established the Comprehensive Epidemiologic Data Resource, a growing archive of data sets from the many epidemiologic studies sponsored by DOE. This public archive provides the research community with data that continue to be used to gain additional insights into the relationships between occupational exposures and a variety of health outcomes including diseases of aging, such as cancer.

OTHER DOE-FUNDED RESEARCH RELATED TO AGING

Since the inception of the Atomic Energy Commission, the Department and its predecessor agencies have carried out a broad range of research and technology development activities which have impacted health care and medical research. The Medical Applications and Biophysical Research Division within the Office of Biological and Environmental Research carries out a Congressional mandate to develop beneficial applications of nuclear and other energy related technologies including research in aging affecting older Americans. The Aging Research involves study of a brain chemical, dopamine (DA), and its function in humans as they age. A significant decline in the function of the brain DA system with age has long been a recognized fact, but the functional significance of this loss is not known. Medical imaging studies, using radiotracers and positron emission tomography, are designed to investigate the consequences of the age-related losses in brain DA activity in cerebral

function and to investigate mechanisms involved with the loss of DA function with normal aging. The results of these studies have already shown that in healthy volunteers with no evidence of neurological dysfunction there is a decline in parameters of DA function, which are associated with decline in performance of motor and cognitive functions. The results of these studies also indicate that changes in life style, such as exercise, may be beneficial in promoting the health of dopamine system in the elderly.

Cancer is a disease generally associated with aging. One of the essential steps in the conversion of a normal cell to a malignant cancer cell is a heritable loss of the cell's ability to control its normal growth behavior. In addition, cancer cells often escape from the normal cell aging process. Research is funded on the role of cell aging (or senescence) in the aging of the whole organism. This research received an award from the Alliance for Aging Research, the nation's leading citizen advocacy organization for promoting scientific research in human aging and working to ensure healthy longevity for all Americans.

Additional research has resulted in the creation of a new scientific discipline known as biodemography, a melding of biology and demography. This research is searching for biological information, at all levels of biological organization, that predicts and explains patterns of age-related mortality observed in populations. In the long term, biodemography provides a conceptual framework that helps policy makers assess the impact that specific biomedical interventions such as heart bypass surgery, renal dialysis, chemotherapy, or gene therapy will have on population aging and, as a result, on the fiscal solvency of government entitlement programs for aging citizens.

The programmatic costs for aging research are estimated at approximately $400K annually.

ITEM 6—DEPARTMENT OF HEALTH & HUMAN SERVICES

THE ADMINISTRATION ON AGING AND THE OLDER AMERICANS ACT

INTRODUCTION

Today, 44 million, or one in six, Americans are 60 or older. While most older Americans are active members of their families and communities, others are at risk of losing their independence. These include the 4 million Americans 85 or older, those living alone without a caregiver, members of minority groups, older persons with physical or mental impairments, low-income older persons, and those who are abused, neglected, or exploited.

To meet the diverse needs of the growing number of older people, the Older Americans Act of 1965 (the Act), as Amended, calls for programs that offer services and opportunities for older Americans. The Act established the Administration on Aging (AoA), an agency of the U.S. Department of Health and Human Services, which is headed by the Assistant Secretary for Aging.

Among its major responsibilities, the AoA administers programs at the federal level, which help those elderly at risk of premature or unnecessary institutionalization to remain in their own homes by providing supportive and nutrition services. This report summarizes the major activities of the AoA in Fiscal Years 1995 and 1996.

THE NATIONAL AGING NETWORK

The AoA is the federal focal point and advocacy agency for older persons. In this role, the AoA works to heighten the awareness of other federal agencies, organizations, and the business and public sectors about older persons—their many contributions to the nation, their resources, but also their needs and concerns. The AoA also works with these various groups to ensure that, whenever possible, their programs and resources are targeted to the elderly and coordinated with those of the aging network. The AoA works closely with the nationwide network of State Units on Aging (SUA's), Area Agencies on Aging (AAA's), and Indian Tribal Organizations (ITO's) to plan, coordinate, and develop community-level systems of services designed to meet the unique needs of older persons and their caregivers. The AoA awards funds for nutrition and supportive in-home and community services to the 57 SUA's which are located in every state and territory. Additional funds are awarded to these state agencies for elder rights programs, including the nursing home ombudsman program, and elder abuse prevention efforts.

Funding for programs is allocated to each SUA, based on the number of older persons in the state, to plan, develop, and coordi-

nate systems of supportive services. Most states are divided into Planning and Service Areas (PSA's) so that programs can be developed and targeted to meet the unique needs of the elderly residing in that area.

Nationwide, approximately 655 AAA's receive funds from the SUA to plan, develop, coordinate and arrange for services in each PSA. The AAA's contract with public and private groups to provide in-home and community-based services. Nationwide, there are some 27,000 service provider agencies.

The AoA also awards funds to 222 tribes and native organizations to assist older American Indians, Alaskan Natives, and Native Hawaiians. Funds are allocated to ITO's based on the number of older American Indians, Alaskan Natives or Native Hawaiians to be served in their designated geographic area. The ITO's provide home and community-based service in keeping with the unique cultural heritage of these Native Americans.

Volunteers are a vital component of the national aging network. The AoA uses the talents of a half-million volunteers, many of them older persons, to assist in service programs supported under the Act. These volunteers work at the community level to enhance the independence of the elderly. Additionally, the rich talents of older Americans are being tapped. Through intergenerational programming, they are helping families by working with Head Start children and their parents, as counselors to troubled youth, and by providing respite care for disabled children. Appendix I includes an organizational chart of the National Aging Network.

Discretionary grant programs

The discretionary grant programs authorized by Title IV of the Older Americans Act constitute the major research, demonstration, training, and information dissemination effort of the AoA. These programs are aimed at expanding our understanding of older persons, developing innovative model programs, training personnel for service in the field of aging, and providing technical assistance and information to the aging network and to others who work with older persons.

Because of severe reductions in Title IV funding for fiscal year 1996, there were only three demonstration project areas—the Eldercare Locator, Family Friends, in which older volunteers service children with disabilities and their families, and Senior Legal Hotlines/Legal Assistance and related elder rights projects.

The Act under Title II requires the establishment of resource centers. The AoA has provided funds to educational institutions to develop curricula and training programs for professionals and paraprofessionals.

In the past, the AoA awarded funds to support national resource centers on long-term care, housing, nutrition, Native Americans, older women, and elder abuse.

The budgets for AoA in FY 1995 and FY 1996 are included in Appendix II.

AGING IN THE FUTURE

During FY 1995–1996, the AoA worked to shape an environment where Americans will have the best opportunity to adopt attitudes

and lifestyles that enable them to remain independent in their later years. Through consumer advocacy and outreach and education, the AoA is seeking to enable older Americans, and those nearing retirement, to make changes that help them to enjoy a fulfilling future. The key is to plan and to adopt, for their later years, lifestyles that include the goals of good health, a satisfying quality of life and financial security.

Through these and many other programs supported by the AoA, the mandate of the Act—to ensure the dignity and independence of older Americans in their own homes and the opportunity to contribute to their communities and our nation—is coming closer to being fully realized for present and future generations.

This report is organized and divided into five sections summarizing the major activities during FY 1995–1996. Section I discusses the activities focused on "Improving Services for Seniors and Their Families." Section II discusses the activities related to "Enhancing the Capacity of the Network." Section III discusses those activities geared toward "Planning for the Future." Section IV discusses those activities focused on "Addressing Diversity." Section V contains those activities related to "Expanding international Partnerships."

SECTION I—IMPROVING SERVICES FOR SENIORS AND THEIR FAMILIES

Preserving and strengthening the Older Americans Act

The AoA, in consultation with key partners in the aging network, produced a reauthorization proposal for the Older Americans Act (the Act) designed to strengthen its services and maintain the integrity of its successful programs and titles, while improving local flexibility, protecting the most vulnerable, and preparing for a growing and diverse aging population. The Act was not reauthorized by the 104th Congress and continues to be discussed in the 105th Congress.

Protecting elders' rights

As a result of the five Bi-Regional Elder Rights Protection meetings conducted in fiscal year 1995, a number of state elder rights coalitions were established during fiscal year 1996 to develop ways to resolve problems affecting large numbers of vulnerable older persons and to assist elders secure the rights and benefits to which they are entitled.

In FY 1995, the Institute of Medicine, National Academy of Sciences completed its study to evaluate the State Long-Term Care Ombudsman Programs concluding that the ombudsman program serves a vital public purpose and merits continuation with its present mandate. Through advocacy efforts at both the individual resident and the system levels, paid and volunteer ombudsmen uniquely contribute to the well-being of LTC residents—complementing, but not duplicating, the contributions of regulatory agencies, families, community-based organizations, and providers. The summary report can be found in Appendix III.

The Congressionally-mandated National Ombudsman Reporting System (NORS), established to obtain detailed ombudsman compliant and program information, was fully implemented. The informa-

tion received from this report will serve as a basis for policy development and as a baseline against which to measure program outcomes in future years. The Introduction and Summary from the FY 1995 Long-Term Care Ombudsman Annual Report is included in Appendix IV.

A special task force to develop outcome measures for the work of ombudsmen resulted in a report entitled "An Approach to Measuring the Outcomes of the Long-Term Care Ombudsman Program" which was issued to states and other interested parties.

The Congressionally-mandated National Long-Term Care Ombudsman Resource Center continued to provide technical assistance and training activities for state long-term care ombudsmen in nursing homes and board and care facilities.

Preventing crime and violence

A Crime/Violence Prevention Initiative which focused on the prevention of crimes and violence against older persons was initiated.

The Congressionally-mandated National Center on Elder Abuse continued to serve the information, knowledge and skills development, and knowledge-building needs of organizations, individuals, and professionals working within and outside the nation's elder abuse/neglect prevention network.

The AoA, in collaboration with the Department of Health and Human Services (HHS) Administration for Children and Families, is supporting a National Elder Abuse Incidence Study designed to examine the incidence of elder abuse, neglect, and financial exploitation. The study also identifies the characteristics of victims of domestic elder abuse, as well as those of the perpetrators. The second year of the three-year study was devoted to collecting data. The third year of the study will be devoted to the analysis of the data and dissemination of a final report upon completion.

An interagency agreement with the Department of Justice to address the public safety and security needs of older Americans resulted in the formation of local and state TRIAD programs (efforts to increase cooperation between law enforcement and aging and social services providers to reduce criminal victimization).

Final products from AoA-funded projects to link, at the state and local levels, domestic violence and aging networks were completed. They include manuals and other resources that are useful for developing programs for the protection of older women against domestic violence.

Cracking down on fraud

The AoA worked in partnership with the Office of Inspector General and the Health Care Financing Administration in carrying out Operation Restore Trust—a Presidential initiative to detect and prevent fraud and abuse in the Medicare and Medicaid programs. This demonstration program began operating in five states—New York, Florida, Illinois, Texas, and California—and plans to expand nationally under the Health Insurance Accountability Act (Kassebaum-Kennedy bill).

Through September 30, 1996, the program produced $57.5 million in criminal and civil restitutions, fines, settlements and penalties.

The AoA joined the American Association of Retired Persons, the National Association of Attorneys General, the Federal Bureau of Investigation, the U.S. Postal Inspection Service, the National Fraud Information Center, the Royal Canadian Mounted Police, MCI and Federal Express in launching "Operation Unload." This national effort, named after the boiler room operations (phone centers) commonly used by fraudulent telemarketers, warned elderly victims and potential victims that their names appear on telephone lists used by criminals and unscrupulous telemarketers for telemarketing schemes. Alerting potential victims that their names were on such lists, resulted in unloading their names from the lists. This effort reached nearly 2,000 people across the United States.

Increasing visibility of nutrition as key health component

An independent Congressionally-mandated evaluation of the Elderly Nutrition Program (ENP) under Titles III and VI of the Act was completed. The study determined the effectiveness of the ENP in meeting the nutritional needs of older persons, as well as in addressing unmet needs. It was the first national evaluation of nutrition programs of the Act since 1983, and the first-ever to evaluate Title VI nutrition programs. Key findings include:

The ENP provides an average of one million meals per day to older Americans;

People who receive ENP meals have higher daily intakes of key nutrients than similar nonparticipants;

ENP meals provide approximately 40 to 50 percent of participants' intakes of most nutrients;

Participants have more social contacts per month than similar participants; and

A dollar of Title III congregate nutrition funding is supplemented with $1.70 from other sources. The leveraging rate for home-delivered meals is higher: a dollar of Title III home-delivered nutrition funding is supplemented with $3.35 from other sources.

The final report on the national evaluation of the Elderly Nutrition Program is included in Appendix V.

Implementing expedited assistance for disasters

Because of the loss of Title IV discretionary funds in fiscal year 1996, AoA could not reserve funds to give to states for disaster assistance.

The AoA signed a Statement of Understanding with the American Red Cross to make the delivery of relief efforts to elderly victims of disasters more efficient through cooperative efforts, including training, data collection, emergency meal distribution and transition of services.

A training video distributed to the aging network which addresses the impact of disasters on the elderly was produced in both English and Spanish.

Improving customer service

The first-ever strategic plan for the AoA was developed. The plan articulated the mission as well as goals and objectives for the agency and the aging network.

A customer service plan for the AoA was included with HHS Secretary Shalala's plan. The plan contains nine customer service standards for the AoA employees in delivering services to older persons and their families, to State and Area Agencies on Aging, ITO's, as well as other agencies, organizations and grantees.

The use of these standards was expanded by establishing a comprehensive AoA Website (http://www.aoa.dhhs.gov) on the Internet which provides current data and information on a variety of matters of concern to older consumers and their families.

The "AoA Update," a monthly newsletter, was created for distribution to the aging network, agency employees and other interested individuals to keep them apprised of agency activities/initiatives.

A National Symposium on Performance-Based Management brought together representatives of the aging network to address data and technology requirements for the future.

SECTION II—ENHANCING THE CAPACITY OF THE NETWORK

Improving research, training and discretionary grants process

The AoA undertook a variety of efforts which resulted in an improved discretionary grants process:

Utilized the research, training and discretionary funding program to move forward priorities of the agency including home and community-based long-term care, older women, nutrition/malnutrition, crime/violence prevention, and planning for the future.

Improved the peer review process in awarding grants.

Established field-initiated projects to encourage creativity and innovation. Field-initiated projects offer applicants an opportunity to propose and develop innovative approaches which expand knowledge in any policy, program, or related issue of importance to older Americans without being confined by specific priority areas.

Assessing cost sharing for services to older persons

In anticipation of changes in the Act relating to cost sharing, the AoA commissioned the HHS Office of Inspector General to survey states and territories. The purpose of this activity was to describe current cost sharing activities within states and discuss implementation issues concerning cost sharing for services to older persons under Title III of the Act. The review found that although 36 states currently make use of cost sharing programs, states' specific experiences with these practices will affect their readiness to implement Title III cost sharing. This report is contained in Appendix VI.

Establishing a national aging data base information and resource center

A Congressionally-mandated National Aging Information Center funded by AoA provided convenient access to a wide range of re-

sources for those interested in aging issues and information. The Center served policymakers and Congress, the aging network, educators, researchers, practitioners and the public, and is the repository of documents and the final report of the 1995 While House Conference on Aging.

Working to expand home and community-based long-term care

Four long-term care resource centers contributed to a long-term care agenda aimed at the development of consumer-driven home and community-based systems of care for older persons who need services. Products included guidebooks, policy papers, manuals, and research briefs on such diverse topics as expanding consumer choices, addressing the needs of persons with disabilities, overcoming barriers to long-term care assistance in rural areas, examining managed care and frail elders, highlighting home and community-based cared best practices, evaluating housing for rural and African American elders, analyzing assisted living alternatives, reducing the cost of institutional care, improving transportation for the elderly, and others.

Phase II of AoA's Health Care University (conference on managed care) brought together 750 representatives of the aging network to understand the concepts of managed care for the elderly and individuals with disabilities and its relationship to Medicare, Medicaid and the Act. The conference also provided an opportunity to examine ways to assure consumer protection and offer advocacy to those in managed care.

The National Long-Term Care Mentoring Program continued to assist states to develop more extensive programs in home and community-based care, profile model home and community-based programs, and provide a corps of "mentors" with a wide range of expertise.

The AoA continued support for the Neighborhood Senior Care Program which resulted in innovative neighborhood-based efforts which encourage health professionals and community volunteers to provide home and community-based services.

A working partnership with the Department of Housing and Urban Development (HUD) enhanced the availability and accessibility of services for the elderly and persons with disabilities who reside in federally-assisted housing facilities. This collaboration with HUD also resulted in "Best Practice" awards to the top-rated housing facilities demonstrating successful coordination between the aging network and government-assisted housing facilities.

Establishing linkages between aging and disability communities

The AoA joined as a participant in the National Coalition on Disability and Aging. The Coalition, comprised of twenty-eight national aging and disability organizations, seeks to focus national attention on the common concerns of aging and disability constituencies. As a result of this linkage, collaboration was enhanced between the disability and aging communities, particularly with respect to home and community-based services. Examples of collaborative efforts included:

Funding projects to provide information and technical assistance on consumer-directed services; building model partner-

ships between communities; fostering involvement of home and community-based consumers in systems development; and coordinating with agencies that serve persons with developmental disabilities;

Provided joint funding with the HHS Office of the Assistant Secretary for Planning and Evaluation for the National Institute on Consumer-Directed Home and Community-Based Care Systems to foster increased opportunities for consumer choice and direction in systems and services for adults with disabilities;

Renewed an informal partnership with the National Easter Seal Society designed to call greater attention to the needs of individuals who suffer from post-polio syndrome, the long-term impact of which mirrors an accelerated aging process.

Documenting value of aging network in human terms

The approval of the National Aging Program Information System State Program Report (SPR) by the Office of Management and Budget represents a successful conclusion to over four years of cooperative work between AoA and all levels of the aging network. The Congressionally-mandated SPR is a comprehensive and coordinated information and reporting system designed to provide data primarily on clients, services and costs of the programs provided to the elderly under the Act. The new state reporting requirements will replace a report having up to 30 categories of services with a report of no more than 15 categories of services, while at the same time providing more in-depth data on client characteristics. The reporting system, which includes electronic submission of reports to AoA, is an important step in enhancing the capacities of the aging network at all levels to utilize the data in support of policy development, program enhancement, and advocacy. Note that Appendix VII includes Executive Summary of the State Program Report for fiscal year 1995.

SECTION III—PLANNING FOR THE FUTURE

Preparing for the needs of a growing aging population

An Initiative on Redefining Retirement resulted in a variety of efforts designed to lay the foundation for changing behaviors, attitudes and choices about planning for the future. This Initiative sought to educate and motivate baby boomers to make thoughtful choices now so that they will be more likely to be financially secure, productive, healthy and socially involved in their later years. Some examples of these efforts include:

Initiated the National Planning Objectives Project which brought together for the first time various leaders of the public and private sector to explore and initiate a process for setting national planning objectives for an aging society;

Established mechanisms for policy dialogue at the national, state and local level by funding the National Academy on Aging to serve as a resource for objective information on broad policy issues;

Provided funding to the Council of Governor's Policy Advisors to work with states to help them better understand the implications of an aging population for state policymaking;

Established partnerships with other federal agencies such as the Social Security Administration and the Department of Labor; and

Cosponsored a publication produced by the Metropolitan Life Insurance Company which provides tips on how to enjoy one's retirement.

Improving service delivery to Hispanic elders

The Assistant Secretary for Aging co-chaired the HHS Working Group on Hispanic Issues which worked to improve the delivery of services to Hispanic customers. The working group prepared a final report and recommendations for the Secretary on strategies for improving services to Hispanic Americans.

Through the Eldercare Locator, a nationwide information and referral service funded by AoA, assistance is being made available in Spanish and the Locator is beginning an outreach campaign to inform the Hispanic community about this important service. A Spanish language brochure and advertisements have been developed.

Improving service delivery to American indians, Alaskan Natives, and native Hawaiians

To understand and respond to the home and community-based long-term care needs of American Indians and Alaskan Natives better, a survey of home and community-based long-term care in American Indian and Alaskan Native communities was completed. The Executive Summary from the report appears in Appendix VIII.

The AoA convened the Fourth American Indian, Alaskan Native, and Native Hawaiian Elders Roundtable in Washington, D.C. The focus was on home and community-based long-term care in Native American communities.

Grants totaling $16,057,000 were awarded to 221 ITO's and one Native Hawaiian organization for providing nutrition and supportive services to elders. A summary of the program performance data is contained in Appendix IX.

The Third Annual National Title VI Training and Technical Assistance Meeting was held in Denver, Colorado. The focus was on "Aging with Honor" and included training on preventive health care, elder rights and abuse, and coordination of program resources.

The University of Colorado at Denver and the University of North Dakota at Grand Forks were awarded cooperative agreements by AoA totaling approximately $500,000 to establish National Resource Centers for Older Indians, Alaskan Natives and Native Hawaiians. The primary focus of both centers is health, community-based long-term care and related issues. The Centers are the focal points for the development and sharing of technical information and expertise to ITO's, Title VI grantees, Native American communities, educational institutions, and professionals and paraprofessionals in the field.

The Federal Interagency Task Force on Older Indians which facilitates coordination among federally-funded programs to improve services to older Indians focused on three areas of concern to older Indians during fiscal year 1996: health, transportation, and data. The Task Force will make recommendations to further interagency collaboration and enhance services to older Indians, and highlight problems, issues and/or barriers that prevent or diminish collaboration.

Working to improve the quality of life for older women

The AoA participated in a variety of collaborative efforts designed to improve the quality of life for older women:

Launching the "Pensions Not Posies Campaign"—a public education effort developed by the Pension Policy Consortium to inform women about the importance of pensions and future planning;

Convening a roundtable entitled "Grass Roots Innovations for Older Women's Employment" in collaboration with the Pension Rights Center. The forum highlighted innovative mechanisms at the state and local level for assisting women to overcome barriers to employment in areas of job training, caregiving and pensions; and

Working with HHS Secretary Donna Shalala's work group to prepare for the 39th Session of the United Nations' Commission on the Status of Women; the Beijing Task Force which focused on implementation of recommendations adopted by the 4th World Conference on Women; and the National Action Plan on Breast Cancer Federal Coordinating Committee.

The National Policy and Resource Center on Women and Aging, established by AoA to provide a national focal point for coordinating efforts to educate older women at a grassroots/local level, convened a National Conference on Women and Aging in conjunction with the Office of Women's Health in HHS. The Center published a monthly newsletter focused on critical issues impacting older women, as well as numerous pamphlets and reports on topics of interest to women including hormone replacement therapy, caregiving, housing, health care and economic security.

SECTION V—EXPANDING INTERNATIONAL PARTNERSHIPS

Established cooperative efforts with Mexico and China

The AoA worked to establish stronger partnerships between Mexico, China and the United States in preparing for the growing numbers of older persons in their honored countries and to elevate aging matters as a priority issue of mutual concern.

The Assistant Secretary for Aging was a keynote speaker at the International Symposium of Geriatrics and Gerontology, held in Guadalajara, Mexico.

Provided briefings for foreign officials

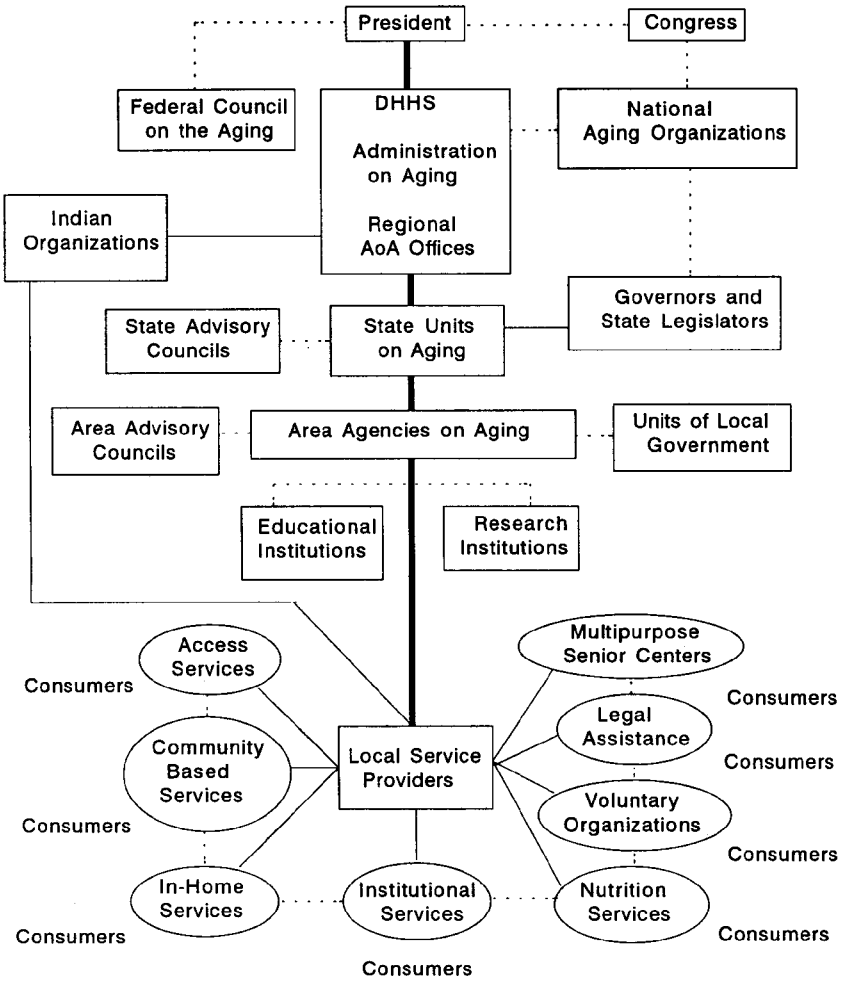
In fiscal year 1996, the AoA held a number of briefings for visiting officials, including those from China, Japan, France, Mexico, Uruguary, Latvia, Korea, Taiwan, Turkey, Argentina and the Slovak Republic.

Provided international training and technical assistance

A Memorandum of Understanding between AoA and Sister Cities International resulted in joining aging professionals and volunteers in the United States with their counterparts in other countries to provide technical assistance in meeting the needs of an aging population.

With the cooperation of the U.S. Information Agency's Individual Visitor Program and the National Personnel Authority in Japan, the AoA also mentored two officials from the Japanese Ministry of Health and Welfare who studied health care reform and aging in the U.S.

SECTION I—THE NATIONAL AGING SERVICE NETWORK



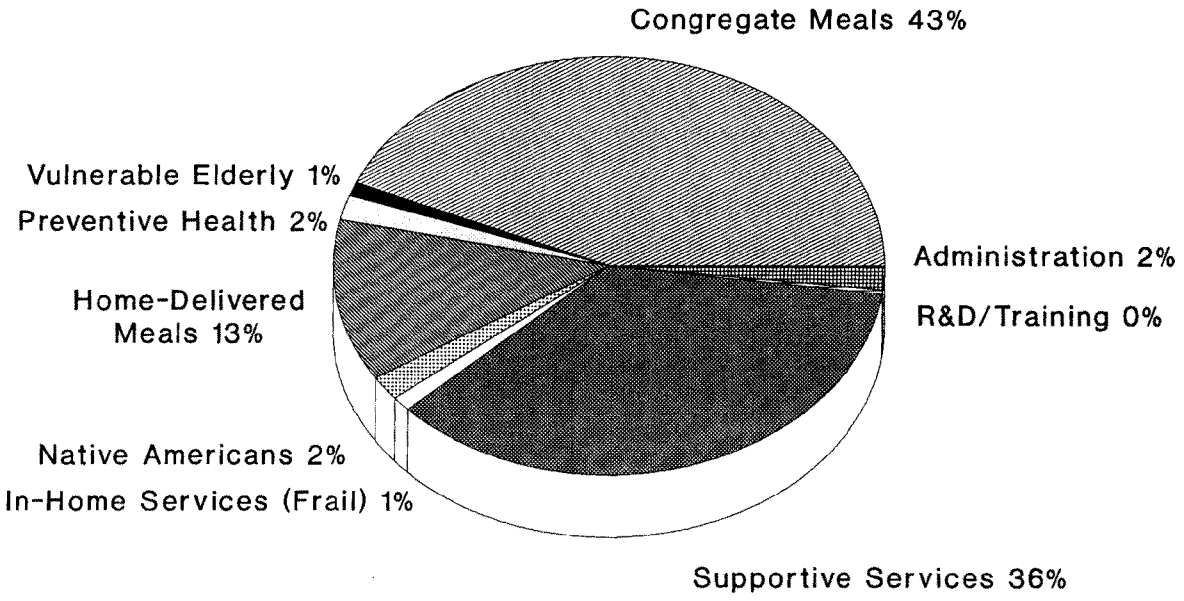
ADMINISTRATION ON AGING

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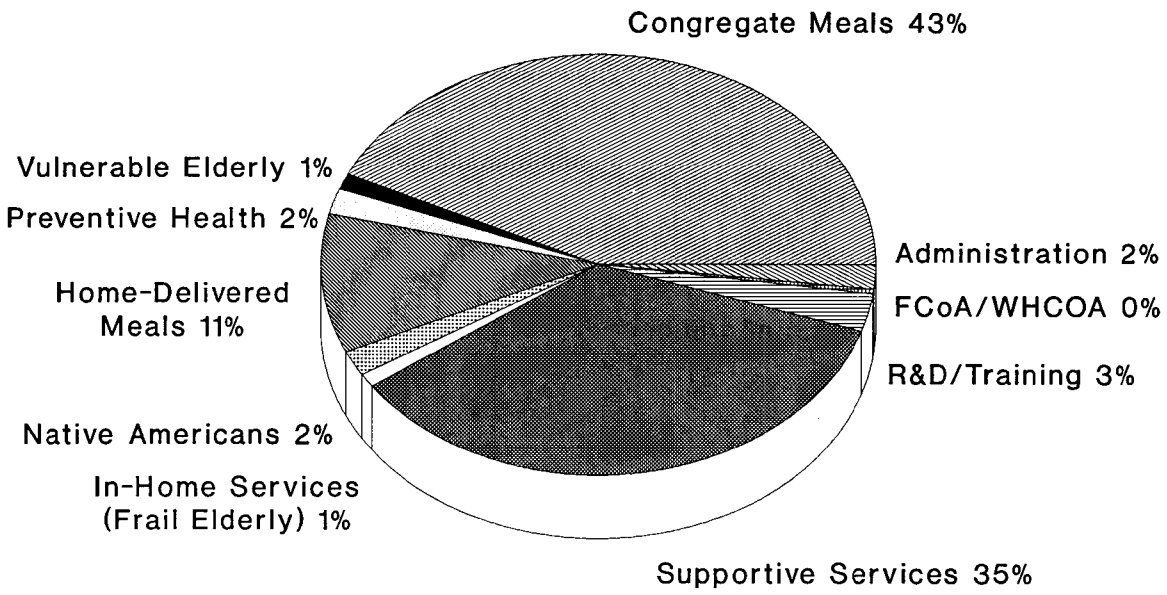
	FY 1995 Enacted	FY 1996 Enacted
Supportive Services/Senior Centers	306,711	300,556
Congregate Meals	375,809	364,535
Home Delivered Meals	94,065	105,339
In-Home Svc. Frail Elderly	9,263	9,263
Preventive Health Services	16,982	15,623
Research/Discretionary	25,630	2,850
Grants for Native Americans	15,212	16,057
Grants for Native Hawaiians	1,690	0
Ombudsman Services	4,449	[4,449] 1/
Sec. 371 Elder Abuse	4,732	[4,732] 1/
Outreach, Public Benefit and Insurance Counseling	1,976	0
Federal Council on Aging	176	0
White House Conference on Aging	3,000	0
Program Direction	16,312	15,097
Total, Aging Service Programs	876,007	829,320

1/ Earmarked under Supportive Services.

Fiscal Year 1996 Enacted
$829,320,000



Fiscal Year 1995 Enacted
$876,007,000



SECTION III—SUMMARY REPORT OF THE INSTITUTE OF MEDICINE'S "REAL PEOPLE, REAL PROBLEMS: AN EVALUATION OF THE LONG-TERM CARE OMBUDSMAN PROGRAMS OF THE OLDER AMERICANS ACT"

SUMMARY

INSTITUTE OF MEDICINE

Real People Real Problems:

An Evaluation of the Long-Term Care Ombudsman Programs of the Older Americans Act

1995



SUMMARY

Real People

Real Problems

An Evaluation of the

Long-Term Care Ombudsman Programs

of the Older Americans Act

Division of Health Care Services

INSTITUTE OF MEDICINE

Jo Harris-Wehling, Jill C. Feasley, and
Carroll L. Estes, *Editors*

Washington, D.C. 1995

Institute of Medicine •2101 Constitution Avenue, N.W.• Washington, D.C.20418
NOTICE: The project that is the subject of this report was approved by the Governing Board of the National Research Council, whose members are drawn from the councils of the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine. The members of the committee responsible for this report were chosen for their special competences and with regard for appropriate balance.

This report has been reviewed by a group other than the authors according to procedures approved by a Report Review Committee consisting of members of the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine.

The Institute of Medicine was chartered in 1970 by the National Academy of Sciences to enlist distinguished members of the appropriate professions in the examination of policy matters pertaining to the health of the public. In this, the Institute acts under both the Academy's 1863 congressional charter responsibility to be an adviser to the federal government and its own initiative in identifying issues of medical care, research, and education. Dr. Kenneth I. Shine is president of the Institute of Medicine.

Support for this project was provided by the Administration on Aging, U.S. Department of Health and Human Services, Contract No. HHS-100-93-0032.

This Summary and the complete volume of *Real People, Real Problems: An Evaluation of the Long-Term Care Ombudsman Programs of the Older Americans Act*, from which it is extracted, are available in limited quantities from the Institute of Medicine, Division of Health Care Services, 2101 Constitution Avenue, N.W., Washington, D.C. 20418.

Library of Congress Cataloging-in-Publication Data
Real people, real problems : an evaluation of the long-term care ombudsman programs of the Older Americans Act / Jo Harris-Wehling,
Jill C. Feasley, and Carroll L. Estes, editors.
p. cm.
Includes bibliographical references
1. Nursing homes—Patient representative services—United States.
2. Long-term care facilities—Patient representative services—United States. 3. United States. 3. United States. Older Americans Act of 1965. 4. Nursing homes—Complaints against—United States. 5. Nursing homes—Law and legislation—United States. 6. Nursing home patients—Legal status, laws, etc.—United States. 7. Nursing homes—Standards—United States. I. Harris-Wehling, Jo, 1941- II. Feasley, Jill C., 1965- . III. Estes, Carroll L.
IV. Institute of Medicine (U.S.). Division of Health Care Services,
RA999.P34R43 1995
362.1'6'0973—dc20 94-42711
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The serpent has been a symbol of long life, healing, and knowledge among almost all cultures and religions since the beginning of recorded history. The image adopted as a logotype by the Institute of Medicine is based on a relief carving from ancient Greece, now held by the Staatlichemuseen in Berlin.

Printed in the United States of America

COMMITTEE TO EVALUATE THE STATE LONG-TERM CARE OMBUDSMAN PROGRAMS

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Preface

The subject of this study, the long-term care (LTC) ombudsman programs, came about two decades ago in response to the widespread perception that there was a crisis in nursing home quality. Despite laws and regulations to address these concerns and to protect nursing home residents, scandals involving poor and negligent care were surfacing. The mission of the ombudsman program was twofold: while advocating for broad policy changes, ombudsmen were to help resolve the very real problems faced by real people in nursing facilities. In 1981, the program's mission was extended to cover the concerns of residents of board and care facilities.

Over the past two decades, quality assurance activities for nursing facilities have multiplied. In particular, a 1986 Institute of Medicine study, *Improving the Quality of Care in Nursing Homes,* made far-reaching recommendations for federal policy in this area. As a result of that study and subsequent legislation in 1987, several policies have been adopted to address problems in nursing home quality. Phasing in these changes is a slow and lengthy process that is far from complete. Although ombudsmen do not bear the responsibility of implementing these changes, much of their activity for the past decade has been concerned with and shaped by the anticipation, inception, and implementation of these new laws and regulatory reforms.

In the early 1990s, policymakers—at the urging of ombudsmen themselves—concluded that an in-depth examination of the program was warranted to examine its present strengths and weaknesses and assess its potential for future contributions. The Congress of the United States directed the Assistant Secretary for Aging of the Administration on Aging (AoA) to conduct a study of the state LTC ombudsman programs. AoA subsequently contracted with the Institute of Medicine to perform the study.

The effectiveness of the current program is not well understood, and its potential for having a meaningful impact beyond the relatively narrow settings of LTC facilities is not known. Nevertheless, the program serves as a model for several proposed "health care ombudsman" programs. Consequently, many experts and parties interested in the LTC arena, as well as those concerned more broadly with comprehensive health care reform, will look to this study for guidance. Can the structure, activities, and accomplishments of the present LTC ombudsman program be successfully generalized to other settings, populations, and challenges?

This report is the culmination of a 12-month effort by a committee of 16 individuals recognized for their expertise in LTC, medicine, medical sociology, health care policy and research, clinical research, health law, health care administration, state government policy and program administration, consumer advocacy, public health, voluntarism, and the LTC ombudsman program. The charge to this committee was to assess the LTC ombudsman programs' performance and, when appropriate, to make recommendations on public policy strategies by which the program can better achieve its objectives.

The committee engaged in several factfinding activities, including: site visits to six states; seven commissioned papers; structured, systematic contacts with directors of state units on aging, state and local LTC ombudsmen, LTC physicians, and grassroots advocacy groups; a one-day invitational symposium; a public hearing; two "open-mike" sessions at national professional conferences; discussions with four national associations of LTC facility providers; and a technical panel that was convened twice and called upon as needed throughout the course of the study.

The committee concluded that the ombudsman program serves a vital public purpose and merits continuation with its present mandate. Through advocacy efforts at both the individual resident and the system levels, paid and volunteer ombudsmen uniquely contribute to the well-being of LTC residents—complementing, but not duplicating, the contributions of regulatory agencies, families, community-based organizations, and providers. To underscore this commitment to the mission of the program, the committee sets forth several recommendations that are intended to bring the programs in compliance with the legislated mandates; build a nationwide database on key structure, process, and outcomes measures for the program; enhance each state's ability to operate a unified statewide Office of the LTC Ombudsman; stimulate and guide needed research; and encourage leadership from the federal government.

The committee conjectured about the future of the ombudsman program in light of the health care reform movement and recent trends in health care and LTC. For more than a decade, virtually all components of the health care delivery system have undergone restructuring and have experienced the "ripple" or "domino" effects of Medicare and other policy changes. The

process of change holds significant clues about the future direction of health care and implications for the LTC ombudsman program.

The increasing growth and dominance of managed care organizations raise complex issues for LTC. Among the more pressing are: the relationship of LTC facilities and services to managed care organizations, how cost-containment strategies will be implemented in LTC settings, and how they will influence the organization, scope, and delivery of care. Additionally, the nature and scope of community-based service delivery has altered to such an extent that traditional conceptions of post-hospital care and LTC are no longer realistic. Average lengths of stay in nursing homes are decreasing and the nursing home is shifting in some respects from a long-term residence to a sub-acute facility. The home care sector is experiencing considerable growth, attributable in part to advances in medical technology that have led to the transfer of "high-tech" medical procedures from hospitals, clinics, and nursing facilities to the home setting.

Increased demand for ombudsman-type services will likely rise as managed care and cost-containment strategies play a more prominent role in decision making about who does—or does not—enter nursing facilities and other LTC facilities, and as more LTC services are provided in home- and community-based settings. If the ombudsman of the future serves only residents of LTC facilities, many vulnerable persons needing the services offered by an ombudsman will be denied access. The extent to which the LTC ombudsman program is poised for integration into the frameworks of the larger, restructured health care system and coordinated with other forms of consumer advocacy depends in part on how successfully the present program fulfills it mission. The committee's recommendations are intended to strengthen the program's capacity to carry forth with its current mission and prepare for the real problems that will be faced by real people in the future.

Carroll L. Estes
Chair

Acknowledgments

The Committee to Evaluate the State Long-Term Care Ombudsman Programs of the Older Americans Act would like to acknowledge the assistance that they and the study staff received from several individuals and groups during this study.

The study was funded by the Administration on Aging (AoA) of the Department of Health and Human Services (DHHS). AoA staff members—William Benson, Saadia Greenberg, Jack McCarthy, Michio Suzuki (deceased October 1994), and Sue Wheaton—helped keep the committee and staff informed of relevant activities, facilitated contacts with the printer of the committee's report, and provided useful background material on the ombudsman program. James Steen served as the study's project officer until mid-January 1994; Nancy Wartow served in that capacity thereafter. Staff in several regional offices of the AoA and the DHHS Office of the Inspector General provided background information for the study.

We are indebted to several hundred individuals in the six states visited by the committee (California, Colorado, Florida, Massachusetts, Minnesota, and Virginia) who welcomed the committee graciously into their communities and shared their thoughts, experiences, and time. On each visit, the committee met with state, local, and volunteer ombudsmen, residents and staff of nursing facilities and board and care homes, state officials, and advocates. The committee appreciates the efforts of several individuals who provided testimony at the study's public hearing: Pat Nuckols, Beth O'Neill, Mercedes Patterson, Mary Sapp, and John Willis. We also express our gratitude to the many active state and local long-term care (LTC) ombudsmen, both paid and volunteer, and former ombudsmen for participating in our study. Additionally,

the committee is grateful to the state unit on aging directors who contributed to the study.

The committee expresses its appreciation to the individuals who contributed to the committee's symposium in February 1994: William Benson, Sara Best, Albert Buford, Meredith Cote, Curtis Decker, Virginia Dize, Barbara Frank, Iris Freeman, Marshall Kapp, John Newmann, Patricia Riley, Michael Schuster, Carol Scott, and Bruce Vladeck. More than 75 people attended the symposium, and the committee benefitted from their questions and comments.

The committee received helpful contributions from many other experts and interested parties. We are indebted to the authors of the commissioned papers prepared for this study, which were used extensively by the staff and committee in their deliberations and in drafting this report; all are cited in the references. They include: Martha Holstein, Roland Hornbostel, Ruth Huber, James Kautz, Deborah Lower, Richard Lusky and colleagues, and Charles Phillips and colleagues. The following representatives of national associations also provided valuable information and assistance at one committee meeting: Shawn Bloom, George Cate, Carol Fisk, Louis Iovieno, Evvie Munley, Janet Myder, Susan Pettey, and Ronald Retzke. Philip Lee provided inspiring comments at the committee's first meeting and Arthur Flemming honored us with his presence at our last meeting. We are especially indebted to Dr. Flemming for his comments about "real people with real problems," thereby providing the title for our study's report.

The committee is particularly grateful to the members of the study's technical panel for their interest, support, and assistance throughout the project. The individuals and organizations on the panel included: Ester Houser Allgood, National Association of State Long-Term Care Ombudsman Programs; Virginia Dize, National Association of State Units on Aging; Toby Edelman, National Senior Citizens' Law Center; Roland Hornbostel, Ohio Department of Aging; Sara Hunt, National Long-Term Care Ombudsman Resource Center; and Brina Melemed, National Association of Area Agencies on Aging.

Many individuals shared unselfishly the results of their work with the committee. In particular, the committee thanks Rachel Filinson, Rhode Island College; Barbara Frank, Connecticut Office of the State LTC Ombudsman; Virginia Fraser, Colorado Office of the State LTC Ombudsman; Colleen Galambos, formerly with the Maryland Gerontological Association; Lynn Mason, University of Denver; Patricia Murphy, formerly of the New York City Ombudsman program; Wayne Nelson, Oregon Office of the State LTC Ombudsman; Ellen Netting and Bob Schneider, Virginia Commonwealth University; John Olinger, Thomas J. Downey & Associates; Tony Potter, New Hampshire Office of the State LTC Ombudsman; Alex Ross, Public Health Service; and Louie Terango, Legal Counsel for the Elderly at the American

Association of Retired Persons. Additionally, we appreciate the help of several individuals at the National Citizens' Coalition for Nursing Home Reform who shared their library resources, findings from recent surveys, and draft manuscripts of journal articles: Sarah Burger, Holly Dabelko, Michelle Kitchner, Jacklyn Koenig, and Lori Owen.

The committee and staff also received helpful contributions from Elinore Lurie, a consultant to the committee. We worked closely throughout most of the study with Lynn Chaitovitz, consultant, and we are most grateful for the contributions she made to the study. Karen Linkins and Marie Christine Yue, Institute for Health and Aging, University of California, San Francisco, were always willing to help when called upon for unexpected tasks.

Finally, the editors extend their appreciation to their colleagues at the Institute of Medicine whose efforts were invaluable and contributed to the successful completion of the study and this report. Kathleen Lohr, in addition to providing invaluable guidance and support throughout the study, provided considerable and timely assistance in the preparation, review, and revision of several chapters of this report. Karl Yordy was particularly helpful in the early stages of planning and initiating the study; he subsequently worked with the committee at its third meeting. We are especially grateful for the insight and advice he provided. Anita Zimbrick provided essential secretarial support. Other IOM staff made valuable contributions behind the scenes; we thank Mary Jay Ball, Claudia Carl, Michael Edington, Nina Spruill, Donna Thompson, H. Donald Tiller, and Sue Wyatt.

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Summary

Long-term care (LTC) ombudsmen[1] advocate to protect the health, safety, welfare, and rights of the institutionalized elderly in nursing facilities[2] and board and care (B&C) homes. Given the dramatic changes that are occurring in the entire LTC sector, the need for such advocates is compelling. A multiplicity of factors—sociodemographic, economic, political, and clinical—are converging in ways that call for significant attention to the quality-of-care and quality-of-life needs of all persons needing LTC services.

"LTC services" is a broad term that describes a constellation of services used by people with disabilities to achieve a meaningful life according to their own expectations and yardsticks. These services include health care, social services, housing, transportation, and other supportive services. Typically, LTC is associated with the elderly, although many older persons never require such care and many who are not elderly do require LTC services. Elderly residents of LTC facilities (nursing facilities, B&C homes, and other group residential homes) are the designated constituency of ombudsmen.

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[1]The term "ombudsmen" carries no meaning with respect to the gender of the occupant of the position. Indeed, in the United States, the vast majority of long-term care ombudsmen are women.

[2]In this report "nursing facility," the technical term for a Medicaid-certified nursing facility, is used more broadly to describe any nursing home—whether or not it is Medicaid-certified, Medicare-certified, or private-pay.

ORIGINS OF THE STUDY AND REPORT

This report from the Institute of Medicine (IOM) addresses important aspects of the LTC ombudsman program—specifically the LTC ombudsmen's ability to deal with problems that affect the care provided to and the quality of life achieved by elderly residents of LTC facilities. The ombudsman program arose in response to the widespread perception of problems in nursing facility quality. The program began in 1972 through five state demonstration projects that were funded by the Department of Health, Education, and Welfare's Health Services and Mental Health Administration. The Administration on Aging (AoA) received responsibility for the program during a departmental reorganization in 1973 and has retained that responsibility over the past two decades.

Recently, policymakers—at the urging of ombudsmen themselves—concluded that a more in-depth examination of the program is warranted, with the aim of clarifying present strengths and weaknesses and assessing the program's potential for future contributions. To this end, the Congress of the United States directed, in the 1992 reauthorization of the Older Americans Act (OAA), that the Assistant Secretary for Aging conduct a study of the state LTC ombudsman programs. Through a contractual arrangement, the IOM carried out the study.

This report is the culmination of that work, which commenced in October 1993. To conduct the study, the IOM appointed a 16-member expert committee comprising individuals recognized for their expertise in LTC, medicine, medical sociology, health care policy and research, clinical research, health law, health care administration, state government policy and program administration, consumer advocacy, public health, voluntarism, and the LTC ombudsman program (for details of committee members' backgrounds and specialties, see Appendix D).

The committee's report examines four key issues:

1. the extent of compliance with the program's federal mandates, including conflict of interest issues;
2. the availability of, unmet need for, and effectiveness of the ombudsman program for residents of LTC facilities;
3. the adequacy of federal and other resources available to operate the programs; and
4. the need for and feasibility of providing ombudsman services to older individuals who are not residing in LTC facilities.

To inform itself on issues pertaining to this charge, the committee engaged in a variety of factfinding activities. These included site visits, seven commissioned papers, numerous contacts with a wide array of ombudsmen and

individuals with whom they interact, a one-day invitational symposium, and two meetings of a technical panel.

THE LONG-TERM CARE OMBUDSMAN PROGRAM

Concerns with the quality of nursing facilities, the care provided in them, and the government's ability to enforce regulations in them led to the creation of the LTC ombudsman program in the early 1970s. In contrast to regulators, whose role is to apply laws and regulations, ombudsmen are supposed to help identify and resolve problems on behalf of residents in order to improve their overall well-being. The ombudsman program works alongside other programs, groups, and individuals engaged also in efforts to improve the quality of care and quality of life of residents in LTC facilities.

Although the classic model of the ombudsman stresses neutrality and mediation, the role of the LTC ombudsman is considered a hybrid, since it was designed to encompass both active advocacy and representation of residents' interests over those of other parties involved. Additionally, in the classic model the ombudsman intervenes between the government and individual citizens. In the case of the LTC ombudsman program, however, intervention usually also includes a private third party—the nursing or B&C facility.

Today the LTC ombudsman program operates in all 50 states, the District of Columbia, and Puerto Rico. No single model can accurately describe these multifaceted programs. Variability in organizational placement, program operation, funding, and utilization of human resources has given rise to at least 52 distinctive approaches to implementing the program. The Office of the State LTC Ombudsman program is most often housed within the state unit on aging (SUA); 42 states have this arrangement. The SUAs in these states themselves vary in their organizational placement: some are housed in independent, single-purpose agencies; some reside in larger, "umbrella" agencies in which several other agencies report to a head office. Others are housed in independent state-run ombudsman agencies. Some even operate completely outside state government. Recent estimates of LTC ombudsman staffing put the number of full-time equivalent (FTE) paid staff at about 865. Volunteer ombudsmen number about 6,750, excluding volunteers who serve chiefly on advisory committees.

Funding for LTC ombudsman programs is patched together from multiple sources at the federal, state, and local levels. Most federal funding comes from the OAA. Sources for other funding include state and local governments, area agencies on aging (AAAs), the United Way, and foundations.

The primary activity required of LTC ombudsmen by the OAA is the identification, investigation, and resolution of individual complaints relating to

the residents of LTC facilities. The program clearly performs this function. In 1993, LTC ombudsmen received more than 197,800 complaints, lodged by more than 154,400 people.

Ombudsmen are required to address and attempt to rectify the broader, or underlying, causes of problems for residents of LTC facilities. When working on the systemic level, ombudsmen's responsibility to advocate for policy change includes evaluating laws and regulations, providing education to the public and facility staff, disseminating program data, and promoting the development of citizen organizations and resident and family councils.

STATE COMPLIANCE WITH PROGRAM MANDATES

If a state is operating a LTC ombudsman program in compliance with congressional mandates, the program will perform several functions. For purposes of reviewing the extent of compliance, the committee collapsed the several statutory functions of the LTC ombudsman program into two primary services: (1) direct, individual advocacy services, which should be accessible, available, and meet the needs of residents of nursing and B&C facilities, and (2) systemic advocacy services.

Findings

Although in some states and locales elements of the ombudsman programs are vigorously implemented, the ombudsman program as a whole has not been fully implemented with regard to the provisions of the OAA that call for ombudsman services to be available and accessible to residents of LTC facilities. The committee finds the following:

- Not all residents of LTC facilities in need of advocacy assistance have meaningful access to the services of an ombudsman.
- Given the lack of a frequent visitation pattern to LTC facilities by ombudsmen in many parts of the country and little, if any, evidence that other methods are used effectively to build an awareness in the community of the availability of ombudsman services, large numbers of residents of LTC facilities are unaware of, and thus would probably not be able to use, the ombudsman programs' services.
- For the most part, ombudsmen provide timely responses to complaints. However, serious problems exist in some locales. For example, some state programs serve a large proportion of their LTC residents largely through one central toll-free telephone service. In such cases, it is not unusual for ombudsmen to investigate complaints through telephone inquiries only.

Those residents most in need of an ombudsman to assist in protecting their health, safety, welfare, and rights may be reluctant or simply unable to initiate complaints to the ombudsman by such means as telephone calls because they are too frail or cognitively impaired.

- Implementation of the ombudsman program for residents of nursing facilities has been uneven among and within states.
- Implementation of the ombudsman program for residents of B&C homes has not been achieved in any significant way except in a small number of states.
- The ombudsman program activities of too many states are piecemeal, fragmented, and focused primarily on responding to complaints that relate to individual residents of nursing facilities. These states are not in compliance with the spirit of the program provisions as stated in the OAA; the Offices of the State LTC Ombudsman programs do not function as a whole, statewide, unified, integrated program delivering a range of individual, systemic, and educational efforts.
- AoA has not mandated any level of implementation for the legislated LTC ombudsman program, nor has the agency monitored the states' efforts at implementation. Although ombudsman programs vary in the amount of staff and volunteer resources being expended to serve the residents of LTC facilities, no agreed-upon level of effort exists to signify that an ombudsman program has been implemented at a minimum acceptable level in a state. States do not uniformly comply with the essential requirements for operating statewide ombudsman programs, and neither AoA nor any other federal agency employs mechanisms to require such compliance.
- AoA has not developed technical guidance materials that inform states of the federal government's operational definitions of a fully implemented Office of the State LTC Ombudsman program.
- Ombudsman programs need competent legal advice and backup, including, when the circumstances call for legal interventions, assistance to LTC facility residents in pursuing issues in the courts and in regulatory hearings. The availability of these services is extremely uneven across the country.
- Except in a very few states, SUAs have not fulfilled their responsibility to ensure that adequate and independent legal counsel is available to the ombudsman programs for the purpose of providing advice and counsel related to LTC residents.

Recommendations on Compliance

The committee considers the mission of the LTC ombudsman program to be worthy in purpose and deserving of support from public funds. Accordingly, the programs should operate throughout the country in compliance with federal mandates. The committee proposes eight recommendations as a result of this part of its review.[3]

3.1. The committee recommends that Congress amend the Older Americans Act to allow state ombudsman programs to serve younger individuals who reside in long-term care facilities in which primarily elderly individuals reside. However, state ombudsman programs should strive to comply fully with their current mandates before using Older Americans Act resources to serve residents who are younger than 60 years of age. When applicable, the state long-term care ombudsman should coordinate activities and advocacy efforts with other organizations that serve as advocates for nonelderly residents.

3.2. The committee recommends that the Department of Veterans Affairs (VA) institute an agreement with the Administration on Aging (AoA) to ensure that long-term care ombudsman services are available to all veterans residing in nursing and domiciliary homes operated by the VA. The agreement should include the transfer of adequate funds from the VA to the AoA to support the provision of ombudsman services to VA-owned or VA-managed facilities.

3.3. The committee recommends that the Assistant Secretary for Aging develop and distribute a policy statement detailing the sanctions the AoA is authorized to use to enforce state compliance with statutory mandates of the long-term care ombudsman program. The statement should describe the sanctions and explain which conditions require or justify invoking each sanction.

3.4. The committee recommends that the Assistant Secretary for Aging issue clearly stated policy and program guidance that sets forth the federal government's expectations of state long-term care ombudsman programs. Such guidance should articulate operational principles in terms of basic elements of the program, including:

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[3]In this summary, recommendations are numbered to correspond to the numbering scheme used in the chapters in which they are found. For example, Recommendation 3.1 is the first recommendation that is made in Chapter 3.

- **definitions, criteria, and standards to determine whether a state ombudsman program is operating as a unified entity throughout the state;**
- **designation and de-designation process(es) of all host agencies and all individual representatives within the ombudsman program;**
- **process(es) by which the state ombudsman program provides assistance (including training) to local ombudsman programs;**
- **method(s) by which the state ensures that its ombudsman program has suitable access to facilities, records, and residents;**
- **method(s) by which the state ensures that its ombudsman program provides meaningful annual reports; and**
- **method(s) by which the state ensures that adequate legal counsel is an integral part of the ombudsman program both in representing the ombudsman program itself and in providing advice and counsel in matters related to long-term care facility residents.**

3.5. The committee recommends that Congress direct the Secretary of the Department of Health and Human Services to implement the statutory provisions set forth in Public Law 102–375 that require a federal Office of Long-Term Care Ombudsman Programs in the Administration on Aging and that Congress explicitly provide an adequate appropriation in the Older Americans Act for the position of Director of the Office of Long-Term Care Ombudsman Programs.

3.6. The committee recommends that the Assistant Secretary for Aging explicitly operationalize the federal government's responsibility for oversight of the long-term care ombudsman program. This should include (at a minimum) the following elements of program oversight: (1) active monitoring of programs by regional offices or the central office of the Administration on Aging; (2) effective technical assistance to the state programs; and (3) standards and procedures for training representatives of the Office of the State Long-Term Care Ombudsman.

3.7. The committee recommends that the Assistant Secretary for Aging develop plans of action and cooperative agreements with the Legal Services Corporation, the National Association of Protection and Advocacy Systems, the National Association of Medicaid Fraud Control Units, and the Office of the Inspector General of the Department of Health and Human Services to foster and encourage a variety of legal assistance resources for residents of long-term care facilities.

3.8. The committee recommends that the Assistant Secretary for Aging require that each state unit on aging include in its state plan a

description of how the state has funded and ensured the provision of adequate and independent legal counsel to the ombudsman program, including how all designated representatives of the Office of the State Long-Term Care Ombudsman are afforded legal counsel so that all their mandated duties and services can be and are performed.

CONFLICTS OF INTEREST

Legislative and Conceptual Aspects

The determination of whether actual or potential conflicts of interest in the administration and operation of the LTC ombudsman programs exist depends primarily on two factors: (1) the definition of or parameters describing occurrences of conflicts of interest and (2) the circumstances of the situation under review. Without a doubt, most state and local ombudsman programs are subject to one or more of the conflicts of interest reviewed by the committee.

Of particular concern to the committee is the prevalence of potential and real conflicts of interest that arise from the structural location of many of the Offices of the State LTC Ombudsman programs. Situations in which real, potential, and perceived conflicts of interest exist may be more prevalent than is typically understood, and perceived conflicts of interest may be as detrimental to operating the ombudsman program as real conflicts of interest. All conflicts of interest work to the disadvantage of the vulnerable client.

Ombudsmen—particularly state ombudsmen—operate in a politically charged environment accentuated by the fact that most often the state ombudsman is a state employee. Government cannot function efficiently if its employees work in opposing directions. All levels of government in the United States have formal and informal standards that govern chains of command. Every executive branch of government justifiably exercises some control over its employees' contacts with the legislative branch and media.

By federal statute, the ombudsman is required to speak out against government laws, regulations, policies, and actions when the circumstances justify such action. Taking such steps, however, is antithetical to the hierarchical rules of government. It is not surprising, therefore, that conflicts occur. The imposition of a state's routine chain-of-command rules on the ombudsman can significantly constrain his or her independence, although no person in such situations may intentionally act to interfere with the work of the ombudsman.

The committee began its review of conflicts of interest with the statutory provisions of the OAA that prohibit conflicts of interest in the LTC ombudsman programs. The parameters set forth in the act to identify situations of conflicts of interest are quite limited and outdated, focusing

almost exclusively on financial interests and nursing facility settings. They provide little guidance for addressing the conceptually related variations of conflict of interest—conflicts of loyalty, commitment, and control—that characterize the environments in which the ombudsman program operates in the 1990s.

The committee reviewed four major types of conflicts of interest: (1) organizational, (2) individual, (3) those arising from willful interference in the independent operation of the program, and (4) those related to the provision of legal counsel. Conflicts of interest can be dealt with either by prevention or by detection and correction. These are concepts and approaches similar to those in the quality-of-care field. Not all conflicts of interest can be prevented in the ombudsman programs, although prevention is clearly the preferred method of program administration and the most effective means of assuring compliance with the statutory provisions. Numerous mechanisms can ameliorate individual conflicts of interest, such as disclosure, ethical behavior, and accountability to the public.

Recommendations on Conflicts of Interest

The committee determined that conflict of interest problems are sufficient to warrant greater vigilance and a broader array of tactics to prevent, identify, and correct pertinent and significant conflicts. To that end, the committee offers four recommendations.

4.1. The committee recommends that Congress amend the Older Americans Act to include the following policy directive. By fiscal year 1998, no ombudsman program should be located in an entity of government (state or local) or agency outside government whose head is responsible for:

- **licensure, certification, registration, or accreditation of long-term care residential facilities;**
- **provision of long-term care services, including Medicaid waiver programs;**
- **long-term care case management;**
- **reimbursement rate setting for long-term care services;**
- **adult protective services;**
- **Medicaid eligibility determination;**
- **preadmission screening for long-term care residential placements; or**

- **decisions regarding admission of elderly individuals to residential facilities.**

4.2. The committee recommends that the Assistant Secretary for Aging adopt a clear policy that prohibits parties who provide, purchase, or regulate services that are within the purview of the ombudsman program from membership on policy boards having governance over the long-term care ombudsman program. The policy should not prohibit these parties from membership on boards and councils that serve solely in advisory capacities.

4.3. The committee recommends that the Assistant Secretary for Aging establish procedures and resources by which to identify potential conflicts of interest in the areas of loyalty, commitment, and control that are pertinent to the long-term care ombudsman and ombudsman representatives and provide guidance on how to address such conflicts of interest.

4.4. The committee recommends that each state unit on aging, in exercising its responsibility to ensure that legal counsel is available without conflict of interest to the statewide long-term care ombudsman program, adopt the following three principles to guide the selection of counsel:

- **For purposes of representing the ombudsman in (a) employment, contract, or other administrative functions and (b) litigation brought against the ombudsman in connection with the performance of his or her official duties, representation by the state's office of the attorney general is appropriate and generally free of conflict of interest.**
- **If advice and counsel related to the rights of long-term care facility residents is provided by a government-employed lawyer, then the lawyer and agency employing the lawyer, including any "umbrella" agency, should not advise or represent other agencies or interests that could conceivably have a conflict of interest with the resident's interests or ombudsman's responsibilities.**
- **If advice and counsel related to the rights of long-term care facility residents is provided by a lawyer not employed by the government, then the ombudsman should receive assurances of conformance to state rules of professional conduct for the legal profession.**

EFFECTIVENESS OF THE OMBUDSMAN PROGRAM

The committee attempted to assess the effectiveness of the state LTC ombudsman program from several perspectives. The underlying impediment to sound assessment has been the lack of reliable and valid information that could be fit into any defensible summative evaluation format. For that reason, the committee opted for a formative evaluation effort—one that would highlight program issues, strengths, and weaknesses and would point to more specific questions deserving in-depth attention in coming years.

Continuance of the Ombudsman Program

On the basis of all the information it reviewed, collected, and analyzed, the committee concludes that the ombudsman program serves a vital public purpose. Every year the LTC ombudsman program helps many thousands of individual LTC facility residents, particularly those in nursing facilities, with a wide range of problems and concerns. The committee thus takes a strong supportive stance with respect to the ombudsman program. To underscore this commitment to the mission of the program:

5.1. The committee recommends that Congress continue the long-term care ombudsman program as set forth in the Older Americans Act.

Stating such a recommendation may seem superfluous from a group empaneled to examine a program that, on the face of it, serves a worthy cause and a needy population. However, the committee took seriously the question of whether the program merited continuation in its present form (or at all). Having concluded that it does, the committee intended, through the above recommendation, to make clear that the aims of those who crafted the original program and its subsequent modifications remain consequential today.

The LTC ombudsman program can justly claim to have improved the system of LTC services. Through systemic advocacy work and educational efforts, the state programs, individually and collaboratively, have brought to the attention of state and federal policymakers, regulatory agencies, and provider organizations a host of conditions that can and should be changed to improve the health, safety, rights, and welfare of LTC residents. Examples of changes advanced or promoted by ombudsman programs (often in conjunction with other organizations) include: enactment of the federal Nursing Home Reform Law of 1987 (in particular, provisions pertaining to quality of care and quality of life); increased personal needs allowances; protections from involuntary discharge and room transfers; reduced use of physical restraints;

improved building and safety standards; increased state funding for inspection and surveying of LTC facilities; reduced use of psychotropic medications; better licensing oversight of health care professionals; increased use of advance directives; stronger LTC staff competencies and sensitivities; and empowerment of residents through stronger resident and family governance structures.

In the B&C area, the ombudsman program has been partially implemented at best. Hence, evaluating national program effectiveness in this area is premature.

Exemplary Practices and Performance

The committee believes that the individual and systemic successes attributed to the ombudsman program occur despite considerable barriers in most, if not all, states. Obstacles to effective performance include inadequate funding, resulting staff shortages, low salary levels for paid staff, structural conflicts of interest that limit the ability to act, and uneven implementation among and within states. In many states, the program attempts to operate in a structural environment that expressly prohibits or, at least, does not foster its ability to carry out all federally mandated functions. The committee observed such examples as prohibitions on state and local ombudsmen from talking with any state or federal legislators about issues of concern to residents and ombudsmen who attempted to carry out additional and conflicting roles such as adult protective services officials.

As a consequence of what it perceived to be the significant drawbacks of this variation in basic program implementation and practice, the committee has developed a detailed scheme relating to the structure and activities of the program called "Elements of Infrastructure and Functions." The elements are expressed in terms of exemplary, essential, and unacceptable practices. They incorporate prerequisites for effective ombudsman program performance. The detailed elements and respective practice levels are found in tables in Chapter 5 of the committee's report. They include the following categories:

- Structure of the Office of the State LTC Ombudsman and Elements of the Host Agency(s) for the State and Local Entities;
- Qualifications of Representatives of the Office;
- Legal Authority;
- Resources (financial, information management, legal, and human);
- Office of the State LTC Ombudsman Program;
- Individual Resident Advocacy Services;
- Systemic Advocacy Work; and
- Educational Services.

Committee members underscored their belief in the value of building upon these "ideal types" of practices as a basis for objectively measuring compliance with the legislative mandate. In addition, the exemplary practices offer a standard and a challenge for ombudsman programs in terms of higher levels of effectiveness and service. Thus:

5.2. The committee recommends that the Administration on Aging build upon the committee's proposed set of exemplary, essential, and unacceptable practices to develop and implement an objective method to assess compliance of state long-term care ombudsman programs.

Data and Information Systems

As noted above, because the ombudsman program is still developing and evolving, and because data on program performance are not available, evaluating the program's effectiveness in any comprehensive way is not possible. Other barriers to adequate assessment also exist. Agreement has been lacking about the definition of goals. Implementation has been extremely varied, in part because of broad and uneven interpretations of the OAA mandate. No formal evaluation component was ever built into the program. Finally, only recently has AoA adopted a standardized data reporting system of any complexity.

Of all these issues, the committee focused on information systems as an area that AoA could and should remedy. Accordingly, the committee developed a set of recommendations in this area.

5.3. Building on work already begun by the Administration on Aging and the National Association of State Long-Term Care Ombudsman Programs, the committee recommends that the Secretary and Assistant Secretary for Aging, Department of Health and Human Services, establish and implement an information system for the ombudsman program that provides an empirical basis for:

- **evaluating and improving complaint resolution efforts by identifying the extent to which ombudsmen have been effective in resolving complaints and issues to residents' satisfaction;**
- **identifying more precisely the kinds of problems (resolved or not) that affect the lives of residents of nursing and residential care facilities in order to provide a basis for systemic advocacy and change;**
- **documenting the key efforts made toward systemic advocacy and the results of those efforts to address priority long-term care issues; and**

- **documenting and analyzing the full range of activities of the long-term care ombudsman programs.**

To follow up this overall recommendation about information systems for the ombudsman program, and reflecting its concern about the paucity of comprehensive and accurate data to assess program activities and performance, the committee concluded that additional, more specific, or more technical points should be made with respect to data and information systems. Two recommendations pertaining to these point are as follows:

5.4. The committee recommends that the Assistant Secretary for Aging continue the efforts of the Administration on Aging to develop, refine, and implement a uniform data collection and reporting system. The committee recommends, at a minimum, that the data system should:

- **be based on a manageable number of uniform and reliable data items—each of which has precisely specified, field-tested definitions;**
- **be derived from annual statistical reports submitted by state long-term care ombudsman offices that provide information in terms of the data items in the previous point;**
- **include a clear indication of status of complaint resolution from a consumer perspective;**
- **be used to provide feedback to state and local ombudsman programs;**
- **be available for public use to foster research and inform decision making;**
- **incorporate methods and procedures for continuous revision and improvement; and**
- **be reviewed and updated no less than once every three years.**

5.5. The committee recommends that the Assistant Secretary for Aging periodically conduct audits of the data collection and reporting systems of state ombudsman programs to ensure that all states adhere to the national standards of the uniform data collection and reporting system.

The committee underscored the importance of well-defined, accurately reported, uniform data in which each item has precisely the same meaning for all state programs. Committee discussion emphasized the necessity of assuring that the burden of reporting is minimized and realistic, given the facts that staff resources are limited and that volunteers are crucial in data collection efforts. Time spent recording data is time not available for direct service. Thus, all items intended for a formal data collection instrument should be carefully

examined and included only if they have demonstrated utility for AoA or state or local ombudsman programs (or, ideally, both). Preference should be given to items that are useful in documenting the nature and outcomes of the full range of ombudsman services. Committee members expressed particular interest in the value of all state ombudsmen offices commenting consistently on four specific elements of information, as noted in this recommendation:

5.6. The committee recommends that the Secretary and Assistant Secretary for Aging, Department of Health and Human Services, require that each Office of the State Long-Term Care Ombudsman include in its annual report, in addition to currently required elements, information on and comments about:

- **the level of awareness of residents, their agents, and other parties regarding the ombudsman program, and the availability of ombudsmen to individual residents;**
- **the extent to which the complaints and concerns of residents have been satisfactorily resolved;**
- **the extent to which ombudsmen have provided input into activities designed to improve the overall system of care and services for long-term care residents; and**
- **the extent to which ombudsmen have improved the overall system of care and services for long-term care residents.**

Research Imperatives

Almost no evidence exists that causally links the activities and the outcomes of the ombudsman program. For example, little, if any, empirical information relates participation in nursing facility surveys or development of an annual report with such outcomes as changes in LTC facility practices that show more respect for residents' rights or revisions in state or federal laws that provide legislative backing for residents' rights. Just as research is being conducted to assess linkages among processes, structures, and outcomes in various aspects of the U.S. health care system, so too the need exists for such research relating to the LTC ombudsman program. To this purpose, the committee offers the following recommendation:

5.7. The committee recommends that the Administration on Aging, the Health Care Financing Administration, the Agency for Health Care Policy and Research, other government agencies, and foundations support research to develop valid and reliable measures for assessing the impact

of ombudsman activities on outcomes relative to the well-being of residents of long-term care facilities, at both individual and systemic advocacy levels.

Adequate Management of Volunteers

A prerequisite to effectiveness is adequate resources. Paid staff is the most crucial of all resources. To ensure that capacity exists for an effective program, staffing issues must be addressed for each state LTC ombudsman program, quite apart from funding issues. Based on site visits and other data gathered and analyzed, the committee agreed that staffing resources were minimal to inadequate from a national perspective.

The committee was particularly interested in information that suggests that many of the more "successful" programs make good use of a large number of volunteers. Use of ombudsman volunteers is positively associated with routine visitation and number of complaints made and resolved. This fact calls attention to the importance of recruiting, training, and retaining volunteers and to their singular contributions to the adequate functioning and performance of the program. Volunteers can provide a level of authenticity and consumer "grassroots" participation that is lacking in most other systems designed to protect and support the frail elderly. The continued use of well-trained volunteers is very much in keeping with the original intent and design of the program.

The committee concluded that the establishment of a standard staff-to-volunteer ratio was needed to protect and manage this resource. Thus, in setting the standard recommended here, the span of management of individuals was emphasized rather than the quantity of effort provided per volunteer (i.e., hours volunteered). The committee suggests a minimum standard for this staff-to-volunteer ratio of 1:40. It strongly encourages state LTC ombudsman programs that involve volunteers to maintain paid staff-volunteer ratios at the more robust level of 1:20.

5.8. The committee recommends that the Assistant Secretary for Aging establish a standard for ensuring the adequate management of volunteers who serve as designated ombudsmen. The committee suggests that the ratio of staff to volunteers be in the range of 1 paid full-time equivalent manager for every 20 to 40 volunteers.

ADEQUACY OF RESOURCES

Financial Resources and Program Performance

The full intent of Congress with respect to the LTC ombudsman program has not been met in all—indeed, perhaps not in any—state of the union. Some states fall short in not having expanded to B&C homes, other states do not have adequate cycles of visitation for all LTC facilities, some states operate fragmented programs and individual advocacy efforts that have no link to preventive or educational system efforts, and still others lack appropriate access to legal services.

Many factors compromise the fulfillment of congressional—and public—expectations. A significant factor is the overriding realities of budget shortfalls and inequitable resource allocations. At the heart of many of the problems lie deficiencies of financial resources rather than any lack of interest or basic commitment to the LTC ombudsman program or LTC facilities. In addressing the subject of adequacy of resources, the committee confined its discussions to resources for bringing the program into full implementation and compliance with today's statutory mandate for nursing facilities and B&C homes. It did not attempt to forecast the level or type of resources that might be needed to fulfill any possible expansion of the program (with respect to LTC, to the elderly, or to the nation as a whole secondary to comprehensive health care reform).

The committee approached the question of whether federal and other resources supporting the LTC ombudsman programs were adequate by identifying, first, some proxy measures of performance and, second, some levels of effort that link to resources. Its analysis included a review of such factors as the number of FTE paid staff per number of LTC beds, peer nominations of successful programs, and visibility. The available data, however, does not indicate that a straightforward relationship exists between staffing relative to LTC beds and the fulfillment of the duties of the ombudsman program.

By triangulating on data from several sources, the committee arrived at the conclusion that resources are not adequate for each state LTC ombudsman program to perform at a level that ensures compliance with even the basic, decade-old mandates of the OAA ombudsman program. In the committee's judgment, 1 FTE paid staff per 2,000 LTC beds is an essential resource standard, and it provides a measure against which the adequacy of resources can be judged. The committee concludes that, at a minimum, additional resources are needed to support an increase of about 300 FTE paid staff. Using the FY 1993 average national program expenditure of approximately $43,240 per FTE paid staff supports the argument for an increase of $13.2

million beyond FY 1993 total spending. If the current distribution of resources remains the same, then federal sources would have to supply approximately $8.8 million in new dollars; state and local sources would have to supply $4.4 million. In the committee's view, therefore, a federal appropriation within five years of about $32.5 million ($23.7 million plus $8.8 million) is a defensible target. Assuming an inflation rate of 4 percent per year, estimates yield a target figure for FY 1998 of approximately $39.5 million in federal funds.

6.1. The committee recommends that by fiscal year 1998 Congress increase the appropriations through Title VII, Chapter 2 of the Older Americans Act for the state long-term care ombudsman programs to an amount that ensures that all state Offices of the Long-Term Care Ombudsman program are funded at a level that would permit them to perform their current functions adequately. The committee further recommends that the factor of 1 full-time equivalent paid staff working as an authorized, designated ombudsman per 2,000 long-term care beds be used as a base indicator of performance and a unit of effort to determine the amount of additional resources needed.

The committee recognizes that further analysis is needed to determine more accurately the level of additional funding needed at the national level to bring each state up to a minimum level of resources.

Formula for Allocating Federal Funds and Level of State Contributions

The committee recognizes the need to distribute federal funds to states in a manner that more rationally considers the "beneficiaries" of the ombudsman programs—that is, the elderly residents of LTC facilities—and to that purpose it recommends that the distribution formula for Title VII-2 funds be changed. The formula for allocating federal funds under Title VII-2 of the OAA is based on total numbers of persons age 60 and older. This formula has several drawbacks from the perspective of need and equity in the context of the ombudsman program's mission. For example, states vary in the ratio of LTC beds to population 60 years of age and older, and some states with a high percentage of the nation's population in that age range have a low percentage of the nation's LTC beds.

Thus, in addition to arguing for a meaningful increase in federal appropriations for the ombudsman program, the committee has concluded that the major drawbacks of the current state-by-state allocation strategy must be addressed. Accordingly:

6.2. The committee recommends that Congress revise the interstate formula for allocating funds under Title VII, Chapter 2 of the Older Americans Act and further recommends that Congress give consideration to equitably distributing funds on the basis of such factors as the number, size, and type of long-term care facilities in each state and wage and cost-of-living indices.

At present, state monetary matching is not required for federal dollars appropriated under Title VII of the OAA, as it is under Title III-B. This is a major inconsistency within even a single program. Moreover, it is one that may permit states to avoid giving the program its intended level of support, in particular if increases are made in federal appropriations through Title VII-2, as is recommended by the committee.

According to the committee, state and local governments and entities have a responsibility to provide significant financial support to the program. The committee did not examine the details of a required percentage match, in either theoretical or practical terms. It did, however, agree that a match of no less than 20 percent of federal funds would be a defensible minimum.

6.3. The committee recommends that Congress require that states match the federal funding they receive under Title VII, Chapter 2 of the Older Americans Act appropriations for the long-term care ombudsman programs and that the state match should be no less than 20 percent.

Management of Fiscal Resources

The committee makes two recommendations to enhance the management of fiscal resources. The committee believes that state ombudsman offices should have unrestricted knowledge of their own budgets and, within the boundaries permitted by state budget policy and procedures and required by federal mandates for compliance, decision making-authority among line-item expenditures. Host agencies should exercise prudent judgment regarding the use of ombudsman service monies to support administrative costs.

The committee recognizes that contracting and host agencies may need to use ombudsman program funds to offset some administrative costs. For the most part, according to information available, local host agencies tend to provide additional resources to the ombudsman programs rather than the other way around. During this study, however, the committee became concerned about the possibility that in some locales a series of host agencies may be assessing administrative charges against the earmarked ombudsman program budget to a degree that severely limits the ability of the ombudsman and

designated representatives to deliver services. This practice becomes especially burdensome when the budget of a local ombudsman program administratively moves through two or more levels of host or contracting agencies, each of which assesses a fee against the ombudsman's budget.

6.4. The committee recommends that the Assistant Secretary for Aging issue program guidance to states that stresses the importance of delegating to the Office of the State Long-Term Care Ombudsman responsibility for managing all of the human and fiscal resources earmarked for the state ombudsman program within the boundaries of what is permitted by state budget policy and procedures and required by federal mandates for compliance. The Office of the State Long-Term Care Ombudsman program should in turn work with local ombudsman programs and their host agencies to assign fiscal management responsibility to appropriate managers.

6.5. The committee recommends that Congress direct the Office of the Inspector General, Department of Health and Human Services, to conduct an audit across the states of expenditure practices in the ombudsman programs to determine the extent of diversion of ombudsman program funds for administration and indirect costs and its relation to multiple sponsoring agencies. Congress should subsequently review the audit's findings to determine whether congressional or administrative action is needed to prevent excessive use of ombudsman program resources for host agencies' administrative costs.

Unmet Need and Unfunded Responsibilities

The committee's report discussed the question of "unmet need"—that is, the expectations that Congress, the elderly community, and others have for the ombudsman program, which frequently go beyond the present tasks assigned through the OAA. In fact, unmet need is not confined to possible or future program mandates; it exists today in the majority of states with respect to noncompliance of their ombudsman programs in serving residents of B&C homes. Inherent in the ombudsman's advocacy role are a plethora of strategies not being consistently addressed, including interagency rapport, involvement with other community LTC and advocacy programs, administrative advocacy, and legislative lobbying—all for the purpose of influencing the care and well-being of LTC residents aged 60 and older.

With respect to adequacy of funding, the committee concludes that the present level of support for the ombudsman program is completely insufficient to allow it to expand to satisfy these unmet needs. The committee asserts

unequivocally that the first priority is that the program be provided with resources commensurate with meeting all the current mandates, including those that have existed, but been neglected, since 1981. That position underlies the thrust of earlier recommendations about federal funding, the allocation formula for that funding, and the state match.

If, however, Congress or others determine that expansion of the program beyond its present mandates is desirable, then the committee wishes to go on record with respect to the fiscal realities of that movement. Specifically:

6.6. The committee recommends that, if Congress mandates additional responsibilities for the ombudsman programs, then Congress should also provide adequate additional appropriations to the ombudsman program.

NEED FOR AND FEASIBILITY OF EXPANDING THE OMBUDSMAN PROGRAM

The committee accepts the conventional wisdom that self-advocacy by consumers is the most desirable solution to many of the problems consumers face. Further, the committee also acknowledges that frail elderly people receiving health care and LTC services, ranging from skilled home health care to the wide range of in-home services funded under home- and community-based waivers and state-funded programs, may be vulnerable to neglect, abuse, and poor care. Such consumers of health care and LTC services, especially persons who cannot advocate for themselves when confronted by systems that are complex, fragmented, and cost-conscious, need an independent intermediary and advocate. Such advocates do exist in some places and in some capacities, but they cannot always act expressly on behalf of the consumer, provide both individual and systemic advocacy, or work preventively.

The 13 states that have expanded ombudsman services to health care and LTC consumers outside of LTC residential facilities have gained limited experience to date. The committee heard testimony that this circumstance arises, in large measure, from inadequate resources to implement and operate a fully viable program. The result, however, is that little empirical evidence is available to support decision making on whether and how the current ombudsman program ought to be expanded.

On the basis of what is already known, most committee members believe that some entity or individual—whether or not it is the current LTC ombudsman—is needed to answer questions, to provide systemic advocacy, and to intervene in problem situations for some consumers.

Other activities are in place ostensibly to help address the needs and interests of vulnerable people receiving community health and LTC services. These include: case management programs; the Adult Protective Services efforts available in most states; the home care complaint hotlines mandated by law in 1987, which have been variably implemented across the United States; and licensure, certification, and survey processes for home health agencies. In addition, public and private guardianship and conservatorship policies are meant to ensure that those unable to make decisions have an agent to act in their best interests. All these mechanisms have strengths and limitations. It is unclear, therefore, whether the solution to these problems is to strengthen one or more of the existing mechanisms, combine and strengthen advocacy functions into a new structure, or create an ombudsman as a superordinate, general operation.

Various arguments are marshalled for and against expanding the current LTC ombudsman program to other settings, as a means of helping to fill deficits in the present system by which people receive health care and LTC services. Opponents raise both jurisdictional and operational points. Given the status of the current program, the various philosophical and operational considerations highlighted above, and the general lack of persuasive evidence on any side, the committee takes a cautious stance about expansion. Specifically:

7.1. The committee recommends that, before any consideration is given by a state to expand its long-term care ombudsman program to serve individuals other than those mandated by the Older Americans Act, the Offices of the State Long-Term Care Ombudsman programs that are supported with Older Americans Act funds fully implement existing mandates for serving older residents of long-term care facilities.

This recommendation is intended to underscore the need to fulfill existing mandates before taking on added duties, regardless of how worthwhile they may be. The committee favors improving the operation of the current ombudsman program so that it provides a stronger base for any future expansion. Thus, the committee reemphasizes here the strong recommendations it has made about funding, program evaluation, and similar topics.

Nevertheless, the committee believes that some interim steps may be taken to clarify further the desirability and feasibility of expansion. To that end:

7.2. The committee recommends that Congress, through the Secretary of the Department of Health and Human Services, direct the leadership of the Administration on Aging, the Agency for Health Care Policy and Research, the Administration on Developmental Disabilities,

and the Health Care Financing Administration to develop and support research and demonstration initiatives to determine how ombudsman advocacy services can best be delivered for consumers of health care and long-term care services. Because of the potentially significant role ombudsmen may have in ensuring quality of care in a reformed health care system, the committee also recommends that Congress require that the Secretary undertake these initiatives during fiscal years 1996–1999 and submit the accumulated results of such research to the Congress no later than January 1, 2000.

CLOSING COMMENTS

During its meetings, the committee conjectured about how a future LTC system might be configured and about the trends that might affect both the need for and nature of the ombudsman program. Consensus on these topics was neither desired nor sought. Based on all this input and its own deliberations, the committee concluded that rather substantial changes in the very nature of LTC are likely in the next decade; it also judged that any ombudsman program will face challenges to adapt and be responsive to changing needs.

If the committee's recommendations are adopted—including those related to increasing funding, minimizing conflict of interest, developing and enforcing program compliance, and enhancing the capacity of the ombudsman program to generate information about its activities and their effects—then policymakers should be in a better position 10 years from now to make decisions about the desirable evolution of an ombudsman program to meet future needs for advocacy in whatever kind of health care system has emerged in the meantime.

SECTION IV—LONG-TERM CARE OMBUDSMAN ANNUAL REPORT FISCAL YEAR 1995 (EXECUTIVE SUMMARY INTRODUCTION AND SUMMARY)

Long-Term Care Ombudsman Annual Report Fiscal Year 1995

Administration on Aging
Department of Health & Human Services

Executive Summary

State and local long term care ombudsmen speak and act on behalf of the approximately 2.4 million residents of nursing and board and care homes and similar long term care facilities.

In FY 1995, ombudsmen investigated over 218,000 complaints made by over 162,000 individuals. Most nursing facility (NF) complaints were filed by residents and friends and relatives of residents; most complaints concerning board and care and similar (B&C) facilities were filed by ombudsmen and residents. About 75% of these complaints were resolved or partially resolved. Over 85% of the complaints related to nursing home residents; almost all of the remainder related to residents of B&C facilities.

The five most frequent nursing home complaints concerned:

1. Accidents, improper handling;
2. Dignity, respect: staff attitudes;
3. Menu: quantity, quality, variation and choice of food;
4. Personal hygiene; and
5. Call lights (unanswered), requests for assistance.

The five most frequent complaints made by or on behalf of residents of board and care and similar adult care facilities concerned:

1. Menu: quantity, quality, variation and choice of food;
2. Equipment/building: disrepair, hazard, poor lighting, fire safety;
3. Medications: administration, organization;
4. Dignity, respect: staff attitudes; and
5. Cleanliness, pests.

The following sample cases illustrate the range of complaints which ombudsmen are called upon to address:

> **California** - An anonymous caller to the Ombudsman Program alleged that a frail, elderly female resident of a board and care home was being over-medicated with an unprescribed psycho-tropic drug with intent to cause her death. The ombudsman went to the facility and found the resident in a catatonic state. The ombudsman contacted local law enforcement, Adult Protective Services and an ambulance service; the

resident was transferred to an acute emergency center for respiratory failure. Further investigation revealed an intricate conspiracy between the owner of the facility, an ex-son-in-law, and a treating physician. The Ombudsman Program played a significant role in pulling all of the investigatory forces together and collecting information that ultimately lead to a criminal conviction of the guilty parties.

Florida - A relative questioned charges to Medicare of over $1000 for an "anti-contracture" device for his parent, who lived in a nursing home. The ombudsman went to the facility and found that a "Dr. A" had visited the facility and ordered such brace devices for almost all of the 90 residents. The contraptions were stored in residents' closets; they didn't help any of the frail, sick people they were given to; and in many cases they caused pain and skin abrasions. The ombudsman reported her suspicion of massive Medicare fraud to the appropriate authorities, providing documentation of what she had observed at the facility. "Dr. A" was ultimately convicted of organized fraud in several facilities.

Indiana — A nursing home resident wished to transfer to another facility where her sister resided. The home in which the resident lived opposed the transfer, apparently because its census was down. Although arrangements had been made for the move, the home intimidated the resident, and she was afraid to leave. She appealed to the ombudsman for assistance. After investigating the situation, the ombudsman remained with the resident throughout the transfer process, assuring that the resident's right to transfer was respected. Following up on the case later, the ombudsman found the resident doing well and eating lunch daily with her sister and another sister who lives in the community.

In addition to working on individual complaints, ombudsmen at both the state and local level:

- work in a variety of ways to resolve major issues which impact on large numbers of residents;

- provide training and technical assistance to other ombudsmen in the statewide program and managers and staff of long term care facilities — the most frequently mentioned topic of both ombudsman training and consultation to facility managers and staff was residents' rights ;
- provide information and consultation to individuals — nationwide, ombudsmen in 29 states assisted over 93,000 people in FY 1995; selecting and paying for a nursing home and alternatives to nursing homes were the most frequently mentioned topics of individual consultation;
- visit residents on a regular basis (not in response to complaints) — the 27 states which reported this information reflected visitation rates of 77% of nursing facilities and 49% of board and care and similar facilities;
- participate in facility surveys;
- work with resident and family councils and provide community education; and
- work with the media to publicize the concerns of residents.

In FY 1995 there were a total of 565 local ombudsman entities (programs), 913 paid full-time equivalent staff at both state and local level, and 11,580 volunteers, 6421 of whom were trained and certified to investigate complaints. Total program funding was $40.9 million, about $1 million less than in FY 1994. Of this total, Older Americans Act funding was almost 65%, state funding was 22%, and other non-federal funding was 13%.

States reported a total of 18,911 licensed NF's and 1,819,069 licensed NF beds and 36,904 licensed B&C or similar facilities covered in their ombudsman program's purview, with a total of 662,199 beds in those facilities. The national ratio of long term care facility beds to paid ombudsman program staff was 2,718. (A 1995 Institute of Medicine report on the Ombudsman Program recommended program funding sufficient to provide one paid ombudsman staff person per every 2,000 beds.)

Major issues identified in the state reports, barriers to resolving the issues, and ombudsman actions and recommendations for resolving the issues are summarized in Part V of the report and presented extensively in Appendix D. Issues addressed by three or more states involved:

1. Board and care and similar adult day care facilities;
2. Inadequate state nursing facility regulations and enforcement, and inadequate state resources to enforce regulations;

3. Abuse of residents and issues related to state protective systems, reporting requirements, and the need for abuse prevention;
4. Staff shortages in general and chronic shortages of well trained and equitably compensated certified nurse assistants;
5. Transfer and discharge issues - related to issue # 6;
6. Lack of placement, needed services, and staff training for those caring for mentally ill and dementia residents;
7. Ensuring that rules and regulations established in the federal Nursing Home Reform Act (OBRA '87) are continued and enforced;
8. Subacute care and "distinct parts" (related to difficulty in finding a bed, issue # 10);
9. Inappropriate and excessive use of chemical and physical restraints, and related issues;
10. Difficulty in finding a nursing home bed for those in need — especially for Medicaid-eligible individuals, those with special care needs, and those with moderate financial resources (financial discrimination in admissions);
11. Improving communication and coordination with licensure and certification agency staff;
12. Medicaid reductions/eligibility delays, denials;
13. Bedhold — nursing facilities sending residents to a hospital or local mental health center for evaluation or care and refusing to readmit the resident;
14. Lack of needed services for elderly and disabled;
15. Advocacy through education about rights, benefits and costs and the residents' perspective on life in a nursing home; and
16. Ombudsman program coverage (cited by 10 states but distinguished from the other issues as a program operation rather than resident/facility issue).

Part I. Introduction and Summary

This report highlights the work of state and local ombudsmen, who speak and act on behalf of the approximate 2.4 million residents of nursing, board and care and similar adult care homes. These residents are among the most frail and vulnerable of the U.S. population and often are unable to speak and act on their own behalf.

Working under the ombudsman mandate in the Older Americans Act (OAA), over 10,000 paid and volunteer ombudsmen in every state and over 565 local/regional programs:

- identify, investigate and resolve complaints made by, or on behalf of, residents related to action, inaction, or decisions that may adversely affect the health, safety, welfare or rights of residents;
- inform residents and their representatives about how to obtain needed services;
- represent the interests of residents before government agencies and promote policies and practices needed to improve the quality of care and life in long term care facilities; and
- educate both consumers and providers about residents' rights and good care practices.[1]

Through providing a regular community presence in facilities, volunteer ombudsmen who are trained and certified to assist residents with their concerns help prevent and reduce the incidence of poor care, neglect, and even abuse of residents. Also, through their presence in facilities and involvement with beneficiaries, ombudsmen play an important grassroots role in detecting, reducing, and preventing costly fraud against Medicare and Medicaid.

In FY 1995, ombudsmen investigated over 218,000 complaints made by over 162,000 individuals. Nationally, the five most frequent nursing home complaints made to ombudsman programs in FY 1995 concerned:

[1] The above functions are paraphrased from Section 712 of the Older Americans Act.

6. Accidents, improper handling;
7. Dignity, respect: staff attitudes;
8. Menu: quantity, quality, variation and choice of food;
9. Personal hygiene; and
10. Call lights (unanswered), requests for assistance.

The five most frequent complaints made by or on behalf of residents of board and care and similar adult care facilities concerned:

1. Menu: quantity, quality, variation and choice of food;
2. Equipment/building: disrepair, hazard, poor lighting, fire safety;
3. Medications: administration, organization;
4. Dignity, respect: staff attitudes; and
5. Cleanliness, pests.

Over 70% of these complaints were resolved or partially resolved to the resident's and/or complainant's satisfaction. Fifteen percent were either withdrawn by the complainant or required no action after ombudsmen investigated and provided needed information on a particular matter. One percent required government policy, regulatory change or legislative action to resolve the problem. Of the remainder, only about eight percent were not resolved to the satisfaction of the resident or complainant. These outcomes are discussed more fully on page 24.

National totals of FY 1995 ombudsman complaint and program data from all 50 states, the District of Columbia and Puerto Rico are provided on the next page.

Table 1: Selected National Information FY 1995		
Complainants (Cases)		162,338
Complaints		218,455
Total Program Funding		$40,870,107
Local Ombudsman Entities		565
Paid Program Staff (FTEs)		913
Volunteers		
Certified Volunteer Ombudsmen[1]		6,421
Other Volunteers		5,159
Total Volunteers		11,580
Licensed Facilities (National Totals)		
Nursing Facilities	Number	18,911
	Beds	1,819,069
Board & Care/Similar Facilities[2]	Number	36,904
	Beds	662,199
All Facilities	Number	54,215
	Beds	2,481,268
Number of LTC Facility Beds per Paid Program Staff (FTEs)		2,718

[1] Individuals who have completed a training course prescribed by the State Ombudsman and are approved by the State Ombudsman to participate in the Statewide Ombudsman Program.

[2] Includes only those types of facilities which state ombudsman programs include within their purview under the requirement of Section 102(34)(D) of the OAA.

State-by-state breakdowns of these figures and selected ratios of cases/complaints per bed, complaints per case, and beds per paid ombudsmen are found in Tables A-1[1] and A-9.

Ombudsman Activities in Addition to Complaint Investigation

In addition to working on individual complaints, ombudsmen at both the state and local level:

- work in a variety of ways to resolve major issues which impact on large numbers of residents; this includes working on laws, regulations and government policies,
- provide training and technical assistance to other ombudsmen in the statewide program and managers and staff of long term care facilities;
- provide information and consultation to individuals — nationwide, ombudsmen in just 29 states assisted over 93,000 people in FY 1995;
- visit residents on a regular basis (not in response to complaints) — the 27 states which reported this information reflected visitation rates of 77% of nursing facilities and 49% of board and care and similar facilities;
- participate in facility surveys;
- work with resident and family councils and provide community education; and
- work with the media.

Major Issues

Major issues identified in the state reports, barriers to resolving the issues, and ombudsman actions and recommendations for resolving the issues are summarized in Part V of the report and presented extensively in Appendix D. Issues addressed by three or more states involved:

1. Board and care and similar adult day care facilities;
2. Inadequate state nursing facility regulations and enforcement, and inadequate state resources to enforce regulations;

[1] Tables numbered A-1 to A-11 are found in Appendix A.

3. Abuse of residents and issues related to state protective systems, reporting requirements, and the need for abuse prevention;
4. Staff shortages in general and chronic shortages of well trained and equitably compensated certified nurse assistants;
5. Transfer and discharge issues - related to issue # 6;
6. Lack of placement, needed services, and staff training for those caring for mentally ill and dementia residents;
7. Ensuring that rules and regulations established in the federal Nursing Home Reform Act (OBRA '87) are continued and enforced;
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15. Advocacy through education about rights, benefits and costs and the residents' perspective on life in a nursing home; and
16. Ombudsman program coverage (cited by 10 states but distinguished from the other issues as a program operation rather than resident/facility issue).

Sources of Ombudsman Program Funding

Funding for statewide ombudsman operations is supplied through a combination of federal, state and local funds, the largest source of which is the congressional appropriation for Title III[1] of the OAA. The OAA permits states to use Title III dollars to directly fund statewide ombudsman services, and area agencies on aging also support their local ombudsman programs with Title III funds which they receive through the OAA intrastate funding formula. As in previous years, state funds were the second largest source of funding in FY 1995, followed by OAA Title VII[2] funds. Other non-federal funds constituted a fourth important funding source. Figure 1 on

[1] Title III of the OAA, *Grants for State and Community Programs on Aging*, funds area agencies on aging, supportive services, and nutrition services.

[2] Title VII of the OAA, *Vulnerable Elder Rights Protection Activities*, funds Long-Term Care Ombudsman and Elder Abuse Prevention programs.

page 7 gives a breakdown on the percentages of total funding supplied by each of these sources.

Multi-Year Trends

When compared with data from previous years, (See Table 2 below and Table 3 on page 9), the 1995 figures show that while the numbers of local ombudsman programs, complaints, and people filing complaints continued to increase as in previous years, total program funding decreased for the first time in the program's history — by almost one million dollars.

This is partly due to a sharp drop in funding in the category *Other Non-Federal Sources* (primarily local, which includes in-kind contributions). Due to an increase in Title III funding, federal funding increased by about $1,000,000, even though funding in the categories *Title VII, Chapter 3: Elder Abuse Prevention* and *All Other Federal Programs* decreased.

The findings on funding indicate that since AoA started to collect ombudsman funding data in FY 1987, there has been a dramatic shift in sources of ombudsman program funding. As reflected in the table below and Figure 2 on the next page, from FY 1987 to FY 1990 the percentage of federal funding dropped. Beginning in FY 1991 the percentage of federal funding of the total funding began to increase[1].

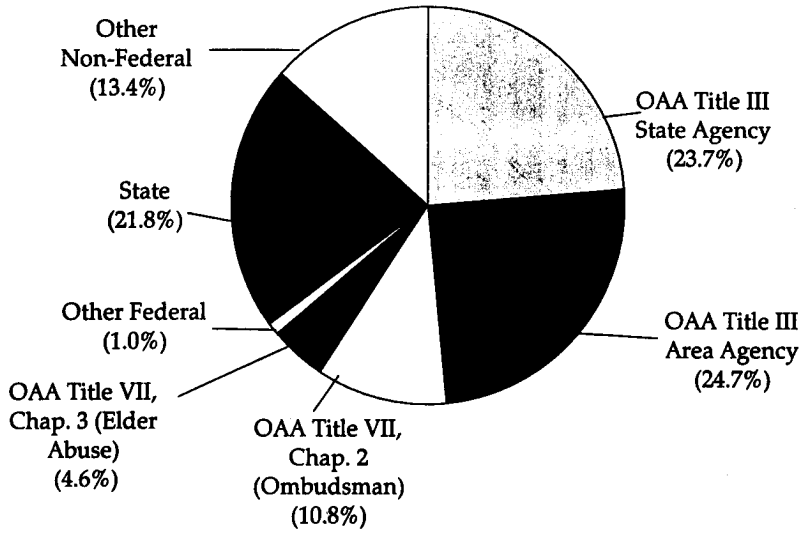
Table 2: Change in Funding: Federal vs. Non-Federal—FY87-FY95

Source of Funds	FY87	FY88	FY89	FY90	FY91	FY92	FY93	FY94	FY95
Federal (%)	62.1%	59.2%	57.1%	55.9%	56.2%	61.8%	57.5%	61.0%	64.8%
Federal (in millions)	12.6	13.8	14.4	15.6	19.1	21.7	21.5	25.5	26.5
Non-Federal (%)	37.9%	40.8%	42.9%	44.1%	43.8%	38.2%	36.6%	39.0%	35.2%
Non-Federal (in millions)	7.7	9.5	10.8	12.3	14.9	13.4	13.7	16.3	14.4

These statistics indicate a significant challenge if the demand for services continues to increase while financial support for ombudsman services becomes static or decreases. Consequences would include waiting lists and priority setting for responses which would jeopardize the health and safety of residents.

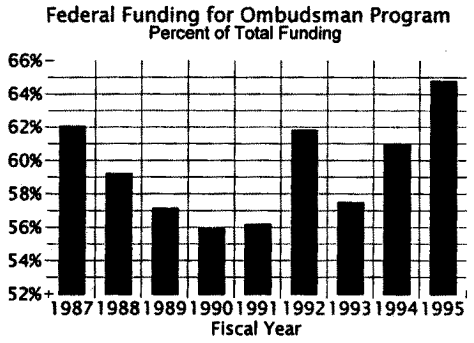
[1] In FY 1992, the rise was very high; thus the percentage dropped for FY 1993 and 94. However, the trend is still obvious.

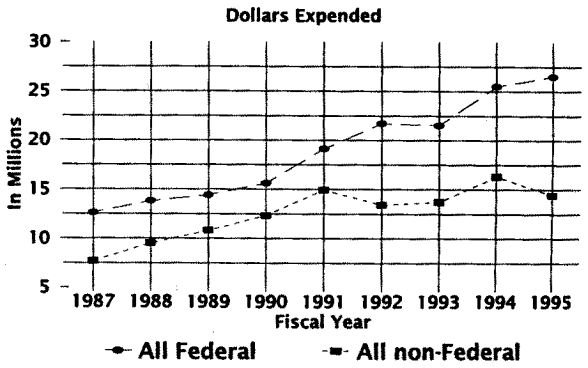
Figure 1: Sources of Funding—FY 1995
Long-Term Care Ombudsman Program



Long-Term Care Ombudsman Report, p. 7

Figure 2: Sources of Funds—FY1987 to FY1995
Federal vs. Non-Federal





Long-Term Care Ombudsman Report, p. 8

Table 3: Trends in the Ombudsman Program—FY87-95

	FY87	FY88	FY89	FY90	FY91	FY92	FY93	FY94	FY95
Total Number Local Programs	557	578	570	578	551	571	549	559	565
Local Programs in AAA's[1]			435	412	395	406	386	414	374[2]
Total Number Complainants (in thousands)[3]					159.4	144.0	154.4	152.1	162.3
Total Number Complaints [Cases] (in thousands)	110.4	129.0	134.5	154.1	174.3	177.3	197.8	207.4	218.5
Funding (in millions of dollars)									
Title III-B Funding[4]									
Allotted by State & Area Agencies	11.6	12.7	13.6	14.5	15.4	15.6	16.5	17.4	19.8
Allotted by State Agencies									9.7
Allotted by Area Agency									10.1
Title III Ombudsman Allotment[5]					2.0	3.3	.6		
Title III-G Abuse Prevention[5]					.8	1.8			
Title VII Chapter 2							3.5	4.2	4.4
Title VII, Chapter 3							2.1	2.9	1.9
All other Federal	1.0	1.1	.8	1.1	.9	1.0	.9	1.0	0.4
All State[6]	7.7	9.5	7.1	7.4	8.1	8.3	7.9	8.2	8.9
All Other Non-Federal			3.7	4.9	6.8	5.1	5.8	8.1	5.5
Total Funding	20.3	23.3	25.2	27.9	34.0	35.1	37.4	41.8	40.9

[1] This information was not collected prior to FY 1989.

[2] The reduced number in Area Agency on Aging-sponsored programs may be due to more refined definitions in the NORS rather then to an actual drop in the number of programs located in AAAs.

[3] There was no clear distinction between "complaint," "complainant," or "case" until the implementation of the NORS in FY1995, but numbers of "people presenting complaints" were collected each year. These are generally comparable to "case" (i.e. "Complainants") in the NORS.

[4] A breakdown on the source of Title III funding between State and Area Agencies on Aging was one of the enhancements included in NORS.

[5] These allotments were provided for FY 1991-92. They were replaced by Title VII allotments in FY 1993.

[6] Data in FY 1987-8 not collected separately for All State and All Other Non-Federal

The National Ombudsman Reporting System

FY 1995 is the first year for which all of the data presented in Table 1 has been available at the national level. In FY 1995 states began to collect and report information required in the new National Ombudsman Reporting System (NORS). The NORS provides national statistics and narrative which have not been available previously on types of complainants and complaints, complaint verification and disposition, major issues affecting long-term care residents, host agencies of local ombudsman programs, numbers of facilities and beds, program coverage, staff and volunteer levels, Title III funds provided by state and area agencies, and a variety of ombudsman activities in areas other than complaint investigation. FY 1995 will serve as the base year for this type of program information in the future.

The NORS was initiated by AoA in 1991 in response to

ombudsman reporting requirements in the then-pending FY 1992 amendments to the Older Americans Act and

- reports by the General Accounting Office and the Department of Health and Human Services' Office of the Inspector General recommending that standard definitions be established and comparable data on complaints filed with ombudsman programs and other program activities be documented and analyzed.

Later, the Institute of Medicine Committee which evaluated the effectiveness of the Ombudsman Program also stressed the importance of collecting detailed, comparative information on ombudsman complaints, other activities, and program operations.

For the FY 1995 transition year from the previous reporting requirements to the new requirements, states were afforded an option of providing all of the NORS data, or only modified data. Twenty-nine states submitted most of the NORS data. The remaining 23 states provided the modified data required. This information is presented Parts III through V of this report.

SECTION V—"SERVING ELDERS AT RISK," THE NATIONAL EVALUATION OF THE ELDERLY NUTRITION PROGRAM (EXECUTIVE SUMMARY)

SERVING ELDERS AT RISK

The Older Americans Act Nutrition Programs

National Evaluation of the Elderly Nutrition Program, 1993 - 1995

United States Department of Health and Human Services
Office of the Assistant Secretary for Aging
Office of the Assistant Secretary for Planning and Evaluation

Prepared by Mathematica Policy Research, Inc., Princeton, NJ

SERVING ELDERS AT RISK

The Older Americans Act Nutrition Programs

National Evaluation of the Elderly Nutrition Program, 1993 - 1995

Executive Summary

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June 1996

Prepared by Mathematica Policy Research, Inc., under contract no. 100-93-0033, for the U.S. Department of Health and Human Services, Assistant Secretary for Aging Fernando M. Torres-Gil, Administration on Aging, 330 Independence Avenue, SW, Washington, DC 20201, and the Office of the Assistant Secretary for Planning and Evaluation, 200 Independence Avenue, SW, Washington, DC 20201.

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Some of the data used in this publication were collected using computer programs made available through the Computer-Assisted Survey Methods Program (CSM), University of California, Berkeley. Neither the CSM staff nor the University of California bears any responsibility for the results or conclusions presented here.

EXECUTIVE SUMMARY

The aging of the U.S. population has heightened interest in designing efficient and effective systems for delivering health and related services to older people. Developing service networks to provide elderly people with a continuum of home- and community-based long-term care has become especially important, to allow them to avoid unnecessary and costly institutionalization.

One very important component of any overall package of home- and community-based services for elderly people is nutrition services. Adequate nutrition is critical to health, functioning, and quality of life for people of all ages. For elderly people, nutrition can be especially important, because of their vulnerability to health problems and physical and cognitive impairments. Key nutrition services include nourishing meals, as well as nutrition screening, assessment, education, and counseling, to ensure that older people achieve and maintain optimal nutritional status.

This publication summarizes the results of a comprehensive evaluation of the largest U.S. community nutrition program for older persons, the Elderly Nutrition Program (ENP). The ENP, which serves the general elderly population under Title III of its authorizing legislation and Native Americans under Title VI, is administered by the U.S. Department of Health and Human Services (DHHS), Administration on Aging (AoA). The evaluation was conducted by Mathematica Policy Research, Inc., in conjunction with the University of Minnesota.

FINDINGS IN BRIEF

Following are key findings of the evaluation:

Program Outcomes

- People who receive ENP meals have higher daily intakes of key nutrients than similar nonparticipants.
- ENP meals provide approximately 40 to 50 percent of participants' daily intakes of most nutrients.
- Participants have more social contacts per month than similar nonparticipants.
- Most participants are satisfied with the services the ENP provides.

Participant Characteristics

- Between 80 and 90 percent of participants have incomes below 200 percent of the DHHS poverty level, which is twice the rate for the overall elderly population in the United States.
- More than twice as many Title III participants live alone, compared with the overall elderly population.

- Approximately two-thirds of participants are either over- or underweight, placing them at increased risk for nutritional and health problems.

- Title III home-delivered participants have more than twice as many physical impairments, compared with the overall elderly population.

Funding

- ENP expenditures are highly leveraged by state, tribal, local, and other federal monies and services and are also augmented by donations from participants. Typically, $1.00 of Title III funds spent on congregate services is supplemented by an additional $1.70 from other sources (to result in total program expenditures of $2.70). The amount of leveraging is substantially higher for Title III home-delivered services and lower for Title VI.

- The average cost of an ENP meal, including the value of donated labor and supplies, seems reasonable. For Title III, a congregate meal costs $5.17, and a home-delivered one costs $5.31. The comparable costs for Title VI are $6.19 and $7.18, respectively.

Program Operations

- The ENP is closely linked to other parts of the nation's emerging home- and community-based long-term care system, particularly through cross-referrals and coordination of service delivery by many ENP agencies at all levels within the aging network.

- The ENP provides a continuum of nutrition services, in addition to meals, to participants. This continuum includes nutrition screening, assessment, education, and counseling.

- ENP meals supply well over 33 percent of the Recommended Dietary Allowances (RDAs) for key nutrients. The meals are also "nutrient dense"--they provide high ratios of key nutrients to calories.

- Forty-one percent of Title III ENP service providers have waiting lists for home-delivered meals, suggesting a significant unmet need for these meals.

BACKGROUND

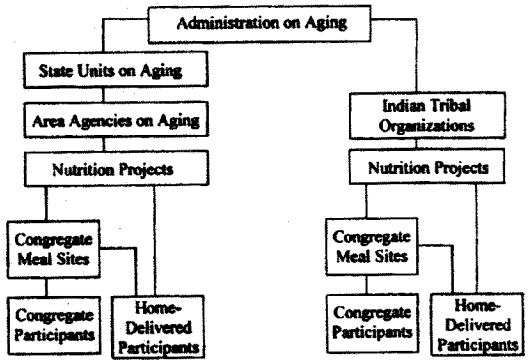
The ENP is authorized under the Older Americans Act (OAA) and is administered by the AoA. The AoA gives state units on aging (SUAs) Title III-C grants to help them provide daily meals and related nutrition services in congregate (group) or home settings to people age 60 and older. The ENP targets its services to older people with the greatest economic and social need. In fiscal year (FY) 1994, Title III-C funding for the ENP was nearly $470 million.[1] During this year, 127 million meals were served to 2.3 million people at congregate sites, and more than 113 million home-delivered meals were provided to 877,000 homebound elderly people.

Title VI established a grant program for tribal organizations to help them deliver social and nutrition services to older American Indians, Alaskan Natives, and Native Hawaiians. These services are comparable to those provided under Title III. In 1994, 226 American Indian and Native Hawaiian grantees received nearly $17 million in Title VI funds for nutrition and supportive services. These grantees served 1.3 million meals to 41,000 congregate participants and 1.5 million meals to 47,500 home-delivered participants.

. . . 127 million meals were served to 2.3 million people at congregate sites, and more than 113 million home-delivered meals were provided to 877,000 home-bound elderly people.

Under Title III and Title VI, SUAs and Indian Tribal Organizations (ITOs) receive grants for congregate nutrition services, home-delivered nutrition services, and supportive services. The OAA also requires the U.S. Department of Agriculture (USDA) to provide SUAs and ITOs with commodities or cash in lieu of commodities, in amounts based on the number of meals they serve annually.[2]

Figure 1: Elderly Nutrition Program Structure



SUAs distribute Title III funds to Area Agencies on Aging (AAAs), which administer the nutrition programs in their planning and service areas (Figure 1). The AAAs award grants to and contract with nutrition projects to provide nutrition and supportive services in their planning areas. Many AAAs also provide nutrition services directly to participants. In addition to receiving AoA and USDA funds, nutrition projects get financial support from state and local government, donated food and supplies, private donations, and voluntary contributions from participants. Congregate meals are served at meal sites (such as senior

centers, religious facilities, schools, public or low-income housing, or residential care facilities). Home-delivered meals are taken to homebound clients, either from the congregate meal sites, affiliated central kitchens, or nonaffiliated food service organizations.

. . . each meal must provide a minimum of one-third of the daily RDAs.

Congregate and home-delivered nutrition projects must offer at least one meal per day, five or more days per week (except in rural areas). On average, each meal must provide a minimum of one-third of the daily RDAs established by the Food and Nutrition Board of the National Academy of Sciences National Research Council. The meals must also comply with the *Dietary Guidelines for Americans*, published by the Secretaries of DHHS and USDA.

Under Title VI, the federal government awards funds directly to ITOs from federally recognized tribes and to public or nonprofit private organizations representing Native Hawaiians. AoA and USDA funding for Title VI is supplemented by Title III funds, participant donations, tribal funds, and state and local resources. Funds received by Title VI grantees are dispensed to senior centers and other programs that serve American Indian elderly people. The Title VI program provides nutrition and supportive services that are similar to those provided by the Title III program. Meals served under Title VI must comply with the standards established for Title III; however, the minimum age for program eligibility may be lower.

STUDY'S PURPOSE AND APPROACH

America will face critical challenges in the coming decades as it attempts to provide long-term care services to the nation's elderly people. As the large group of individuals born after World War II ages, a much higher proportion of Americans will be elderly and will require more health services and long-term care. At the same time, however, concern about the federal deficit has constricted the resources available to meet these needs.

In this context, public policy programs must demonstrate their effectiveness in accomplishing their objectives efficiently. It is essential to examine whether these programs produce the intended impacts and whether their services are directed to those who need them most. It is also important to look at the efficiency of program operations and whether funding streams are adequate.

In light of these issues, the U.S. Congress authorized DHHS to conduct the first full evaluation of the ENP in more than a decade. A comprehensive evaluation, covering all aspects of ENP operations and funding, was mandated in the ENP's authorizing legislation. The legislation specified 19 requirements for the evaluation, discussed in detail in the full report. These requirements were incorporated into the following objectives for the evaluation:

- To evaluate the ENP's effects on participants' nutrition and socialization, compared with similar nonparticipants

The study is the most comprehensive evaluation of the ENP in the past 15 years.

- To evaluate who is using the ENP and how effectively the program serves targeted groups most in need of its services
- To assess how efficiently and effectively the ENP is administered and delivers services
- To clarify ENP funding sources and allocation of funds among its components

A comprehensive research design, involving both extensive data collection and multiple lines of analysis, was necessary to meet these objectives. To collect the required data, Mathematica® interviewed ENP participants and staff from all levels of the program structure, including SUAs, AAAs, ITOs, nutrition projects, and congregate meal sites. For the Title III program, Mathematica also interviewed a comparison group of nonparticipants, chosen to be as similar to the participant group as possible.[3]

Study Limitations

This study is the most comprehensive evaluation of the ENP in the past 15 years. It also provides important information about participants and program impacts. Interpretations of the results summarized here, however, must be made in light of the study's limitations. Four key limitations are highlighted next.

Lack of Random Assignment. The strongest evaluation design for measuring the effects of the ENP on participants would have randomly assigned potential participants to the program or to a control group that did not receive program services, for a specific assessment of program impacts over time. A prospective randomized design was not possible, however. Instead, Mathematica selected a sample of nonparticipants in the same locations as participants, matching them in terms of key characteristics. Without random assignment, underlying differences between the participant and nonparticipant groups might confound the comparisons made in the impact analyses. Mathematica minimized this possibility, however, by matching the comparison group to the participant group as closely as possible, and by using statistical techniques to control for observable differences.

Sampling Error. With the exception of the data collection from SUAs, all of the surveys in this study were based on samples of agencies or respondents. As a result, the numerical estimates reported here are subject to possible error caused by random statistical variation. In general, however, the sample sizes were large enough so that sampling error, while present, is probably not large enough to affect the conclusions.

Potential Measurement Error in Meal Cost Estimates. Many nutrition projects in the ENP do not keep detailed-enough cost records to provide consistent cost information across projects. Accordingly, Mathematica "built up" cost estimates on the basis of detailed information from the projects about local operations, staff wage rates, and other factors. This process may have introduced some measurement error into the detailed cost estimates, but Mathematica is confident that the overall order of magnitude of the cost estimates is correct.

Difficulties in Allocating Funding by Source. The agency surveys asked respondents to provide information on total funding and funding by source, separately for congregate meals, home-delivered meals, and supportive services. Because meals and supportive services are closely intertwined in many projects, it was often not possible to link services with specific funding sources. As a result, much of the analysis of program funding relied on aggregate program data.

These limitations should be kept in mind in assessments of the study's overall findings. Despite these limitations, however, the basic conclusions drawn here are strongly supported by the information collected in the study. Next, we provide more detailed data on each evaluation objective.

PROGRAM OUTCOMES

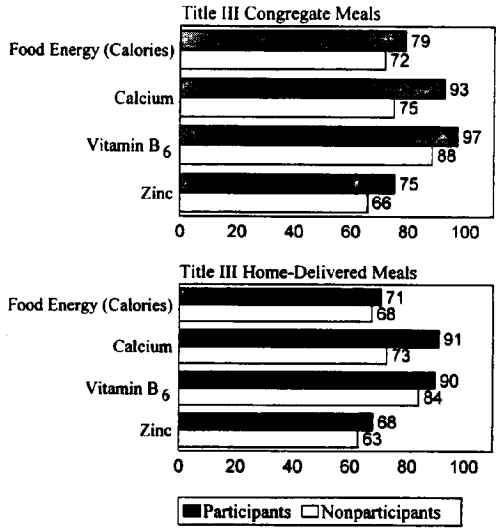
The evidence suggests that the ENP has substantial positive impacts on participants. In particular, Title III participants have higher daily intakes of key nutrients, as well as more social contacts per month, than the comparison group. It is likely that these differences are at least partially caused by the ENP.

24-Hour Nutrient Intakes

To explore ENP impacts on daily nutrient intakes, Mathematica interviewed a comparison group of older people who were similar to Title III participants but did not participate in the ENP. Daily nutrient intakes as a percentage of the RDAs are higher for both Title III congregate and home-delivered participants who receive program meals, relative to the comparison group (Figure 2). These results suggest that the program is increasing participants' dietary intakes on days when they receive program meals. Both congregate and home-delivered participants have significantly higher intakes of the nutrients with the lowest average intake levels (such as food energy [calories], zinc, calcium, and vitamin B_6). Similar results were also obtained for most other nutrients (not shown in figure). Most of the observed differences for participants are statistically significant. There are no significant differences between participants' and nonparticipants'

The ENP plays a very important role in participants' overall dietary intakes.

Figure 2: Program Participants' and Nonparticipants' Mean Daily Nutrient Intakes (as a Percentage of the RDAs)



NOTE: All differences are statistically significant at the five percent level.

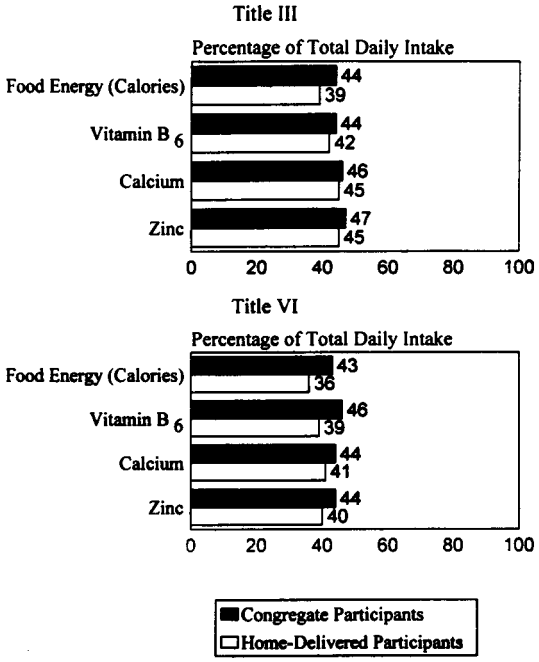
intakes of sodium and cholesterol, or in their intakes of carbohydrate, protein, total fat, and saturated fat as a percentage of food energy (calories).

ENP Nutrient Intakes Versus Overall Nutrient Intakes

The ENP plays a very important role in participants' overall dietary intakes. Nearly all home-delivered participants and one-half of congregate participants receive five or more program meals a week. These meals supply a large part of their total nutrient needs. More than a third of home-delivered participants save part of the program meal to eat as a second meal, part of a second meal, or a snack. Twelve percent of congregate participants take either an additional full meal or a snack home for later consumption.

For almost all of the nutrients studied, congregate meals supply well over a third of participants' daily intakes. In fact, for most nutrients, the contribution to daily intakes is in the range of 40 to 50 percent

Figure 3: Percentages of Participants' Total Daily Intakes from All Program Meals (Means)



(Figure 3). A similar pattern exists for home-delivered meals, although the contributions tend to be a few percentage points lower for this component. These results, which apply to both Title III and Title VI, indicate that the ENP plays an important role in participants' overall nutrition. Furthermore, the similarity in Title III and Title VI contributions to dietary intakes suggests that the earlier findings based on the use of a Title III comparison group can be generalized to Title VI as well.

Table 1: Nutrients in ENP Meals, as Served (As a Percentage of the Male RDAs)

	Title III		Title VI	
	Congregate	Home-Delivered	Congregate	Home-Delivered
Food Energy (Calories)	36	37	37	33
Vitamin B_6	38	44	37	40
Calcium	56	58	50	47
Zinc	33	33	33	28

NOTE: Program meals are required to supply 33 percent of the RDAs

Nutrient Content of ENP Meals

The average ENP meal meets the program's requirement to provide at least one-third of the relevant RDAs (Table 1). Under both Title III and Title VI, the average meal provides more than 50 percent of the adult male RDAs for many nutrients. Basing the calculations on the RDAs for females (not shown in table) only reinforces this comparison, because the RDAs for females are lower for many nutrients. Table 1 also shows that ENP meals are relatively "nutrient dense," providing relatively large amounts of nutrients per kilocalorie of food energy

ENP meals are relatively "nutrient dense"

Under both Title III and Title VI, the estimated fat content as a percentage of food energy is 36 percent for congregate meals and 35 percent for home-delivered meals, in excess of the 30 percent recommended in the *Dietary Guidelines for Americans* (not shown in table). Furthermore, when participants' overall diets from program and nonprogram sources of food are considered, their intakes of fat--especially those of Title III congregate and home-delivered participants--are closer to the *Dietary Guidelines* recommendations. For example, the typical Title III participant consumes 32 percent of his or her daily calories as fat (not shown). There is some controversy in the scientific community about appropriate fat intakes for the elderly population. Some experts view the fat standards for older persons as overly stringent, particularly as they apply to the very old. Reducing total fat and saturated fat, unless carefully managed, may compromise the overall intake of food energy (calories) for older persons.

Social Contacts

On average, both congregate and home-delivered participants have about 14 more social contacts per month than the comparison group (Table 2). This represents more than a 16 percent increase in the number of social contacts per month. It also suggests that the program increases socialization opportunities for participants.

It is important to note that direct program contacts--either attendance at a meal site or receipt of a meal delivery--are included in the estimates of contacts for participants. For congregate participants, this inclusion is clearly appropriate, because these contacts usually last for an hour or more and involve considerable social interaction. The home-delivery contacts are usually much shorter, but about 25 percent of participants report that the ENP delivery person usually spends at least some time in conversation with them (not shown in table). Whether or not there is extended conversation, the majority of home-delivered participants report that the contact with the delivery person is important to them socially.

Table 2: Mean Number of Monthly Social Contacts for Participants and Eligible Nonparticipants, Controlling for Other Characteristics

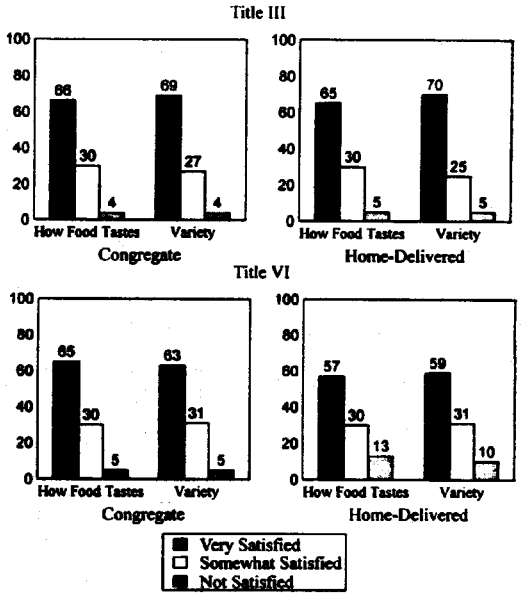
	Title III Congregate Program	Title III Home-Delivered Program
Participants	96.0	98.6
Matched Nonparticipants	82.5	83.3
Percentage Difference	16.3**	18.4**

**Difference between participants and nonparticipants is statistically significant at the .05 level, one-tailed test.

Satisfaction with Services

Sixty-six percent of Title III congregate participants and 65 percent of Title III home-delivered participants describe themselves as "very satisfied" with how the food tastes (Figure 4). The comparable figures for Title VI are 65 percent and 57 percent. For other questions on the food served, the numbers of "very satisfied" tend to be 60 percent or more. Most of the respondents who did not choose "very satisfied" (the highest level on the four-point scale) selected the next-highest level, indicating they were "somewhat satisfied."

Figure 4: Participants' Satisfaction with Program Meals (Percentages)



When asked what they like most about the program, 77 percent of Title III congregate participants and 70 percent of the Title VI counterparts mentioned the other participants; 58 and 69 percent, respectively, mentioned the meals; and 30 and 23 percent mentioned supportive services. Seventy percent of Title III congregate participants and 61 percent of Title VI congregate participants take part in recreation activities provided through the nutrition program. Fifty percent or more of those participating in recreational activities at the meal site report that these activities are either the only source or a major source of their social activity. These responses suggest that participants are generally satisfied with the meals and that the socialization aspect of the program is also important to them.

PROGRAM PARTICIPANTS

In principle, Title III is available to everyone age 60 and older, but its authorizing legislation requires special efforts to target the program to populations who particularly need ENP services. The evidence from the evaluation shows that the program has achieved considerable success in accomplishing this "targeting" objective.

The ENP serves highly vulnerable people with characteristics that tend to put them at increased health and nutritional risk. ENP participants tend to be older, poorer, more likely to be members of racial or ethnic minorities, and more likely to live alone, compared with the overall population in the United States age 60 and older.[4] Participants are also more likely to be in poor health, to have greater difficulty performing everyday tasks, and to have relatively high nutritional risk. These and related client characteristics are examined next.

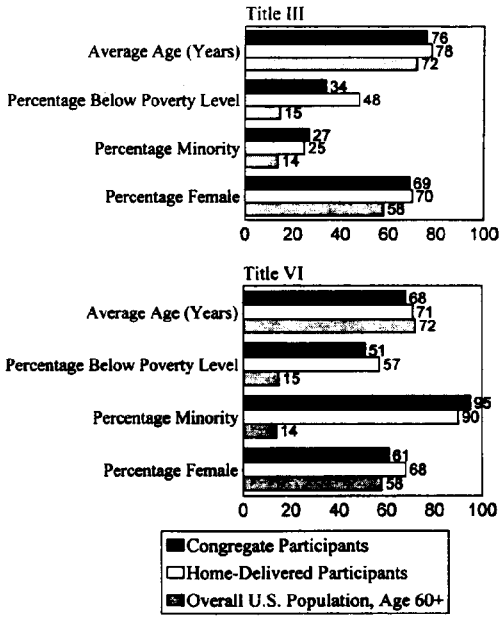
Demographic Characteristics

For Title III, the average congregate meal participant is 76 years old, and the average home-delivered participant is 78 (Figure 5). By contrast, the average age in the overall U.S. population age 60 and older is approximately 72. This pattern suggests that the program is directing its services to people who, at least in terms of age, are most likely to need them.

The average ages of Title VI participants--68 for congregate participants and 71 for home-delivered ones--are considerably lower than those for Title III. In part, this reflects the fact that the minimum age for eligibility in Title III is 60, but the minimum age for eligibility in Title VI is established by ITOs and may be lower than age 60. In our survey, Title III participants ranged in age from 31 to 101; the range for Title VI was 23 to 103.[5]

ENP participants have significant economic and/or social needs. About one-third of Title III congregate participants and one-half of Title III home-delivered participants have incomes at or below the DHHS poverty threshold. More than one-half of Title VI meal participants have incomes at or below this level. The comparable figure for the overall population age 60 and older is 15 percent. Most of the rest are

Figure 5: Socioeconomic Characteristics of ENP Participants



Both . . . programs successfully target . . . poor and minority elderly people.

"near poor," with incomes between 100 and 200 percent of the poverty level (not shown in figure). Between 80 and 90 percent of all participants have incomes below 200 percent of the DHHS poverty threshold, compared with 38 percent of the overall elderly population.

Non-Hispanic African Americans constitute approximately 12 percent of Title III congregate participants and 18 percent of home-delivered ones. Elderly people of Hispanic origin make up, respectively, another 12 percent and five percent of participants in the two parts of the Title III program. Overall, racial and ethnic minorities constitute 27 percent of congregate and 25 percent of home-delivered participants. Almost all Title VI participants are members of minority groups, compared with 14 percent of the overall population age 60 and older.[6] Both the

congregate and home-delivered programs successfully target subgroups of poor and minority elderly people. *Furthermore, nearly four times as many Title III participants and nine times as many Title VI participants are low-income minorities, compared with the overall population age 60 and older.* These groups represent a substantially larger proportion of participants than they do of the overall elderly population.

More than twice as many Title III participants live alone, compared with the overall elderly population (60 percent versus 25 percent). Substantially fewer Title VI participants live alone (about 29 percent). Nearly all Title VI participants, 28 percent of Title III congregate participants, and 16 percent of Title III home-delivered participants live in rural areas, compared with 25 percent of the overall elderly population.

Health Problems and Functional Impairments

Both Title III and Title VI participants have significant numbers of health problems and functional impairments that might place them at nutritional risk (Table 3). In both parts of the ENP, participants tend to have between two and three diagnosed chronic health conditions. In Title III, 26 percent of congregate participants and 43 percent of home-delivered participants had a hospital or nursing home stay in the year before the survey; a similar pattern was observed in Title VI. Among home-delivered participants, 63 percent of Title III participants and 45 percent of Title VI ones rated their health as either poor or only fair. Many participants reported health conditions such as heart disease, diabetes, anemia, and osteoporosis for which nutrition intervention is either a primary or a supportive form of treatment.

Table 3: Health and Functional Status of Participants (Percentages, Unless Otherwise Noted)

	Title III		Title VI	
	Congregate	Home-Delivered	Congregate	Home-Delivered
Average Number of Diagnosed Chronic Health Conditions	2.4	3.0	2.8	2.9
Hospital/Nursing Home Stay in Previous Year	26	43	30	37
Weight Outside of Healthy Range	61	64	65	69
Difficulty Doing One or More Everyday Tasks	23	77	23	44
Unable to or Have Much Difficulty Preparing Meals	8	41	8	26
Moderate to High Nutritional Risk	64	88	80	78
Instances of Food Insecurity in Past Month	10	16	17	15

There is also evidence that many participants are at nutritional risk. Only about one-third have weight levels in relation to their height that were within accepted normal ranges. Between 18 and 32 percent gained or lost 10 pounds without wanting to during the six months before the survey. Under criteria developed by the Nutritional Screening Initiative, 64 percent to 90 percent of participants have characteristics associated with moderate to high nutritional risk.

The ENP serves highly vulnerable people with characteristics that tend to put them at increased health and nutritional risk.

Under Title III, about one-quarter of congregate participants and more than three-quarters of home-delivered participants have trouble doing one or more everyday tasks. A similar pattern exists for Title VI participants, although the proportion of Title VI home-delivered participants with impairments is somewhat lower. Title III home-delivered participants have an average of 3.7 functional impairments; their Title VI counterparts have an average of 2.4. Sixty-four percent of Title III home-delivered participants have difficulty shopping for food; 41 percent are unable to prepare meals. Overall, ENP participants, especially those served by the home-delivered program, are more functionally impaired than the overall elderly population.

Length of Time in Program

For congregate meals, 45 percent of Title III participants and 42 percent of Title VI participants have been in the ENP for more than five years. Only about 10 percent of home-delivered participants have received home-delivered meals for this long. There is a moderate amount of fluidity between the two components of the ENP--9 percent of Title III and 19 percent of Title VI congregate participants have received home-delivered meals in the past. Nineteen percent of Title III and 24 percent of Title IV home-delivered participants have received congregate meals. Most current home-delivered participants, however, have not participated in the congregate meals program in the past. *They represent a new pool of participants and have not aged in place at the congregate sites.*

PROGRAM CHARACTERISTICS

All ENP congregate programs serve lunch. In addition, about four percent of Title III congregate programs and two percent of Title VI congregate programs serve breakfast. Most congregate sites operate only on weekdays; however, about four percent of Title III sites and one percent of Title VI sites also serve weekend meals. Most of the projects that provide home-delivered meals deliver at least five meals per week.[7] A delivery usually includes only a single meal--typically a hot lunch--but some deliveries include more than one meal at a time.

For Title III, about 49 percent of congregate sites make "modified" meals available, such as those that are low in fat, sodium, or calories, whereas 63 percent of home-delivered providers offer these types of meals. The comparable numbers for Title VI are somewhat higher, at 67 percent and 76 percent, respectively. Most nutrition programs also

provide other meals, such as holiday or ethnic meals to meet participants' special needs. Some offer weekend home-delivered meals or meals more than once a day; some provide support for food pantries.

There is wide variation within the Title III home-delivered program in whether meals are prepared at a central kitchen, prepared on site, or bought from a contractor. The most typical approach involves project staff preparing food at congregate sites (43 percent). More than a third buy meals from private contractors, however. Most Title VI programs (96 percent) prepare home-delivered meals at congregate sites. Meals at congregate sites are usually served either cafeteria style or restaurant style, with preportioned meals brought to participants at tables.

Other Nutrition Services

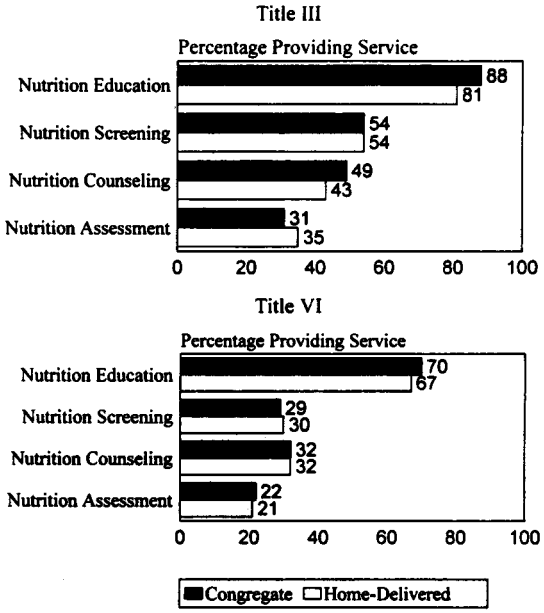
Title III nutrition projects provide a variety of nutrition-related services, in addition to meals. These include nutrition education (about 87 percent of projects),[8] nutrition screening (about 55 percent), and nutrition counseling (about 50 percent) (see Figure 6). Although providing other nutrition services in addition to meals is somewhat less common for Title VI projects, more than half report providing nutrition education. Between one-quarter and one-third offer each of the other nutrition-related services discussed here.

Sanitary Standards

Food safety and sanitation procedures are an important part of a nutrition program's overall quality. Seventy-six percent of the states require that all ENP sites be inspected. Most of the rest require inspection of food production sites but not necessarily eating sites.

Eighty-six percent of Title III and 93 percent of Title VI facilities report that their sites were inspected by the local health department during the past year. Forty-four percent of Title III facilities had one or more deficiencies during the last three inspections; however, almost all of them (93 percent of those with deficiencies) had taken corrective action. For Title VI, the rate at which deficiencies were found was somewhat higher (56 percent), and the correction rate was slightly lower (68 percent of those with deficiencies).

Figure 6: Other Nutrition Services Provided by Nutrition Projects



Of course, the major outcome of interest for safe food handling is whether people become sick because of the food. Reported instances of such illness do occur but are rare. In the more than 400 AAAs surveyed--which represent more than half of the AAAs in the country--only six incidents of illness associated with ENP food occurred in the past three years. AAAs reported that 175 older persons became ill in the past three years from these six incidents. None of the 115 ITOs surveyed--which represent more than half the ITOs in the country--reported any incidents of illness in the previous three years. It should be noted, however, that the actual incidence of food-borne illness is believed to be considerably higher than the reported incidence throughout the food service industry. Thus, the actual incidence of food-borne illness associated with the ENP is probably greater than that reported here, but not more than one percent of participants get sick from program meals.[9]

UNMET NEEDS

Home-Delivered Meals

Overall, the size of the ENP program in terms of meals served annually has increased steadily since 1980, rising from 168 million to 240 million meals. This overall increase masks substantial differences in the growth of program components, however. Although relatively steady for much of the period, the overall provision of congregate meals declined somewhat between 1980 and 1994 (the program served 132 million meals in FY 1980 and 127 million in FY 1994). The home-delivered program, on the other hand, grew rapidly during this period, tripling in size, from 36 million to 113 million meals. In addition to reflecting increasing need for home-delivered meals, this pattern could also reflect available funding. It is possible that more congregate meals would have been served had projects received more funding.

Program operators expect these patterns to continue. In response to a question about expected program changes, most SUAs and AAAs, as well as 38 percent of nutrition projects, expected further increases in the need for home-delivered meals. Furthermore, even this very rapid increase in home-delivered meals does not appear to have kept up with the need for them, as discussed in the next subsection.

Waiting Lists

The number of older Americans, particularly the functionally impaired, has been steadily increasing while funding for OAA programs has generally remained flat. Sources such as the *Wall Street Journal* (November 8, 1994) have reported ENP waiting lists in various parts of the country, suggesting a relatively large degree of unmet need for nutrition assistance among elderly people, especially those who are severely impaired or homebound. The evaluation data indicate considerable unmet need for home-delivered ENP meals.

Overall, these data . . . suggest considerable unmet need for home-delivered ENP meals.

Many of the nutrition projects that arrange or provide home-delivered meals (41 percent) report having a waiting list for potential participants (Table 4). For projects that maintain waiting lists, the mean number of people on the lists is 85. It is important to note, however, that the mean is heavily influenced by a few very large projects with long waiting lists. Yet, even the median is 35 (not shown), which is about 30 percent of the average project's number of home-delivered participants served daily. Nutrition projects that maintain waiting lists report that the mean length of time on the lists is between two and three months. (Again, the median is lower.)

Waiting lists are much less common for congregate meal programs. Nine percent of the nutrition projects arranging or providing congregate meals report having waiting lists. One-fifth of Title III nutrition projects, however, reported that they currently have a waiting list for potential participants for other (nonmeal) nutrition and supportive services, with an average time on the list of two months.

Table 4: Waiting Lists for Participation in Title III Programs, as Reported by Nutrition Projects

	Congregate Meals	Home-Delivered Meals	Other Services
Maintain Waiting List (Percentage)	9	41	22
If Maintain Waiting List, Mean Number on Waiting List	52	85	--
If Maintain Waiting List, Mean Length of Time on List (Months)	2.1	2.6	2.2

Overall, these data, together with the earlier information on trends in ENP meals served, suggest considerable unmet need for home-delivered ENP meals. Furthermore, the findings summarized here probably understate the degree of unmet need for home-delivered as well as congregate meals. It is probable that many nutrition programs with unmet need for services do not maintain waiting lists.

Most ENP participants report having enough food to eat, but 10 to 17 percent reported one or more recent instances of food insecurity, such as having no money to buy food or having to choose between buying food and buying medications during the previous month. In Title III, 10 percent of congregate participants and 16 percent of home-delivered ones mentioned one or more instances of food insecurity during the past month. The comparable numbers for Title VI are 17 percent and 15 percent. Although these percentages appear relatively modest, they mean that, *within the 30 days preceding the interview, approximately 240,000 congregate participants and 130,000 home-delivered participants had experienced food insecurity.*

LINKS TO OTHER HOME- AND COMMUNITY-BASED CARE

The legislation authorizing the evaluation focused on the need to examine the ENP's degree of integration with other parts of the home- and community-based long-term care system. One important aspect of this issue--participants' characteristics--has already been discussed. As noted, most ENP participants have characteristics, such as age, difficulty doing everyday tasks, and poverty status, that increase the likelihood that they will need home- and community-based long-term care services. Here, we examine a number of other linkages:

- ENP participants' use of home- and community-based long-term care services
- Referral sources for the ENP
- Direct provision by ENP providers of home- and community-based long-term care
- ENP agencies' coordination with other providers of home- and community-based long-term care

Use of Other Services

The use of non-nutrition support services by ENP participants shows the degree to which the ENP functions as part of the broader home- and community-based long-term care network. Twenty-nine percent of Title III home-delivered participants also receive personal care services, either from the ENP provider or another public or private source (Table 5). Thirty-five percent receive homemaker services and 14 percent receive home health aid services from providers who are not their families or neighbors. When families or neighbors are counted, 66 percent of Title III and 56 percent of Title VI home-delivered participants receive homemaker services; 39 percent of Title III and 18 percent of Title VI home-delivered participants receive personal care services, designed to maintain frail individuals in their home and communities.

. . . agencies attempting to assemble an integrated package of long-term care services . . . frequently include ENP home-delivered meals.

As might be expected, congregate participants are significantly less likely than their home-delivered counterparts to use long-term care services. Compared with Title VI home-delivered participants, a larger percentage of Title III home-delivered participants use home- and community-based long-term care services and receive a greater percentage of the services from private or public agencies. This pattern may reflect greater impairment or greater availability of services, or some combination of the two.

Referrals to the ENP

Forty-five percent of Title III home-delivered participants and 43 percent of their Title VI counterparts first heard about the ENP through a hospital or community-based organization (Table 6). Most of the rest heard about the program through family or friends. The corresponding numbers for congregate participants are considerably lower, at 12 percent and 16 percent, respectively. This pattern suggests that, as might be expected, agencies attempting to assemble an integrated package of long-term care services for their clients frequently include ENP home-delivered meals. Correspondingly, nutrition projects report that hospitals or intermediate-care facilities are the first or second most

Table 5: Use of Home- and Community-Based Long-Term Care by Participants (Percentages)

	Congregate Participants		Home-Delivered Participants	
	From Private or Public Agency Providers	From All Sources, Including Family	From Private or Public Agency Providers	From All Sources, Including Family
Title III				
Personal Care Services	2	6	29	39
Homemaker Services	1	23	35	66
Home Health Aide Services	2	2	14	16
Adult Day Care Services	2	2	2	2
Title VI				
Personal Care Services	2	5	6	18
Homemaker Services	7	30	8	56
Home Health Aide Services	7	8	8	10
Adult Day Care Services	1	1	1	1

common source of referrals for participants in the home-delivered program (not shown).

Information and Referral

Most nutrition projects do not directly provide more-intensive long-term care services, such as personal care, homemaker, or home health aide services. These services are slightly more likely to be provided to home-delivered participants, but the percentages of projects providing these services are low, ranging from about 4 to 14 percent, with most below 10 percent.

Even though the majority of nutrition projects do not provide major long-term care services directly, they function as part of the larger network of community systems to address the comprehensive long-term care needs of elderly people. Table 7 on the next page shows that approximately 85 percent of both Title III and Title VI projects offer information and referral services to participants.

Table 6: Participants' Referral to the Program (Percentages)

	Title III		Title VI	
	Congregate	Home-Delivered	Congregate	Home-Delivered
How Long Ago Began Participating				
Less than 6 months	9	17	10	15
6 to 11 months	7	18	4	4
1 to 5 years	40	54	44	58
6 to 10 years	25	9	23	13
More than 10 years ago	20	2	19	9
How First Heard About the Program				
Family member or friend	68	44	60	42
Community-based organization or hospital	12	45	16	43
Newspaper, radio, or television	5	2	2	1
Posters or announcement in mail	1	1	1	5
Announcement in church or club	6	1	4	7
Other method	8	7	18	9
On Waiting List Before Receiving Meals	2	13	*	2
Received Other Long-Term Care Services Before Receiving Meals[a]	5	22	2	13

[a]The most commonly mentioned home- and community-based long-term care services were home health, personal care, and homemaker services. Congregate participants most commonly mentioned transportation, homemaker, and personal care services.

* = Less than 0.5 percent.

Table 7: Nutrition Projects Offering Various Types of Non-Nutrition Services (Percentages)

Service Provided	Congregate Participants	Home-Delivered Participants
Title III		
Information and Referral	85	84
Recreation and Social Activities	69	NA
Transportation to and from Meal Site	68	NA
Other Assisted and Nonassisted Transportation	57	58
Other Counseling	53	55
Homemaker Services	12	14
Personal Care Service	4	5
Home Health Aide Services	5	6
Title VI		
Information and Referral	89	86
Recreation and Social Activities	75	NA
Transportation to and from Meal Site	83	NA
Other Assisted and Nonassisted Transportation	77	81
Other Counseling	49	52
Homemaker Services	7	7
Personal Care Service	7	7
Home Health Aide Services	4	4

NA = Not applicable.

Recreational and social activities are provided by about two-thirds of both Title III and Title VI projects serving congregate meals. The majority of III and Title VI projects also offer transportation services other than to and from the meal site.

Coordination of Services

To explore relationships with other components of the long-term care system, the survey included an open-ended question about ENP agencies' efforts to coordinate with providers of other long-term care. The responses showed a broad range of interconnections:

- SUAs are involved in administering, coordinating, and funding ongoing home- and community-based long-term care services. In many states, SUAs are making direct efforts to develop policies to coordinate the ENP with other services.
- ITOs frequently integrate the ENP with their broader planning and delivery of home- and community-based long-term care services.
- Most AAAs are involved in directly providing one or more long-term care services. These services involve managing participants' long-term care needs or facilitating access to care (through case management and information and referral). Some AAAs and ITOs

also indicate that they are major direct providers of long-term care services as well.

- Most nutrition projects carry out specific activities in which they either directly provide their clients with needed home- and community-based long-term care or connect them with other providers of these services.

ENP and the Broader System

To interpret the information discussed here, it is useful to place it in the broader context of long-term care in the United States. The long-term care system can be viewed as the entire set of providers--including family members, individuals, agencies, and institutions--that deliver a continuum of health and related supportive services, including nutrition services, to older people, depending on their needs. For relatively healthy older people, these services focus on prevention or optimal management of health problems and their complications. These services may also address factors that compromise health or independence and prevent acute or long-term institutionalization. For less healthy older people who are frail but still living in their communities, the focus is on providing services, such as an array of in-home health care and homemaker services, to assist them in living independently as long as possible and in preventing premature long-term institutionalization. Finally, for older people who can no longer function independently in community settings, the challenge of the long-term care system is to provide institution-based care that preserves individual dignity, quality of life, and remaining independence.

the ENP provides nutrition and supportive services in ways that participants perceive as meeting their needs.

The two major components of the ENP--congregate and home-delivered meals--serve participants who have different needs for long-term care services. Most congregate participants fall at the end of the continuum that focuses on providing long-term *preventive* services. Only 8 percent of these individuals have difficulty or need assistance preparing meals for themselves, and only 23 percent have trouble doing everyday tasks. This population does have significant health problems, and many of these problems are nutrition-related and can be lessened by optimal food and nutrient intakes and other nutrition-related services.

For congregate participants, the ENP provides nutritious meals and opportunities for socialization that can help them stay active in their communities. The evaluation shows that the ENP is very successful in providing meals that meet current recommendations for intakes of essential nutrients, but somewhat less successful in meeting the *Dietary Guidelines* recommendations (such as providing diets with less total fat and saturated fat) for preventing nutrition-related chronic diseases and their complications. The evaluation also shows that the ENP provides nutrition and supportive services in ways that participants perceive as meeting their needs. The available scientific

evidence suggests that maintaining nutritional well-being in older people helps them mitigate existing health problems, manage chronic conditions, prevent complications associated with acute and chronic disease, and extend the period of healthy living. In addition, the congregate component of the ENP often provides related services, such as nutrition education and counseling, to create healthier nutrition patterns for this group.

For many, the availability of a home-delivered meal is probably crucial to their ability to function largely on their own.

The recipients of home-delivered meals have greater needs for long-term care services, and these needs are at least partially met by the ENP. With an average age of 78, many home-delivered participants have substantial numbers of chronic health conditions and functional difficulties. Fewer than half get out of their homes as often as once a week, and 77 percent are unable to do at least one everyday task without assistance or can only do it with much difficulty. Furthermore, substantial numbers of home-delivered participants--about 15 to 20 percent--rely on other types of long-term care services, such as homemaker or personal care services, in addition to the meal program. For many, the availability of a home-delivered meal is probably crucial to their ability to function largely on their own. Additional evidence of links to the long-term care system is provided by the substantial number of home-delivered participants--more than 40 percent--who were referred to the ENP by a community-based agency or organization.

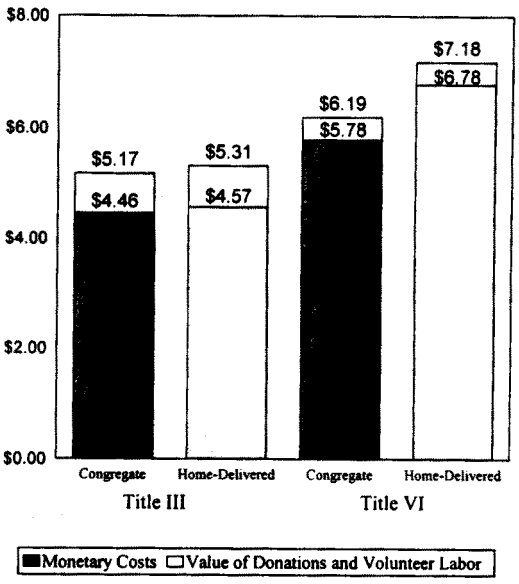
Overall, both components of the ENP function within the continuum of long-term care services. All levels of the ENP, from the SUA to the projects, but particularly the AAAs and ITOs, are involved in the management and delivery of long-term home- and community-based services.

AVERAGE MEAL COSTS

The average total cost of a Title III congregate meal is $5.17. This includes $4.46 in direct monetary costs and another $.71 in the value of volunteer labor and donated goods (Figure 7). The overall cost for a home-delivered meal is slightly higher, at $5.31 ($4.57 in direct monetary costs and $.74 in the value of volunteer labor and goods). The costs of producing ENP meals appear reasonable in light of information supplied by the National Restaurant Association. It reports that, for the 12-month period ending November 1995, the national average per-person cost for eating lunch was $4.86 at cafeterias and $5.29 at "family-style" restaurants.[10]

Costs for large projects (those serving at least 1,000 meals per week) are lower than the average by $.38 for congregate meals and $.81 for home-delivered meals. This pattern suggests that large projects may achieve significant economies of scale in operating the ENP program. Costs also tend to be lower for:

Figure 7: Average Total and Monetary Costs for Congregate and Home-Delivered Meals



- Rural projects
- Projects using central kitchen production methods
- Projects in the South and Midwest

The average costs for Title VI meals are $1.00 to $2.00 higher than those for Title III. Total costs per Title VI meal, including donations, are $6.19 and $7.18 for congregate and home-delivered meals, respectively. Some of the higher costs may be due to the small scale on which most Title VI sites operate, making it difficult for them to achieve economies of scale. The magnitude of apparent economies of scale (as estimated earlier with the Title III data), however, is not large enough to explain the observed differences fully. The relative importance of donated time and materials is substantially less for Title

VI than for Title III, however, with Title VI monetary costs at $5.78 and $6.78.

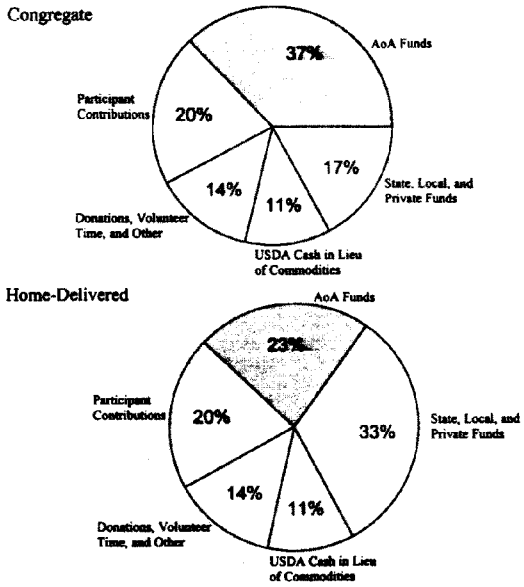
The bulk of ENP meal costs are either for labor or food. Together, these categories make up 75 to 80 percent of Title III and Title VI meal costs.

SOURCES OF FUNDING

Federal and Other Contributions

Federal Title III expenditures are highly leveraged with money from other sources (Figure 8). Title III funding accounts for approximately 37 percent of congregate costs and 23 percent of home-delivered costs. Despite participants' low income levels, their contributions account for 20 percent of both congregate and home-delivered meal costs. Other major resources for the program include the USDA cash in lieu of commodities program and state, local, and private funds. In part, the high leveraging rates reflect the fact that, by law, states are required to supply resources to match the federal contribution.

Figure 8: Title III ENP Funding Sources



For every $1.00 in Title III funds for congregate meals, $2.70 in total resources is devoted to the program. A dollar of Title III funding is thus supplemented with $1.70 from other sources. The leveraging rate for home-delivered meals is higher: a dollar of Title III funding is supplemented with $3.35 from other sources.

[For program meals], a dollar of Title III funding is thus supplemented with [between] $1.70 [and] $3.35 from other sources.

Most projects suggest contribution amounts for participants. These amounts vary substantially, ranging from $.50 or less per meal to more than $2.00. The majority of the suggested contributions are in the range of $1.00 to $1.50. In the survey, 85 percent of respondents indicated that they felt that their project's suggested contribution was "about right."

The value of volunteer labor accounts for about nine percent of Title III meal costs. Thirty-five percent of Title III congregate participants volunteer their time to perform program tasks, such as setting up meal sites, collecting contributions, or delivering meals.

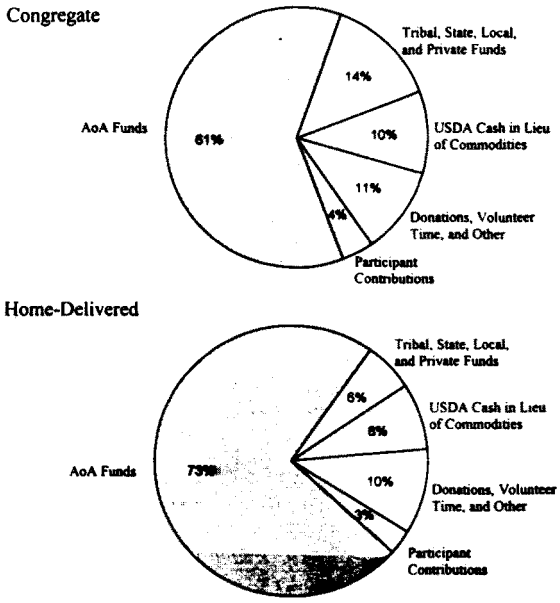
One interesting aspect of Figure 8 is that the average federal contribution to a Title III *congregate* meal is considerably higher than the average contribution to a *home-delivered* one. There appear to be two related reasons for this pattern. First, many projects report that it is easier to raise external funds for home-delivered meals because the need for them is often more apparent to potential donors. Second, nutrition projects may be trying to increase the number of home-delivered meals they can supply by paying a higher percentage of the cost of these meals out of resources from fundraising, compared with congregate meals, on average. However, state and local contributions for both kinds of meals are considerable.

In contrast, the leveraging rate for Title VI is considerably lower than that for Title III. Unlike Title III, the Title VI program does not require state or local matching of federal funding. Title VI grants are the primary source of funding for the ENP: 61 percent of the resources used to provide congregate meals and 73 percent of the resources used to provide home-delivered meals come from Title VI grants (Figure 9 on the next page). Title VI also draws revenue from other sources, including tribal funds, USDA cash in lieu of commodities, and participant contributions, but these sources generally contribute smaller proportions of overall funding.

Flexibility in Fund Transfers

Current law allows states to transfer part of their Title III funding to different subcomponents of the program. Policymakers are interested in whether states currently have enough flexibility to respond to their individual needs. To examine this issue, Mathematica analyzed state-by-state data on funding transfers. The regulatory limits on transfers do not appear to restrict states from shifting resources to components that need more funding. The key findings include:

Figure 9: Title VI ENP Funding Sources



- No state exceeded the limits on transfers between Title III-B supportive services and Title III-C nutrition services in the 10 years examined.

- There are more transfers between components of Title III-C than between Title III-C and Title III-B. Furthermore, the percentages transferred from Title III-C (congregate) to Title III-C2 (home-delivered) have grown over time. However, most states do not seem constrained by the 30 percent limit on funding transfers between congregate and home-delivered meals.

- States transferred about 17 percent of the funds initially allocated for the Title III congregate program to other uses in the 10 years examined. About two-thirds of the transferred funds went toward home-delivered meals; one-third went toward supportive services.

- The New England and West Coast states transferred the highest percentages of funds into home-delivered meals.

CONCLUSIONS

The results of the evaluation show that the ENP has succeeded in accomplishing its mission of improving the nutritional intakes of elderly people, as well as in decreasing their social isolation. The evaluation also shows that the program is evolving to meet the changing needs of older people brought on by shifting demographics and changes in the health care system and public policy environment. There are indications of unmet needs for the program's services, as well as signs that there may be new roles for the program in the future.

Accomplishments

The ENP provides an average of nearly 1 million meals per day to older Americans. These meals are targeted toward highly vulnerable elderly populations, including the very old, people living alone, people below or near the poverty line, minority populations, and individuals with significant health conditions or physical or mental impairments. On average, the meals provided easily meet the RDA requirements set forth in the OAA, and they significantly increase the dietary intakes of ENP participants.

The ENP also reduces the social isolation of older Americans in both the congregate and home-delivered programs. Although the accomplishment of this goal is more obvious in the congregate program, participants' contacts with meal deliverers and links with other services in the home-delivered program also reduce the isolation of homebound elderly people.

Agencies at the various administrative levels of the program--SUAs, AAAs, ITOs, and nutrition projects--have forged close links with other parts of America's emerging home- and community-based long-term care system. Federal dollars spent on the ENP are highly leveraged and supplemented with the financial resources of state, tribal, and local private and public sources. Despite participants' low income levels, their contributions account for 20 percent of both congregate and home-delivered meal costs. Local donations and volunteer time, often from program participants, account for 14 percent of costs.

Future Challenges

By most measures, the ENP is a highly successful program that has a positive influence on an overwhelming majority of its participants. Yet many challenges on the horizon could shape the future of the program.

The changing demographics of the U.S. population suggest different and increasing needs for program services, particularly in the area of

home-delivered meals. The evaluation indicates that the pool of persons needing home-delivered meals and other nutrition services is not limited to those who have "aged in place" within the congregate meal program. In fact, the majority of participants in the home-delivered program have never received congregate meals. Rather, future needs for home-delivered nutrition services will be driven in part by the increase in the number of elderly people, especially the "oldest old"--those 85 years and older--who are expected to double in number by the year 2030. This population is most vulnerable to disabling conditions that hinder their ability to live independently in the community.

Changes in participant characteristics will influence program operations, including the need to provide a continuum of nutrition services and to tailor meals and services to better meet the specialized nutritional needs of both congregate and home-delivered participants.

The changing health care system will also affect the operation of the ENP. As hospitals and nursing homes discharge elderly people more quickly into the community, community service agencies will be expected to provide some services that may have previously been delivered in health care facilities. As a result, the ENP will be called on to provide services to a growing number of frailer, sicker, and more functionally impaired older persons than in the past.

Changes in the public policy environment, such as efforts to reduce the size of the federal deficit and the devolution of decision making to the states, also have potential to shape the ENP in the future. In many ways, the ENP already reflects a number of these shifts, with its emphasis on state and local planning, its extensive reliance on local decision making, and its use of volunteer contributions and local donations. Nonetheless, the ENP will be challenged to meet increasing demands at a time of decreasing federal funding.

There are other indications of the challenges that lie ahead. The evaluation found that 41 percent of Title III home-delivered programs and 9 percent of congregate programs have waiting lists for meals, and 22 percent of Title III nutrition projects have waiting lists for other nutrition and supportive services. It is likely that these figures underestimate the number of nutrition projects that must limit their services, because some projects probably do not maintain waiting lists. Furthermore, 64 percent of congregate and 88 percent of home-delivered participants remain at high or moderate nutritional risk, as assessed by factors used in the Nutritional Screening Initiative. This significant risk is borne out by nutritional risk factors: two-thirds of participants have weights outside the healthy range, one- to three-fourths have functional impairments, between 10 and 17 percent reported recent instances of food insecurity, and most participants have two or more nutrition-related chronic health conditions.

Another challenge for the ENP is to reduce the total and saturated fat content of program meals to meet the *Dietary Guidelines*, without compromising the program's ability to provide participants with much needed calories and essential nutrients. The ENP will also be challenged to find better ways of producing meals as cost-effectively as possible and maintaining or improving food safety and sanitation practices.

To remain successful, the ENP must continue to adapt to changes in demographics, the health care system, and the public policy environment. The program will be called on to meet the need for more meals and other nutrition services, to target services to the most nutritionally needy, to become more efficient and effective, and to leverage additional funds in an environment of shrinking federal resources. The ENP must confront these and other challenges in the future in order to enhance the health, functioning, and quality of life of older people while helping them avoid unnecessary and costly institutionalization, all in order to continue its mission of ensuring adequate nutrition for older Americans.

NOTES

1. Nutrition-related and supportive services, such as transportation to and from meal sites, shopping assistance, information and referral, case management, homemaker and home health aide services, outreach, and nutrition counseling and education, are also provided under Title III-B. Funding for these services was $307 million in FY 1994, but not all are nutrition-related.

2. In FY 1994, USDA provided approximately $150 million in such assistance.

3. Details of the data collection methodologies are presented in the full report.

4. These comparisons are made with the overall elderly population in the United States rather than with the comparison group, because the comparison group was selected to be similar to the participant group, in order to maximize the precision of the impact analysis.

5. In certain cases, the OAA allows services to Title III participants under age 60. For example, spouses of participants age 60 or older may be under age 60. Also included are disabled persons under age 60 who live in housing facilities that serve congregate meals, as well as disabled persons who reside at home with, and accompany, elderly participants age 60 or older to an ENP site. For similar reasons, Title VI participants may be younger than the minimum age established by the ITO.

6. The results reported here are based on weighting the sample to make it representative of persons served by the program *on a typical day* and thus reflect the population receiving the bulk of program resources. As discussed in the full report, when the data are weighted to reflect the overall population of participants who *ever* attend the program--thus equally weighting infrequent and frequent participants--the estimated percentages of minorities go down somewhat but still remain higher than their proportions in the overall population.

7. The OAA requires projects to serve meals at least five days per week. Programs in rural areas, if approved by the SUA, may serve meals fewer than five days per week, if serving five is not feasible.

8. The OAA requires all Title III projects to offer nutrition education. It is not clear whether the ones that report not doing so are out of step with the law or misunderstood the relevant questions on the survey.

9. For example, it has been estimated that the number of cases of human salmonellosis reported to the Centers for Disease Control each year represent from one percent to five percent of the actual yearly incidence of this infection in the United States (Richard B. Chalker and Martin J. Blaser, "A Review of Human Salmonellosis: Magnitude of Salmonella Infection in the United States," vol. 10, no. 1, January-February, pp. 111-124, 1988). If we apply this rate of underreporting to the approximately 200 participants that AAAs reported as getting sick from program meals in the past three years, then between 4,000 and 20,000 participants probably actually became sick from the meals. In other words, no more than one percent of ENP participants contacted food-borne illness from program meals.

10. Source is personal communication with Susan Mills, Research Division, National Restaurant Association, Washington, DC, May 1996.

EXECUTIVE SUMMARY

Purpose

To describe States' current practices and discuss implementation issues concerning cost sharing for services to older persons under Title III of the Older Americans Act.

Background

Through the Administration on Aging (AoA), the Older Americans Act (the Act) of 1965 authorizes financial assistance to States for services to older persons. Services provided under Title III of the Act include, but are not limited to, nutrition, transportation, and in-home personal and medical services. The AoA's programs reach elderly citizens through a wide network of public and private agencies, including local area agencies on aging and service providers.

In the past, States, area agencies on aging, and service providers have been allowed to ask recipients of Title III funded services for voluntary contributions, to help cover the cost of the service. Mandatory charges for the federally funded portion of these services is not allowed, although States can charge for all or part of their portion of the funded service. Known as cost sharing, these charges have helped some States maintain or expand services to recipients. In the current reauthorization of the Act, AoA proposed amendments that would allow States, area agencies on aging, and service providers to charge for some of the Title III funded services.

The AoA requested information on current cost sharing activities within the States. We surveyed 57 States and territories to obtain the information in this report.

FINDINGS AND ISSUES

All States collect voluntary contributions and 36 States make use of cost share programs. States' specific experiences with these practices will affect their readiness to implement Title III cost sharing.

Thirty-six States reported to us that they have some sort of cost sharing program for services to elderly people. These programs vary considerably. They may use State Units on Aging, other State agencies, area agencies on aging, and local service providers, or a combination of the above, to bill, collect, and carry out other responsibilities. Services cost shared also vary greatly, but in-home personal services and adult day care programs are the most commonly reported cost shared services. As with cost sharing, States vary greatly in their voluntary collection activities. After nutrition services, transportation is the most common service for which voluntary funds are collected.

The extent of area agency on aging involvement, and how fees are determined, including the use of sliding-scale fee schedules, will be important to effectively implementing Title III cost sharing. Sliding-scale fee schedules help address the "fairness" question of cost sharing, since recipients are asked to pay only what they can afford, based on their income.

State respondents expressed a variety of opinions regarding the potentialities of cost sharing Title III funds. Opinions ranged from great support for the idea, to great caution.

One-half of State respondents believe they can expand the provision of some services to recipients through cost sharing. They also said that successful implementation will depend in part on how the cost sharing is explained to, and thus accepted by recipients. However, some respondents expressed great concern that cost sharing might encourage some service providers to reach out to recipients better prepared to share costs, thus undermining targeting efforts to low-income elderly.

Cost sharing with Title III funds raises accountability and oversight questions for States, area agencies on aging, and service providers.

Nine States with cost sharing programs currently verify the reported income of recipients receiving services. Most cost sharing programs use "self-declaration" by recipients. Some respondents were concerned that asking recipients to reveal their income might embarrass or anger them to such an extent that they will drop out of programs. Other respondents questioned the overall cost effectiveness of income verification versus self-declaration by recipients.

Cost sharing will also require billing and collection activities that might not currently exist, including policies and procedures on payment default by recipients. States seem to have few written policies in this area so far. General policies range from strict service termination to never terminating services regardless of payment default.

IMPLEMENTATION

If Congress enacts legislation to permit cost sharing, the AoA will need to carefully consider their direction, oversight, and technical assistance to States, area agencies on aging, and service providers. Special attention will be needed concerning the use of fee schedules, income declaration and verification, billing and collection activities, and policies on payment default. Some States will need more help than others.

The AoA provided comments about this report; they can be found in Appendix C. The AoA states that the information in the report has provided them with the necessary background information required to assess cost sharing language in reauthorization bills in both the House and the Senate. The AoA also anticipates that the survey data will provide baseline information to develop program policy and technical assistance for State agencies administering programs under the Older Americans Act.

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INTRODUCTION

Purpose

To describe States' current practices, and discuss implementation issues concerning cost sharing for services to older persons under Title III of the Older Americans Act.

Background

Older Americans Act and services to elderly recipients

The Older Americans Act (the Act) of 1965 (PL-89-73) created the Administration on Aging (AoA) which provides financial assistance to States for social service and nutrition programs for older persons under Title III. Grants are allotted to States based on the size of the 60 plus population. States submit plans which must be approved by AoA Regional offices before funds are allocated.

The AoAs 10 regional offices assist States in developing responsive community-based, comprehensive and coordinated services for elderly recipients throughout the nation. The AoA's programs reach the elderly through a network of public and private agencies, including 59 State and Territorial State Units on Aging (SUAs), and their approximately 675 local area agencies on aging (AAAs), as well as over 100 Native American tribal organizations, and approximately 27,000 local service providers.

Part IIIB of the Act provides funds for a variety of supportive services, including health, transportation, and legal assistance. The Fiscal Year (FY) 1996 requested appropriations for Part IIIB are approximately $307 million. Requested appropriations for Part IIIC, which funds nutrition services, including both congregate and home-delivered meal programs, are approximately $470 million. Part IIID provides for non-medical in-home services for frail older individuals. Requested appropriations for Part IIID are approximately $9 million.

Currently, SUAs, AAAs, and service providers are not permitted to charge mandatory fees to individual users of services for federally funded Title III services. The solicitation and collection of voluntary contributions from recipients for these services is permitted. Nutrition services generate the most money in voluntary contributions; supportive services, especially in-home services, generate the least.

The SUAs and, depending on State laws, the AAAs and service providers may charge mandatory fees to recipients for those services which are provided through State or local funds. These services may parallel or enhance the federally funded services such as homemaker services. For example, one homemaker visit to an older American may cost a total of $20.00. The AoA grant may fund half of that visit while State or local funds will pay for the other half. Under current regulation, the SUA, AAA or service provider may only mandatorily charge for a portion of the State or locally funded

$10.00. Only a voluntary contribution can be accepted for the Federal portion of the service charge.

There are some services in the States provided through Federal Medicaid waivers or Social Security Block Grants, which might include a fee charged to the recipient of the service. The SUA may or may not administer the programs funded through these Federal sources.

Generally referred to as "cost sharing," charging for some services helps some States expand services, or keep services in place as budgets are cut (GAO 1989). Most recipients of services who are required to cost share are not opposed to paying for services as long as the charge is fair (OIG 1990).

Proposed legislative amendments to allow for cost sharing

In past re-authorizations of Title III funding, the Administration has requested cost sharing for certain federally funded services. The Congress, however, has never approved the cost sharing provisions. The AoA's current re-authorization bill once again requests provisions for cost sharing. As summarized, AoA requests that sections 306 and 307 (State Plan requirements) of the Act be amended to give States the option to require or permit cost sharing for some services under State or area plans. Under the proposed amendment, cost sharing could not be required for information and assistance. Other services funded with Title III funds will be open to cost sharing; States will choose which, if any, of these services they may choose to cost share.

The AoA believes that Congress will pass some form of cost sharing amendments in this year's re-authorization of Title III funds. The AoA requested this study in order to obtain information that will help them more effectively implement recipient cost sharing for some Title III services. In particular, the AoA wanted to know what current State activities regarding cost sharing are, and how cost sharing for Title III funds might affect their current cost sharing activities.

METHODOLOGY

The information in this report was obtained by surveying 57 States, the District of Columbia (DC) and territories (all referred to as States) through a mail survey. Two surveys were sent out. The first was a small two-page survey to obtain initial information about whether the State, or any AAA or service provider within the State, conducted any cost sharing with State funds for services provided to elderly recipients. The second survey was an in-depth survey with three sections. The first section asked questions and requested documentation about the State's current cost-sharing activities, the second section concerned States/AAAs/service providers' activities regarding the collection of voluntary contributions for Title III funds, and the third Section asked for State respondents' thoughts on how cost sharing with Title III funds might affect their current activities, and if allowed, how best to implement Title III cost sharing.

Fifty-three States returned the initial survey. From this survey, 36 States indicated that their State conducted some sort of cost sharing activity.

A total of 50 States returned the main survey in time, and correctly, to be included in our analysis of the data. Within the main survey, 31 States responded to Section I regarding current cost sharing activities. Forty-nine States responded to Section II, and forty-nine States responded to Section III. It should also be noted that not all States responded to all questions within the survey, so individual questions have different response rates. (See Appendix A for a copy of the main survey with responses.)

FINDINGS AND ISSUES

All States collect voluntary contributions and two-thirds of the States make use of cost share programs. States' specific experiences with these practices will affect their readiness to implement Title III cost sharing.

Services cost shared

Thirty-six States reported to us that they have some sort of cost share program for services to elderly people. These programs vary in terms of services cost shared, and in SUA, AAA, and service provider responsibilities for billing, collection, and other procedures. Table 1 alphabetically lists the States which reported to us that they cost share, and the services for which they do this. In-home personal services and adult day care programs are the most commonly reported cost shared services.

Services with voluntary contribution collections

All of the States collect voluntary contributions for some services. As with cost sharing, States vary greatly in their voluntary collection activities. Table 2 alphabetically lists the States and the services for which they collect voluntary contributions. After nutrition services, transportation is the most common service for which voluntary funds are collected.

AAA involvement

In 13 States, all of the AAAs are involved in cost sharing programs and activities. In seven other States, some of the State's AAAs are involved in cost sharing programs, either because AAAs may choose whether to cost share, or because of pilot projects or other special programs within the State.

In 11 States cost sharing for services occurs without any AAA involvement. In these cases the State either contracts directly with local providers, or in a few cases, the cost sharing is conducted through an entirely different State agency. In these cases, the SUA also has no current experience with cost sharing practices.

In terms of conducting cost sharing with Title III funds, current AAA involvement with cost sharing programs will be important because Title III funds are generally funneled out to the local providers through the AAAs. (An exception to this case will be 5 States where the State agency is also the State's only AAA.)

States that Cost Share, By Type of Service

Table 1

	congregate meal	home del. meal	in-home medical	in-home personal	adult day care	transpt.	legal asst.	case mgt.	other
AK	P	P	P	P	CS	P	P	CS	CS (respite)
CA	P	P	P	P	CS	P	P	P	
CT	P	CS	CS	CS	CS	P	P	CS	
DC	P	P	P		P	CS	P	P	P(health promotion+)
GA	P	CS	CS	CS	CS	CS	P	P	
HI	P	P		CS	P	P	P	P	P(escort)
ID	P	P		CS	P	P			
IL	CS			CS	CS	P		P	P(senior companion)
IN	P	CS	CS	CS	CS	CS	P	CS	
KS				CS					
KY	P	CS	P	CS	CS	P	P	P	CS (respite+)
LA	P	CS	P	CS	P	P	P	P	
MA	P	CS	CS	CS	CS	CS	P	P	CS (alzheimer)
MD	P	P	CS	CS	CS	CS	CS	CS	
ME	P	P	CS	CS	CS	P	P	CS	
MN	P	P	CS	CS	CS	CS	P	P	
MO	P	P	CS	CS	P	P	P	P	
ND	?	?	?	?	?	?	?	?	?
NE	?	?	?	?	?	?	?	?	?
NH	P	CS	P	P	CS	P	P	P	
NJ	?	?	?	?	?	?	?	?	?
NM	P	P	P	CS	CS	P	P	CS	CS (respite)
NV	P	P		P	CS	P	P	P	
NY	P	P	P	CS	P	P	P	P	CS (respite+)
OH	P	CS		CS	CS	CS	P	P	
OR	P	P	P	CS	CS	P	P	P	
PA	P	P	CS	CS	CS	CS	P	P	CS (attendant)
RI	P	P	CS	P	CS	CS	P		
SC	P	CS		CS	CS	P	P	P	
SD	P	P	CS	CS	P	P	P		
VA	P	P	CS	CS	P	CS	P	P	
VI	?	?	?	?	?	?	?	?	?
VT	P	P	P	CS	CS	CS	P	P	P(?)
WA	?	?	?	?	?	?	?	?	
WI	?	?	?	?	?	?	?	?	?
WY	P	P		CS	CS	P	P	CS	
TOT	1	9	12	24	21	11	1	7	6

CS = cost sharing for service
P = service provided but not cost shared
If blank, service not provided (with State/local funds)
? = non response to the survey or question
Totals reflect number of States that cost share the service.

Table 2

Voluntary Contributions by Service and State

	congregate meal	home del. meal	in-home medical	in-home personal	adult day care	transpt.	legal asst.	case mgt.	other
AK	X	X		X		X	P		
AL	X	X				X			P(health promotion)
AR	X	X		X	X	X	X	X	X(home modification+)
AZ	X	X	X	X	X	X	X	X	X(respite/hm modi)
CA	X	X	X	X	X	X	X	X	X(?)
CO	X	X	X	X	X	X	X	X	
CT	X	X	X	X	X	X	X	X	
DC	X	X	X		X	X	X	X	X(hlth promo/recreat.)
DE	X	X	P	X	X	X	X	P	
FL	X	X	X	X	X	X	X	X	X(IIIF)
GA	X	X	X	X	X	X	X	P	
HI	X	X	P	X	X	X	X	X	X(escort/recreation+)
IA	X	X	X	X	X	X	P	P	
ID	X	X		X		X	P	P	
IL	X	X	X	X	X	X	X	X	X(info. & assist.)
IN	X	X	X	X	X	X	P	P	
KS	X	X	X	X	X	X	X	X	
KY	X	X	X	X	X	X	P		
LA	X	X		X		X	P	P	
MA	X	X				X	X		X(health promotion)
MD	X	X		X		X	X	P	
ME	X	X	P	P	P	X	X	P	
MI	X	X	X	X	X	X	X	X	
MN	X	X	P	X	X	X	X		
MO	X	X		X	X	X	X	X	
MS	X	X		X	X	X	X	P	
MT	X	X	X	X	X	X	X	X	
NC	X	X	X	X	X	X	X	X	
ND	X	X		X		X	X		P(inform/outreach)
NH	X	X	X	X	X	X	X		X(advocacy/educ.+)
NJ	X	X	X	X	X	X	X	X	X(?)
NM	X	X	P	X	P	X	X	P	X(respite)
NV	X	X	P	X	P	X	X	P	
NY	X	X	X	X	X	X	X	P	
OH	X	X		X	X	X	X		P(?)
OK	X	X		X		X	X		
OR	X	X	P	X	X	X	X	X	
PA	X	X	X	X	X	X	X	P	X(?)
RI	X	X	P	P	P	P	P	P	
SC	X	X		X	X	X	X	P	
SD	X	X	P	P	X	X	X	P	
TN	X	X		X	X	X	X	X	
TX	X	X		X	X	X	X	X	
VA	X	X	X	X	X	X	X	X	X(LTC coord.)
VT	X	X	X	X	X	X	X	X	X(advoc./counsel)
WA	X	X		X	X	X	X	P	
WI	X	X	X	X	X	X	X		
WV	X	X		X	X	X	X	X	
WY	X	X		X	X	X	X	X	

X = Voluntary contributions collected
P = Service provided but voluntary contributions not collected
If blank, service not provided with Title III funds

The AAAs will potentially become responsible for developing fee schedules, for accounting for and tracking funds, and for developing default policies. Currently, AAA staff may or may not have any experience with these activities.

Setting of fees

Within their current cost sharing and voluntary contribution activities, States are using a variety of fee setting practices. After determining the actual value of the service provided, a State, AAA, or service provider might calculate the recipient's income, and use income thresholds and fee schedules when determining how much a recipient must pay for a service. States with more experience with some or all of these activities might transition into Title III cost sharing more easily or effectively. In addition, these practices may affect how much revenue can be generated from Title III cost sharing.

Most of the States that conduct cost sharing programs consider personal income (29 States), income of a spouse living in the household (27 States), and business profits and interest (25 States), when determining if and how much a recipient should pay for a service. States also consider income from other household members (14 States), income from government assistance programs (13 States), and assets (5 States). At least 17 States will deduct certain expenses when determining a recipient's income. The most commonly deducted expenses are medical bills, including prescription costs. Less often considered are expenses such as housing, utilities, and other extraordinary costs. (See Appendix B for an example of a form used to determine recipient income.)

Currently, 24 States reported that they use an income threshold below which recipients do not have to pay for the service they receive. Thresholds vary from annual incomes determined to be at poverty, going up to 150 percent of poverty, or they might be determined based on monthly income, such as $800.00 a month for a single household member, or $1500.00 a month for two household members. In some cases, these thresholds are determined at the local level, and vary from AAA to AAA, or even from service provider to service provider within a State.

Some States use sliding-scale fee schedules to help providers determine how much a recipient must pay for a service. The sliding scales generally address the fairness issue within cost sharing. The more a recipient earns in income, the more they are expected to pay for a service. Sliding scales might be a useful tool when marketing a cost share program - recipients are asked to pay only what they can afford.

Within the cost sharing programs, 28 States reported that sliding-scale fee schedules are used. These might be developed at the State level, or left up to the AAA or even to the local provider to develop. (See Appendix B for an example of the sliding scale used in a cost sharing program.)

Twenty-two States also use sliding-scale fee schedules in the collection of voluntary funds. Although recipients of these services are not required to pay for the service,

the fee schedules help providers and recipients determine what a recipient's fair voluntary contribution should be. States already using sliding scale fee schedules for their voluntary contribution services might be better prepared to utilize them in cost sharing activities.

State respondents expressed a variety of opinions regarding the potentialities of cost sharing for Title III funds. Opinions ranged from great support for the idea, to great caution.

Expansion of services

Although most State respondents thought the cost sharing would not affect the way they provide services to elderly recipients, about one-half of respondents thought that through cost sharing, they could expand the services provided to recipients. Services that could be expanded include transportation, adult day care, respite care, and other in-home services. Most of the respondents were unsure of how much they could expand these services.

Explaining cost sharing to recipients

Some respondents expressed that the successful implementation of Title III cost sharing will depend on how well cost sharing is explained to recipients. Of great concern was how the concept of mandatory cost sharing will be accepted by recipients who are used to receiving a service for free. Many State respondents expressed that a personal explanation from the service provider to the recipient about the need for cost sharing and the potential benefits, i.e. expansion of services, would be the best approach. This approach could be supplemented by the use of letters from officials, flyers, announcements at senior centers, and the use of the media.

Additional ideas about successful implementation of cost sharing Title III funds in diverse State environments include allowing flexibility both for and within States, phasing in slowly a few services at a time, and using pilot programs in order to test several approaches.

Targeting of services

A few State respondents expressed their concern that cost sharing of Title III funds could adversely affect current targeting strategies and availability of services to low-income elderly. Respondents were concerned that, if allowed to cost share, providers might reach out more aggressively to recipients with the best potential to pay a greater share of the service. No ideas on how to counteract this potential effect of cost sharing were offered.

Cost sharing with Title III funds raises accountability and oversight questions for States, AAAs, and service providers.

Income verification

Nine States report that they currently verify the income of recipients in their cost sharing programs through such methods as reviewing check stubs. Most of the cost share programs use "self-declaration" by the recipients. Some respondents from States where these methods are not currently in use expressed concern that both the declaration and/or provision of proof of income will embarrass or anger recipients to such an extent that they will drop out of programs or discontinue needed services.

Furthermore, some State respondents also questioned the cost effectiveness of verification of income. It is possible that the time and resources spent on determining how much a recipient actually earns will surpass the amount of cost shared funds that might be lost if self-declared income is erroneous.

Billing, collection, and targeting issues

Cost sharing with Title III funds will require billing and collection activities on the part of States, AAAs, and service providers that might not currently exist. Currently, in 26 States, the service provider both bills the recipient and collects the cost shared funds. In nine States it is the AAA that bills and collects cost shared funds.

In most States, for both cost shared funds and for voluntary contributions, the collected funds are re-spent on the same service they are collected from. In most cases, because the funds are collected by the service provider, funds stay within that service and are thus targeted to recipients with certain needs. This is a fairly simple way to control the use of cost shared funds. However, in some States, where the AAA or the State collects funds, the collected funds might be used to offset expenses for other services. This allows more options for the use of funds, but more planning and tracking of the funds might be required as well.

Payment default issues

Few States with cost sharing programs seen to have clear or written policies and procedures regarding payment default by recipients. At least eight States leave these policies up to individual AAAs and service providers. Other States expressed to us general policies, such as sending the client several notices before services are terminated, or negotiating with clients for deferred or different payments. Some States lean toward policies which require termination of service after other collection methods are exhausted. Other States strongly avoid terminating services, regardless of a recipient's lack of payment.

Accounting issues

Sixteen State respondents expressed that cost sharing will change the way Title III services and funds are accounted for in their State. They could not describe what these changes will look like without more information on what will be allowed or required in terms of cost sharing. Seventeen respondents also said that computer systems, and accounting and tracking systems will have to be changed and updated in order to successfully implement Title III cost sharing.

IMPLEMENTATION

States currently operate in widely diverse environments regarding current voluntary contribution practices and cost shared services and programs. Within States, AAAs and service providers might vary greatly with their practices.

If the Congress enacts legislation permitting the use of cost sharing for Title III funds, the AoA will need to consider practical aspects of several issues. These include:

Direction

The mandates and/or direction AoA will give to the States concerning kinds of services cost shared; the settir.g of fees, including the calculation of recipient income, income thresholds and sliding-scale fee schedules; and the billing, collection, and targeting of cost shared funds.

Oversight

The development of oversight and accounting activities which will be necessary on the part of AoA, the States, AAAs, and service providers in regard to cost sharing Title III funds. This includes policies on income verification, and payment default.

Technical Assistance

The training and technical assistance which will be available to States, AAAs, and service providers in regard to implementing Title III cost sharing. Some States will need more help than others.

AoA's Comments

The AoA provided comments about this report; they can be found in Appendix C. The AoA states that the information in the report has provided them with the necessary background information required to assess cost sharing language in reauthorization bills proposed by the majority in both the House and the Senate. The AoA also anticipates that the survey data will provide baseline information to develop program policy and technical assistance for State agencies administering programs under the Older Americans Act.

APPENDIX A

Surveys and Responses

INITIAL SURVEY FORM

STATE 53 Returned

PLACE AN "X" NEXT TO OPTIONS THAT DESCRIBE YOUR STATE.

1. Is there any cost sharing for any services provided to elderly recipients in your State?

YES 36 ANSWER QUESTIONS 2,3, and 4 ONLY.

NO 17 ANSWER QUESTION 5 ONLY.

2. Please check the option that applies in your State:

All AAAs in the State must cost share 13.

Some AAAs must cost share 2. PLEASE SEND A LIST OF WHICH AAAs MUST COST SHARE.

AAAs may choose to cost share or not 5. IF KNOWN, PLEASE SEND A LIST OF WHICH AAAs CHOOSE TO COST SHARE.

3. Does the State conduct any cost sharing separate from AAAs?

NO

YES 22 (PLEASE EXPLAIN BELOW. USE SEPARATE PAGE IF NECESSARY.)

cost share through Medicaid waiver, Social Security Block Grants.
state is single PSA
state has cost sharing both separate from and through AAAs.

4. Listed below are actions State Units on Aging might take when allowing or requiring AAAs or local providers to cost share. Please indicate whether your State Unit on Aging has taken any of the following actions:

Action	NO	YES
Provide guidance to AAAs/LPs to help them develop fee schedules and procedures.		14
Review AAAs/LPs' proposed fee schedules and procedures.		12
Approve AAAs/LPs' proposed fee schedules and procedures.		7
Develop fee schedules and procedures to be implemented by AAA/LP.		18
Develop fee schedules and procedures used by State.		16
Other (PLEASE SPECIFY)		

5. Does your State have any plans to require or allow cost sharing for services provided to elderly people through the State, AAAs or other local providers?

NO_____

YES_5__ DESCRIBE BELOW CURRENT PLANS FOR COST SHARING IN YOUR STATE. USE A SEPARATE PAGE IF NECESSARY.

MAIN SURVEY SECTION I - CURRENT COST SHARING PRACTICES

1. Listed below are various services that might be offered to elderly people through SUAs, AAAs, and LPs. Please consider the types of services listed below. If the service is not provided in your State at all, check N/A column. If the service is provided in your State, but there is no cost sharing for that service, check the NO column. If the service is provided in your State, and there is cost sharing for the service, check the YES column. Please check only one option in the first three columns.

If the answer is "YES," go to the next three columns and write in the SPENT column how much money (excluding Title III funds) in FY 1994 was spent on the service. In the COLLCTD column write how much money was collected for that service from cost sharing in FY 1994. If you only have money amounts for another year, please write those, but indicate to the right of the table what year the amounts are for. If you don't know how much money was spent or collected in any year, check the DK column. If you only have total amounts for all services, please write those at the bottom of the table.

TYPE OF SERVICE	N/A	NO	YES	$$$ SPENT	$$$ COLLCTD	DK
Congregate Meal	1	28	1			1
Home-delivered Meal	2	19	9			8
In-home Services (Medical - skilled nursing, physical therapy, etc.)	8	10	12			9
In-home Services (Personal -housework, errands, etc.)	0	5	24			14
Adult Day Care	1	8	21			14
Transportation	1	18	11			10
Legal Assistance	2	26	1			1
Case Management	1	19	7			7
Other: (PLEASE SPECIFY)	1	5	5			1
Totals:						

SEND ANY COST REPORTS OR OTHER DOCUMENTATION SENT TO YOU BY AAAs/LPs WHICH EXPLAIN THE ABOVE LISTED $$$s, AND ANY OTHER COST REPORTS FORMULATED BY THE STATE FOR ACCOUNTING FOR AND TRACKING THE COST SHARED FUNDS DESCRIBED ABOVE.

2. The table below describes different ways cost shared fees might be determined in your State, either by the State, AAA or LP. Indicate YES or NO if the option applies in your State. We are aware that all options might apply in your State, due to varying AAA/LP practices. If unknown, check the DK column.

OPTION	NO	YES	DK
Everyone pays the same set fee based on service provided, regardless of different incomes. *MD, RI, VT	26	3*	1
Some people pay the same set fee based on service provided, after crossing an income threshold. *KS, MO, NY, RI, VT, WY	22	6*	1
People pay different fees for different services, based on income, using a "sliding-scale" fee schedule.*MA **CA, LA	1*	28	2**
Other: (PLEASE SPECIFY) *DC - Based on service cost, people pay different fees for the service.	3	1*	1

IF AVAILABLE, PROVIDE FEE SCHEDULES, AND SLIDING SCALE TABLES.

3. Considering most services which are cost shared in your State, does the State, any AAAs or LPs use an income ceiling above which people are not eligible for some services?

DK 2

NO 18

YES 10 IF YES, EXPLAIN BELOW FOR WHICH SERVICES AND/OR WHICH AAAs/LPs USE AN INCOME CEILING. IF AVAILABLE, PROVIDE DOCUMENTATION OF CEILING AMOUNTS.

EXPLAIN:

DC, GA, MA, MO, NH, PA, RI, SD, VT, WA.

Some States use monthly incomes which range from $750.00 to $1700 monthly for an individual. One State uses 380 percent of poverty, another uses 300 percent of SSI.

4. Listed below are various sources of income. For most services that are cost shared, indicate by checking YES or NO whether the State, AAA, or LP considers each source of income when determining a client's cost shared fee. If the answer is YES, check the "VER" column, if this income is documented and verified by such methods as reviewing pay stubs, etc.

SOURCES OF INCOME	NO	YES	VER	DK
Personal (wages, salaries, retirement/pensions, Social Security, income from insurance, etc.) *CT, DC, HI, IL, ME, OH, PA, RI, VT	1	29	9*	1
Business and investment (profits, interest, dividends, rent, etc.)	3	25	7*	3
Income of spouse living in household. *CT, DC, HI, IL, ME, OH, PA, RI, VT	2	27	9*	1
Income of household members other than spouse.*IL, ME, PA, RI, VT	14	14	5*	3
Income from government assistance programs (Food Stamps, AFDC, etc.)*DC, CT, OH	15	13	3*	1
Assets (home, vehicles, etc.)*CT, MD, MN, NM, SD **CT	23	5*	1**	1
Other: (PLEASE SPECIFY)	0	0	0	

IF AVAILABLE, PROVIDE COPIES OF FORMS USED TO DETERMINE INCOME.

5. Considering most cost shared services in your State, does the State or any AAA/LP use an income threshold below which people do not have to pay for any service?

DK 2 CA, MN

NO 4 DC, KS, LA, NH

YES 24 IF YES, EXPLAIN BELOW FOR WHICH SERVICES AND/OR WHICH AAAs/LPs HAVE AN INCOME THRESHOLD. IF AVAILABLE, INCLUDE DOCUMENTATION OF THRESHOLD AMOUNTS.

EXPLAIN:
Poverty or below - CT, IL, OR, PA, SC, SD,
125% of Poverty or below - GA
150% of Poverty or below - NY
Approx. $8000.00 or less annual income for one person - KY, VA
Approx. $800.00 or less monthly income for one person - MO, WA
Those with Medicaid eligibility or incomes less than - MA
Determined at local level - MD, VT

6. Does the State, or any AAAs or LPs deduct any client expenses (e.g. housing, medical, loans) from clients' income when determining fee levels for services?

DK 4 CA, CT, NM, NV

NO 10 DC, GA, IL, KS, LA, MA, MD, NH, WA

YES 17 IF YES, EXPLAIN BELOW WHAT EXPENSES ARE DEDUCTED WHEN DETERMINING FEE LEVELS. IF AVAILABLE, PROVIDE FORMS OR OTHER DOCUMENTATION TO ILLUSTRATE.

EXPLAIN:
MEDICAL - HI, ID, IN, KY, MO, OH, OR, PA, SC, VA, VT, WY
HOUSING - NY, VT, WY
ENERGY - SC
NON-EMPLOYMENT INCOME (such as IRS deductions)- ID
DEPENDENT CARE - VT
OTHER - (extraordinary situations that affect income, situations that are determined on case by case basis) - KY, ME, SC, VT
UNKNOWN - RI, SD

7. Below are various actions SUAs might take when collecting cost shared funds or allowing AAAs or LPs to collect cost shared funds. Indicate by checking YES or NO if your State has taken any of the following actions. (CHECK ALL THAT APPLY.)

ACTION	NO	YES	DK
State bills client and collects cost shared funds. *SD, RI +CT	27	2*	1+
AAA bills client and State collects cost shared funds.+CT	28	0	1+
AAA bills client and collects cost shared funds.*GA, IN, KY, ME, NY, OH, OR, PA, VA +CT	20	9*	1+
LP bills client and State collects cost shared funds. *SD +CT	27	1*	1+
LP bills client and collects cost shared funds.*SD, OH +CA, VA	2*	26	2+
Other: (PLEASE SPECIFY:) * DC -client pays contractor PA -client sends receipts to AAA and is reimbursed MO - state deducts co-pay for providers reimbursement HI- client pays contractor and is reimbursed by LP		4*	

IF AVAILABLE, PROVIDE EXAMPLES OF FORMS USED TO BILL CLIENTS, AND OTHER BILLING PROCEDURES OR POLICIES.

8. Below are listed various services which might be cost shared. The columns to the right give different times when payments on cost shared funds might be collected. The times are ONCE A MONTH (MON); and AT THE TIME OF THE SERVICE (SER). We are aware that these times might vary by individual AAA/LP practice. Check the VARIES (VAR) column if this is the case. If there is some other time when payments are collected in your State, check the OTHER (OTH) column and indicate to the right of the table what that time is. If unknown, check the DK column. If the service is not cost shared or is not provided in your State, check the N/A column.

TYPE OF SERVICE	MON	SER	VAR	OTH	DK	N/A
Home Delivered Meal	6	1	3	0	1	17
Congregate Meal	1	2	1	0	1	23
Assist with bathing/ dressing in the home	10	1	9	0	1	7
Respite Care	6	3	7	1	1	10
Home-health services (skilled nursing, physical therapy, etc.)	6	1	6	0	2	13
Emergency response/alert	1	1	5	0	3	18
Friendly calls/visits	1	0	1	0	2	23
Light housework	11	1	10	0	2	4
Errands/shopping	10	1	6	0	2	9
Handyman/minor home repair	3	3	6	0	1	13
Transportation	2	3	6	0	3	13
Legal assistance	1	2	2	0	1	21
Adult Day Care	10	1	9	0	3	6
Case management	3	0	4	0	1	19
Counseling	2	0	1	0	2	22
Other (PLEASE SPECIFY)*MA-bills for entire program MO-RN visit and advanced personal, KS-senior care act +NY-respite and ancillary, PA-partial hospitalization	3		2+			

9. Please explain general policies and procedures used by the State, and if known, by most AAAs/LPs in the State when clients default on cost sharing bills. ATTACH ANY AVAILABLE DOCUMENTATION EXPLAINING POLICIES AND PROCEDURES.

Policy developed by AAA/LP - GA, HI, KY, NM, OR, PA, VA, VT
Give client several notices/chances to pay before service termination-ID, IL, OH, PA, SC, WY
Will try to work out with clients on case by case basis -HI, ME, OR, PA, SC
Generally will not terminate services -NH, NV, OR, SC, VT, WY
Generally will terminate services after other collection methods are exhausted -ID, IL, IN, KS, MA, ME, NY, OH, PA, SD, VA
Other - DC (service is provided only on receipt of payment for a voucher.)
Unknown - AK, CA, MD, MN, MO

10. Listed below are some options regarding how cost shared funds might be spent after they are collected. Indicate by checking NO or YES if this option applies in your State. We are aware that more than one option might apply in your State due to varying AAA/LP practice. Check all options that apply.

OPTIONS	NO	YES	DK
Collected funds are spent only on the same type of service.*KY, NY	2*	25	3
Collected funds are used to offset administrative costs at State/local level.*IL, LA, ME, NV, RI, VA, VT	18	7*	4
Collected funds are used to offset expenses for other services.*MO, NH, NY, OH, PA, RI, VA	16	7*	6
Collected funds are used to offset expenses in other State/local programs.*MO, NY, OH, RI, VA	20	5*	4
Other: (PLEASE SPECIFY) *KY -unknown, VA -unexpended balances must be spent on critical care needs.		2*	

11. Does your State keep track of, or have any records or reports indicating the administrative costs incurred from cost sharing practices?

DK 3

NO 26

YES 2 (PLEASE EXPLAIN, AND ATTACH ANY PERTINENT DOCUMENTATION)

KS - difficult to calculate, but administrative costs to not exceed collected amounts.
VA - each AAA reports cost of administering fee for service program.

SECTION II - CURRENT VOLUNTARY CONTRIBUTION PRACTICES

12. Below is a table that lists various services that could be provided in whole or in part with Title III funds. As with the first table, check the N/A column if the service is not provided in your State at all. Check the NO column if the service is provided but **voluntary contributions** are not collected at all for the service. Check the YES column if the service is provided and voluntary contributions are collected. Check only one option for each service.

If the answer is YES, indicate how much of **Title III money** was spent on that service in FY 1994 and how much was collected in voluntary contributions. If you have figures for another year, use those figures, but indicate what year to the right of the table. If figures are unknown, check the DK column. If only total amounts are known, write those in the last row.

TYPE OF SERVICE	N/A	NO	YES	$$$ SPENT	$$$ COLLCTD	DK
Congregate Meal	0	0	49			
Home-delivered Meal	0	0	49			
In-home Service (Medical - skilled nursing, physical therapy, etc.)	16	9	22			
In-home Services (Personal -housework, errands, etc.)	1	3	43			
Adult Day Care	5	4	37			
Transportation	0	1	48			
Legal Assistance	0	7	41			
Case Management	6	17	22			
Other: (PLEASE SPECIFY)	0	2	17			
Totals:						

SEND ANY COST REPORTS OR OTHER DOCUMENTATION SENT TO YOU BY AAAs/LPs WHICH EXPLAIN THE ABOVE LISTED $$$s, AND ANY OTHER COST REPORTS FORMULATED BY THE STATE FOR ACCOUNTING FOR AND TRACKING VOLUNTARY COLLECTED FUNDS.

13. Does the State or any AAAs/LPs use any fee schedules/income requirements to determine suggested contribution amounts?

DK 4

NO 23

YES 22 (EXPLAIN BRIEFLY BELOW AND ATTACH FEE SCHEDULES, ETC.)

AAAs/LPs required to develop schedules- PA, SC, TN, WV
AAAs/LPs allowed but not required to develop fee schedules - CA, GA, NY
AAA/LP vary in establishing fee schedules- AZ, CA, CT, MN, NH, SC, TN, TX, VA
State has recommended fee schedule for AAA/LP use - NC
Other - NM (AAAs post cost of meal at mealsite), RI (nutrition project counsels for meals), DC (home health agencies use fee schedules.)
Unknown - DE, ID, MI, SD

14. Listed below are actions SUAs might take when collecting voluntary contributions and/or allowing or requiring AAAs/LPs to collect voluntary contributions. Please indicate whether your SUA has taken any of the following actions:

Action	NO	YES	DK
Provide guidance to AAAs/LPs to help them develop fee schedules and procedures. *AK, AL, AR, DC, FL, GA, IA, ID, IL, IN, MA, MD, MN,	20*	28	1
Review AAAs/LPs' proposed fee schedules and procedures. *AL, AR, CO, FL, GA, IA, ID, IL, KS, LA, MA, MD, ME MN, MT, NH, NM, OK, SC, VT, WI, WY	22*	24	1
Approve AAAs/LPs' proposed fee schedules and procedures.*AZ, DC, DE, MS, NV, NY, OR, PA, RI, SD	35	10*	2
Develop fee schedules and procedures to be implemented by AAA/LP. *CT, GA, ID, LA, NC, ND, NV, OR, PA, RI, SC, SD	35	12*	1
Develop fee schedules and procedures used by State. *CT, RI, SD, WI	42	4*	1
Other (PLEASE SPECIFY)		0	

15. Below are actions a State, AAA or LP might take when seeking voluntary contributions from clients for services. Check YES or NO if any of the following actions occur in your State. If unknown, check the DK column.

ACTION	NO	YES	DK
Give client written information on suggested contribution amounts.*IN, WI +AL, WA	2*	44	2+
Give client envelopes to submit contributions.*AL, ID, MS, WY +WA	4*	42	1+
Set out a locked box in which clients may contribute.*NH +VT, WA	1*	45	2+
Send client monthly statement with suggested contribution amount.*AK, CO, CT, DC, DE, HI, IA ,KS, LA, MI, MN, MO, ND, NH, NV, OR, PA, SC, SD, TX, VA, WV, WY +KY, NJ, VT, WA	20	23*	4+
Negotiate amount of contribution with client or family member.*AK, AZ, CO, CT, DC, HI, LA, ME, MI, MS, ND, NH, NM, NV, PA, RI, SC, SD, TX +MT, OR, VA, VT, WA	24	19*	5+
Ask for contributions from family members.*AK, DC, DE, FL, HI, KY, LA, MD, MI, MO, MS, MT, ND, NJ, NM, NV, OR, PA, RI, SD, TX, VT, WV. +AR, ME, NH, VA, WA.	19	23*	5+
Other: (PLEASE SPECIFY) *MS -promote contributions using written and verbal methods, SD -use a monthly ticket/punch card system, WI -give client information on service cost per unit.		3*	

PROVIDE EXAMPLES OF FORMS, STATEMENTS, AND/OR ENVELOPES USED TO COLLECT FUNDS.

16. Listed below are some options regarding how voluntarily contributed funds might be spent after they are collected. Indicate by checking NO or YES if this option applies in your State. We are aware that more than one option might apply in your State due to varying AAA/LP practice. Check all options that apply.

OPTIONS	NO	YES	DK
Collected funds are spent only on the service they are collected from.*IL, KY, OR, SC	4*	39	4
Collected funds are used to offset administrative costs at State/local level. *GA, LA, ME, NV, RI, VA, VT, WV	35	8*	3
Collected funds are used to offset expenses for other services. *CO, GA, IA, IL, KY, LA, ME, ND, NH, OR, PA, RI, SC, VA, WV	26	15*	5
Collected funds are used to offset expenses in other State/local programs. *KY, LA	39	2*	5
Other: (PLEASE SPECIFY) *KS -collected funds must be used within same title		1*	

17. Below are listed various services which might have voluntary contributions. The columns to the right give different times when voluntarily contributed payments might be collected. The times are ONCE A MONTH (MON); and AT THE TIME OF THE SERVICE (SER). We are aware that these times might vary by individual AAA/LP practice. Check the VARIES (VAR) column if this is the case. If there is some other time when payments are collected in your State, check the OTHER (OTH) column and indicate to the right of the table what that time is. If unknown, check the DK column. If the service has no voluntary contributions or is not provided in your State, check the N/A column.

TYPE OF SERVICE	MON	SER	VAR	OTH	DK	N/A
Home Delivered Meal	5	7	35	1	1	0
Congregate Meal	1	31	16	0	1	0
Assist with bathing/ dressing in the home	6	2	28	1	1	9
Respite Care	7	2	26	1	1	10
Home-health services (skilled nursing, physical therapy, etc.)	2	1	20	1	2	21
Emergency response/alert	1	1	14	1	5	24
Friendly calls/visits	0	2	17	1	3	21
Light housework	6	4	28	1	1	5
Errands/shopping	4	3	27	1	3	8
Handyman/minor home repair	0	5	27	1	1	11
Transportation	1	22	22	1	1	0
Legal assistance	1	8	25	1	4	7
Adult Day Care	6	3	26	1	1	10
Case management	2	2	17	1	2	22
Counseling	0	1	15	1	3	25
Other (PLEASE SPECIFY) *HI - escort, MA-health promotion, VA-dental, health promotion, emergency, financial consulting, info and referral.	0	3*	0	0	0	

SECTION III - IMPLEMENTATION OF TITLE III COST SHARING

18. Listed below are some potential changes/effects that might happen in your State if cost sharing for certain Title III funds is implemented. Check the NO column if you believe the change will not happen in your State. Check the YES column if you think this change might happen in your State AND EXPLAIN BELOW HOW YOU THINK THAT CHANGE MIGHT OCCUR. Check the DK column if you do not know if this change will happen in your State.

POTENTIAL CHANGE	NO	YES	DK
Cost sharing of Title III funds will change the way services are provided in the State.*AZ, CO, HI, KY, LA, MA, ME, MN, NC, NM, RI, TN, TX, WI	24	14*	11
Cost sharing of Title III funds will change the way funds are allocated to AAAs.*KY	27	1*	19
Cost sharing of Title III funds will change the way funds are allocated to LPs.*HI, KY, NM, RI	21	4*	24
Cost sharing of Title III funds will change the way funds are accounted for by the State/AAA/LP.*AR, CT, GA, KS, KY, MA, MI, MS, ND, NY, PA, RI, TN, VT, WI, WV	17	16*	16
Other: (PLEASE SPECIFY)	2	1	2

*EXPLAIN YES ANSWERS:

18D: ND -cost sharing mandates may decrease the number of higher income people if the fee scale requires that significant increases be made.

18OTH:
AR -client contributions are not reported in detail to the state at present. If cost sharing were implemented, those funds would have to be reported differently.
CA-cost sharing clients would create additional administrative costs.
MS-will need new procedures for dealing with large amounts of funds. Will need closer security or new ways of dealing with funds.
ND-cost sharing could affect the type of person receiving the service.

19. Listed below are various services that might be funded wholly or in part with Title III funds. If you believe that this service can be expanded and provided to more recipients by cost sharing the Title III funds spent on this service, check the YES column. Estimate to the right of the YES column a percentage on how much this service might be expanded through cost sharing. If the service cannot be expanded through cost sharing, check the NO column. If you do not know, check the DK column.

TYPE OF SERVICE	DK	NO	YES	PERCENT
Home Delivered Meal	16	12	21	
Congregate Meal	17	17	16	
Assist with bathing/ dressing in the home	21	6	21	
Respite Care	23	5	21	
Home-health services (skilled nursing, physical therapy, etc.)	24	7	14	
Emergency response/alert	23	7	12	
Friendly calls/visits	22	21	5	
Light housework	19	6	24	
Errands/shopping	19	9	21	
Handyman/minor home repair	22	6	21	
Transportation	18	6	26	
Legal assistance	23	6	21	
Adult Day Care	19	5	24	
Case management	23	13	11	
Counseling	22	10	9	
Other (PLEASE SPECIFY)			2	

20. What might be some of the reactions of recipients of Title III funded services to the implementation of mandatory cost sharing for certain services?

Recipients will drop out of programs: 21 -AZ, CT, DC, DE, GA, GM, HI, IA, KY, LA, MA, MO, MT, NH, NY, OK, OR, SC, SD, VT, WY

Recipients will say they cannot afford services: 15 -AZ, CT, DC, IL, KY, MA, ND, NH, NY, PA, SC, TX, VT, WA, WY

Recipients will feel resentment/embarrassment about revealing income: 12 -GA, IL, MA, ME, ND, NY, OK, SC, SD, TX, WA, WI

Recipients will understand/accept necessity: 12 -CT, DE, GA, LA, ME, NH, NY, SC, SD, TX, VT, WV

21. What are some ways that cost sharing for Title III funds might best be announced and explained to recipients?

Public notices/mass media/hearings: 12-DE, GM, HI, KY, LA, MA, ME, MT, ND, NY, PA, WV

Involve elected officials: 3- AL, KY, LA

Have service provider inform recipient in person: 12 -AZ, DC, DE, GM, IL, KY, ME, ND, OR, PA, WA, WY

Send letters from AoA and/or State Agencies: 5- GM, IL, KY, ME, WA

Distribute flyers/other information at senior centers: 4 -AZ, HI, ME, PA,

Explain need for cost sharing/how cost sharing will help maintain or expand services: 15 -CT, DC, GA, HI, IA, MA, NH, OK, OR, SC, SD, TX, VT, WA, WI

Other suggestions:

Use pilot programs to phase in cost sharing.
Involve recipients in planning/implementation.
Give clients plenty of notice.
Make sure there is policy that no one will be refused service for inability to pay.
Do not use mass media.

22. What resources (e.g. staff, systems, etc.) does your State anticipate it will take to implement cost sharing for Title III funds?

Staff time at State, AAA, and/or LP level: 12 - AZ, CT, DC, GA, HI, KY, ME, NY, OK, OR, VT, WV

Update computer/accounting/tracking systems: 17 -CT, DC, GA, GM, KY, MA, ME, MA, MT, NC, ND, NY, TX, VT, WA, WI, WV

Develop new policies and procedures: 6 -HI, KY, ME, MS, NY, VT

Training time: 10 -GA, HI, IL, KY, MS, NC, NY, OK, VT, WI

Other costs:
Materials
Travel
Printing
Audits

23. Please comment below on any other implications of cost sharing of Title III funds.

State supports cost sharing: 5 - DE, GA, ME, SC, SD

Concern that cost sharing will affect targeting and availability of services to low-income elderly: 7 - CT, DC, IL, ND, NY, VT, WV

Other comments:

Would like to cost share nutrition services.

State already receives substantial amounts in voluntary contribution - cannot see how cost sharing will bring in more.

Cost sharing constitutes a major change in philosophy - should be considered carefully.

Carefully consider the cost effectiveness of cost sharing, especially if recipients must verify information.

APPENDIX B

Examples of State Forms for Determining Recipient Income and Sliding Fee Scales

CUMBERLAND COUNTY OFFICE OF AGING
SLIDING FEE SCALE FOR PERSONAL CARE ATTENDANT CARE HOME SUPPORT HOME MODIFICATION/OPTIONS II IN HOME SERVICES

NAME_____ DATE_____

ADDRESS_____ WORKER_____

I. Monthly income (less federal, state, local taxes including FICA)

Social Security/RR Retirement	_____
Pension/Annuities	_____
Net wages	_____
Interest/Dividends	_____
Workers, Unemploy., and/ or Disability Compensation	_____
Other Income	_____
TOTAL	_____

II. Exclusions

A. Medical exclusions that exceed 7.5% of income may be deducted:
1. Actual monthly income _____ X 7.5% = _____
2. Monthly medical expenses _____
Subtract "1" from "2" _____

B. Housing exclusions that exceed 30% of income may be deducted:
1. Actual monthly income _____ X 30% = _____
2. Monthly housing expenses _____
Subtract "1" from "2" _____

Add Medical exclusions and housing exclusions _____
Subtract exclusions from actual monthly income to obtain adjusted income and determine bracket for sliding fee scale.

SLIDING FEE SCALE

Adjusted income 1 PERSON	2 PERSONS	Cost per hour
< 1000	<1300	no charge
1001 - 1050	1301 - 1350	1.50
1051 - 1100	1351 - 1400	2.00
1101 - 1150	1401 - 1450	2.50
1151 - 1200	1451 - 1500	3.00
1201 - 1250	1501 - 1550	3.50
1251 - 1300	1551 - 1600	4.00
1301 - 1350	1601 - 1650	4.50
1351 - 1400	1651 - 1700	5.00
1401 - 1450	1701 - 1750	5.50
1451 - 1500	1751 - 1800	6.00
1501 - 1550	1801 - 1850	6.50
1551 - 1600	1851 - 1900	7.00
1601 - 1650	1901 - 1950	7.50
1651 - 1700	1951 - 2000	8.00
1701 - 1750	2001 - 2050	8.50
1751 - 1800	2051 - 3000	9.00
1801 - 1850	3001 - 3050	9.50
1851 - 1900	3051 - 4000	10.00

Income exceeding these levels, a flat rate of $10.50 per hour will be charged.
For each additional legal dependent for Internal Revenue Service purposes, deduct $200 from monthly adjusted income and use 2 person scale to determine appropriate bracket on sliding fee scale.

IV. Your fee for: Personal Care _____ Home Support _____ Attendant Care _____ Home Modification _____ Options II _____ service has been determined to be $_____ per hour of service.

_____
Client signature

Expanded In-Home Services for the Elderly Program

CLIENT COST SHARING THRESHOLDS AND SCHEDULES
Effective January 1, 1995

A. Monthly Income Thresholds

INDIVIDUAL = $946 per month
COUPLE.... = $1,264 per month

B. Housing Adjustment Thresholds

1) To be eligibile for a housing adjustment, average monthly housing expenses must be more than the following:

INDIVIDUAL = $378 per month
COUPLE.... = $506 per month

2) The amount of the housing adustment can not be more than the following maximum amounts:

INDIVIDUAL = $189 per month
COUPLE.... = $253 per month

C. Cost Share Rate Schedule

INDIVIDUAL		COUPLE	
Adjusted Income	Fee Rate	Adjusted Income	Fee Rate
$0	0%	$0	0%
$1 to $33	5%	$1 to $44	5%
$34 to $66	10%	$45 to $89	10%
$67 to $100	15%	$90 to $133	15%
$101 to $133	20%	$134 to $177	20%
$134 to $166	.25%	$178 to $222	.25%
$167 to $199	30%	$223 to $266	30%
$200 to $232	35%	$267 to $311	35%
$233 to $265	40%	$312 to $355	40%
$266 to $299	45%	$356 to $399	45%
$300 to $332	.50%	$400 to $444	.50%
$333 to $365	55%	$445 to $488	55%
$366 to $398	60%	$489 to $532	60%
$399 to $431	65%	$533 to $577	65%
$432 to $465	70%	$578 to $621	70%
$466 to $498	.75%	$622 to $665	.75%
$499 to $531	80%	$666 to $710	80%
$532 to $564	85%	$711 to $754	85%
$565 to $597	90%	$755 to $799	90%
$598 to $631	95%	$800 to $843	95%
More than $631*	100%	More than $843*	100%

* Or eligible for Medicaid.

APPENDIX C

AoA's Comments

DEPARTMENT OF HEALTH & HUMAN SERVICES

Office of the Secretary
Administration on Aging

Washington, D.C. 20201

MAY - 4 1995

TO: Inspector General

FROM: Assistant Secretary for Aging

SUBJECT: OIG Draft Report "Cost Sharing Under the Older Americans Act"
OEI-05-95-00170

Thank you for the opportunity to review and comment on your draft report, "Cost Sharing Under the Older Americans Act." We are pleased with the attention and quick turn around provided by your Office of Evaluation and Inspections.

As you know, the Older Americans Act (Act) does not permit cost sharing. State agencies administering programs under the Act have expressed a desire to implement some measure of cost sharing in programs under the Act for over 20 years, and many are involved in cost sharing strategies as permitted under other federal and state programs. In recognition of this, and to facilitate enhanced coordination of programs under the Act with other human and social service programs, we are promoting in the current reauthorization proposal the option for states to allow cost sharing for some services.

The comprehensive survey developed and administered by Jean DuFresne, and the coordination provided by David Wright has provided us with the necessary background information required to assess cost sharing language in reauthorization bills proposed by the majority in both the House and Senate. We also anticipate that this survey data will provide us with baseline information to develop program policy and technical assistance for state agencies administering programs under the Act.

Fernando M. Torres-Gil

SECTION VII—STATE PROGRAM REPORT (EXECUTIVE SUMMARY), FISCAL YEAR 1995

Preface

This report compiles data submitted by state agencies on aging in compliance with new reporting requirements issued by the Administration on Aging (AoA), effective in FY1995. Development and implementation of the new Older Americans Act (OAA) reporting requirements has been a multi-year process. The FY1995 report represents the first major product resulting from the changes. As with any new reporting system, the data being reported are the result of many changes in reporting procedures and practices. State and area agencies on aging and community service providers all had to change current reporting procedures and practices to comply with the new reporting requirements. New reporting systems are being implemented in many states that substantially improve and expand the level of reporting on home and community-based care services. While every effort has been made to review the data, it is clear that the quality and accuracy of the data will improve as more experience is gained with the new requirements.

The AoA will continue to encourage improved reporting and information systems capacities in the Aging Network. In the years ahead, AoA looks forward to the availability of more accurate, useful data on OAA funded programs to support policy analysis, planning and advocacy activities of many different agencies both within and outside the Aging Network. This report is a good, first step toward that end.

From the inception of the development process, AoA has sought considerable input from the aging network. We thank state and area agencies on aging as well as service providers for their cooperation and support during the development and initial implementation steps of a new reporting initiative. AoA relied on the National Aging Information Center (NAIC), a service of AoA, to help collect, tabulate and analyze the 1995 data. Alan Ackman, NAIC, coordinated the entire effort and is the author of this report. He was supported by Mary Anne Squire and Dale Less, also staff of NAIC, who assisted in the review and tabulation of the data.

The Aging Network is at a pivotal point in its development. Upgrading our nation's system for data collection and reporting on services to older Americans is critical as we move into the next century. We look forward to continuing our efforts with the Aging Network as we forge ahead in the age of information.

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Introduction

Over thirty years ago the Older Americans Act (OAA) was passed. Since its initial passage, the OAA has been an important force for change for programs and services for older americans . The OAA fostered the creation of a national network of state and area agencies on aging and Indian Tribal Organizations. Through the development efforts of the Aging Network and OAA funding, an infrastructure of home and community based services has emerged in every state. While much has been accomplished, the job ahead is still very large. OAA funds are small compared to the need. Each OAA dollar must be well spent in order to address both current demand and, at the same time, prepare for emergent needs of the elderly in the 21st century.

This report summarizes programs and accomplishments reported by state units on aging which were supported by Titles III and VII of the OAA in Federal Fiscal Year 1995. The information provided in this report are the result of new reporting requirements introduced by the Administration on Aging (AoA) for Title III and VII in 1995. Implementation of the new Title III program reporting requirements is a multi-year process, with the 1995 performance report representing the first step toward reporting by the Aging Network which is more client centered.

To comply with the new reporting requirements, states are making major changes to long -standing reporting procedures. Every effort has been made by states and the AoA to review the new data submitted for FY1995 and ensure its accuracy. Once states submitted the data, AoA prepared summaries that were sent to states for review and concurrence. Still, AoA fully expects it will take *two to three years before all the reporting procedures are in place to produce very accurate, comparable data.*

This 1995 report is designed to provide summary highlights of Title III and VII program performance, including persons served, services provided, services expenditures, providers used, state and area agency staffing, developmental accomplishments and the use of senior centers. Both national and state specific summaries are included. This is the first time the annual State Program Performance Report (SPR) includes information on individual state activities and performance supported by Titles III and VII.

It should be noted that the AoA is required to produce a separate report to Congress on the Long Term Care Ombudsman Program supported by the OAA. This report provides only a brief synopsis of the Ombudsman Program accomplishments. See the separate Ombudsman Report for a more detailed report on accomplishments for this program.

Summary of New Reporting Requirements

In 1995 AoA introduced a new set of reporting requirements for Titles III and VII, including special reporting for the Long-Term Care Ombudsman Program. The new Title III reporting requirements put more emphasis on accurate client counts and additional descriptive information on client characteristics. Key features of the new reporting requirements include:

- Consolidation and elimination of service reporting from 30 separate categories to 14;
- Addition of new service categories reflecting priorities of the Aging Network – case management and adult day care/adult day health;
- A requirement for client registration for nine services in order to produce accurate, unduplicated client counts for the nine services (to be implemented in FY1997);
- Elimination of reporting on clients and service units by individual Title III Parts;
- Provision for optional reporting by states on Title III funded services not included by the AoA list of 14 services;
- Inclusion of the requirement for client registration for selected services; and,
- Electronic transmittal of the data by states to AoA.

In 1995 several new data elements for Title III reporting were introduced. Additional data elements will be introduced in FY1997 tied to the requirement for client registration of selected services. New data elements introduced in 1995 include:

- Number of providers using Title III funds, by service;
- Number of minority providers, by service;
- Number of Area Agencies on Aging (AAAs) acting as direct service providers;
- Program income for each listed service;
- Total estimated persons served -- all services and all Title III parts;
- Summary descriptions of Aging Network developmental accomplishments;
- Staffing profiles for both state units on aging and area agencies on aging.

Given these new requirements, many states are upgrading their reporting systems at all levels. New procedures for client intake/registration are being implemented along with the capacity to maintain a master client registry that can be kept up-to-date as new clients are served, active clients drop out and current clients receive new or different services. AoA has encouraged the development of these new systems, recognizing each state has distinctive requirements and needs for information systems.

New service definitions and terms were introduced as part of the amended reporting requirements. Limited comparisons are possible of 1995 performance data with performance data submitted by states for prior years. AoA plans to use 1995 as a new base year against which future performance data will be compared.

Summary Highlights

After thirty years, the Aging Network has put in place a program involving diverse services and the use of thousands of providers. All fifty-seven state level jurisdictions receive OAA funds awarded annually by the AoA in the form of a grant, based on the size of the elderly population in each state. With these funds, designated state units on aging, supported by area agencies on aging in all but eight states, develop and administer a diverse set of home and community-based services.

Even though funding has not kept up with demand, the Aging Network has still been able to implement and operate a far reaching, diverse program. Summary performance indicators for 1995 show the breadth of services and capacities now in place:

- Programs and services supported by the OAA served an estimated 7,453,575 persons age 60 and over;
- Twenty percent of the program participants were minority;
- Thirty-nine percent of the program participants had incomes at or below poverty;
- Twelve percent of the total count of program participants had incomes below poverty who were also minority participants;
- Of the total clients in poverty, thirty-two percent were minority participants; conversely, of those who were minority clients, 62% had incomes at or below the poverty level;
- Thirty-five percent of the program participants lived in rural areas;
- The OAA puts a high priority on the provision of nutrition services to the elderly. In 1995 a total of 123.4 million congregate meals were provided and 119 million home-delivered meals;

- Title III federal expenditures reported by states totaled $673 million; and,
- Title III federal funds comprised 39% of the total service expenditures reported by the Aging Network in 1995.[1]
- A total of 6,397 senior centers were supported by Title III funds:
- A total of 564 long-term care ombudsman program entities were in place;
- A total of 1,182 staff in state units on aging were supported with Title III funds, 32% of total state unit on agency staffing.
- A total of 9,110 area agency on aging staff were supported by Title III funds, 48% of the total paid area agency on aging staff.

Three services account for the majority of OAA funding, congregate meals, home-delivered meals and transportation. In 1995 Title III federal expenditures for congregate meals reached $250 million and $134 million for home-delivered meals. Transportation is the third largest services in terms of Title III funding, $63 million. Together these three services account for 66% of the total Title III federal funding.

Profile of Clients Served

In 1995, the Title III program provided services to an estimated 7,453,575 persons, approximately 16% of the population age 60 and over in the U.S. This estimate takes into account all services supported by Title III funds in the state.[2] Five states (California, New York, New Jersey, Illinois and Michigan) account for 34% of the total persons served. These five states have 29% of the population aged 60 and over in the U.S. in 1995. The five states reporting the highest percent of the 60+ population served by OAA programs include Wyoming (64%), New Mexico (44%) Alaska (44%) North Dakota (43%) and Utah (39%). Twenty -three states report 20% or more of their population aged 60 and over were served through OAA supported programs.

Of the total participant population served, 1,497,916 persons were reported to be minority participants (20.1%). The distribution by race and ethnicity is estimated to be as follows:

Figure 1. Minority Participants

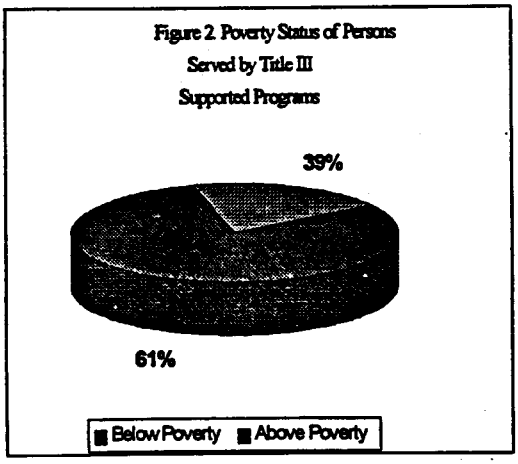
Race/Ethnicity	Number Of Minority Participants	% of Total Minority Participants	% of Total Participants
African-American	820,105	54.7%	11.0%
Hispanic-Origin, All Races	434,674	29.0%	5.8%
American Indian/Alaskan Native	76,999	5.1%	1.0%
Asian American/Pacific Islander	166,138	11.1%	2.2%

California, New York, New Jersey, Texas and Illinois account for 39% of the minority participants. All but three states had a percentage of minority clients served which was equal to or greater than the percentage of the total 60+ minority population in the state.

[1]Excludes estimated total service expenditures for California and Massachusetts that were not reported; as a result, the percent of total expenditures attributable to Title III funding is overstated.
[2]Beginning in 1997, AoA will be able to document not only the total estimated unduplicated clients served but the number of clients served via registered services based on client registries and new reporting systems being implemented by state units on aging.

States reporting the highest percentage of minority participants include Hawaii (75%), Mississippi (47%), New Mexico (45%), and South Carolina (45%). Puerto Rico reports 100% of its participants are minority and the District of Columbia reports 82.1%. Approximately 55% of the total minority participants are African-American with 29% being Hispanic-origin.

An estimated 39% of the total participants have incomes at or below the federal poverty threshold. Among states, the poverty participant rate ranged from a low of 17.2% to a high of 86.9%. Of those below poverty, approximately 32% are minority participants. Low-income, minority participants comprise 12.5% of the total participant population. States with the highest percentage of poverty level participants included Mississippi (86.9%), Oklahoma (68.8%) and Texas (68.7%). The District of Columbia reports 88.5%. Mississippi has the highest percentage of participants who are both in poverty and minority (44.3%). Twelve states report that at least one-half of the participants have incomes at or below the poverty threshold.



When the profile of clients served is compared to the state 60+ population, based on poverty characteristics, every state is clearly targeting poverty clients. For the U.S., in 1989, the Census reports approximately 12% of the 60+ population with incomes at or below poverty. Each state reported a substantially higher percentage of poverty clients than the equivalent percentage of the 60+ population in the state whose incomes fell at or below the poverty threshold. The same is true for targeting of minority persons whose income is below poverty.

An estimated 2.6 million participants live in rural areas (35%). A total of 20 states have at least 50% or more of the total Title III participants who live in rural areas. States with the highest percentage of rural participants include Wyoming (100%), Mississippi (84.6%), Montana (80.9%), and Vermont (78.8%). States reporting the lowest percentage of rural residents include Tennessee (6.4%), Rhode Island (7.9%), Connecticut (7.1%), Massachusetts (11.1%) and California (11.9%).

Service Provision

Beginning in 1995 the SPR service reporting was changed. As already noted, the list of services individually reported was reduced from thirty to fourteen. States have different service priorities for Title

III funding so the mix of services and level of funding for services varies somewhat from one state to another. States could, at their option, provide information on other services supported by Title III and VII funding.

A. Scope of Services

Most states provide the majority of the listed services. To show the extent of service coverage, see Figure 3.

Figure 3. Scope of Services Supported by Older Americans Act

Number of Listed Services Supported With State Funding	Number of States	% of All States*
All 14 Listed Svcs Plus Other Svcs	5	11.5%
All 14 Services	10	19.2%
13 Services	14	26.9%
12 Services	6	11.5%
11 Services	4	7.7%
10 Services	6	11.5%
9 Services	4	7.7%
8 Services	2	3.8%

* *Includes Puerto Rico and the District of Columbia*

Five states indicate all fourteen services are provided in their state plus other services as well. Fifty-eight percent of the states fund at least 13 of the listed services and/or other services. No state reported providing less than eight of the listed services. Five states, Delaware, Indiana, Michigan, Oklahoma, and Oregon did not provide any "other" services with Title III funding support. Looking at service support from a different perspective, the number of states using Title III funds to support each listed service is shown in Figure 4.

Figure 4: State Support for Selected Services

Home and Community-Based Service	# of States Funding the Service	% of All States (inc DC and PR)
Personal Care	41	78.8%
Homemaker	47	90.4%
Chore	38	73.0%
Home-Delivered Meals	52	100.0%
Adult Day Care/Health	40	76.9%
Case Management	41	78.8%
Congregate Meals	52	100.0%
Nutrition Counseling	17	32.7%
Assisted Transportation	31	59.6%
Transportation	50	96.2%
Legal Assistance	50	96.2%
Nutrition Education [3]	29	55.8%
Information and Assistance	48	92.3%
Outreach	45	86.5%
Other Services	46	88.5%

[3]Nutrition education is a required activity by the OAA. However, some state and area agencies on aging consider nutrition education to be part of a meal service and do not report nutrition education separately under the existing reporting procedures. Therefore, the number of states reporting nutrition education is understated.

As expected, all the states provide home-delivered and congregate meals. All of the states operate a long-term care ombudsman program supported by the OAA. In 1995, for the U.S., there were a total of 564 designated local ombudsman entities and a total of 1,546 paid staff (full time equivalents) as well a 6,428 certified volunteers.[4]

B. Levels of Service Provision

Levels of service provision vary by state due to both funding levels and service priorities. The profile of service units is summarized in Figure 5.

Figure 5. Levels of Service Provision

HCBC Service	Measure	Total Units (U.S.)	Top 3 States - Highest # of Units
Personal Care	Hour	7,703,053	NY, PA, NC
Homemaker	Hour	6,635,425	NY, OH, MI
Chore	Hour	890,488	MN, IA, OH
Home-Delivered Meals	Meal	119,000,053	NY, CA, TX
Adult Day Care/Health	Hour	4,221,484	NY,FL, IA
Case Management	Hour	2,976,149	NY, IL, CA
Congregate Meals	Meal	123,387,303	NY, CA, TX
Nutrition Counseling	Hour	100,069	MA,NY, TX
Assisted Transportation	1WayTrip	2,232,027	OH, WY, MD
Transportation	1WayTrip	39,496,946	NY, OH, TX
Legal Assistance	Hour	1,396,519	AZ, CA, WI
Nutrition Education	Session	1,142,379	FL, MD, TN
Info and Assistance	Contact	12,526,537	NY, CA, FL
Outreach	Contact	2,643,830	MN, CA, NM

Levels of service use by individual participants were examined for the nine registered services. Considerable variation exists from state to state. See Figure 6.

Figure 6. Units per Participant for FY1995

HCBC Service	Measure	Avg. Units/Client U.S.	Avg. Units/Client Highest State	Units/Client For the State *
Personal Care	Hour	79.45	Virginia	248
Homemaker	Hour	39.54	Arkansas/N. Car.	*98
Chore	Hour	13.42	Georgia	366
Home-Delivered Meals	Meal	120.36	Florida	*204
Adult Day Care/Health	Hour	90.56	Arkansas	634
Case Management	Hour	5.95	Massachusetts	37
Congregate Meals	Meal	51.15	Florida	*152
Nutrition Counseling	Hour	2.70	Texas	13
Assisted Transportation	1WayTrip	27.39	Florida	231

** Note: The District of Columbia estimates 213 units per person for home delivered meals and 286 units per person for homemaker. Puerto Rico reports 223 units per person for congregate meals.*

[4]See the Annual Program Report for the Ombudsman Program issued by the AoA for a fuller description of the accomplishments of this Program.

States use Title III funds to provide services other than those individually reported to AoA. At the option of each state, information can be provided on these other services. The range of services optionally reported is extensive including such diverse services as benefits counseling, senior center activities, health promotion, home repair and modification, telephone reassurance, friendly visiting, adaptive/assistive technology, volunteer services coordination and more.

C. Service Providers

For the first time, the Title III State Program Report contains summary information on the number and type of service providers funded with Title III funds. Information was collected on the number of providers for each of the 14 listed services. See Figure 7. Providers of other services supported by Title III funding were not identified.

Figure 7. Service Providers for Selected OAA Supported Services

HCBC Service	Total Providers	Total Minority Providers	% Minority Providers	Total Minority Providers (Less D.C and P.R.)
Personal Care	1,856	210	11.3%	116
Homemaker	2,032	186	9.2%	92
Chore	755	151	20.0%	56
Home-Delivered Meals	3,614	397	11.0%	298
Adult Day Care/Health	905	210	23.2%	111
Case Management	821	71	8.6%	61
Congregate Meals	3,902	504	12.9%	405
Nutrition Counseling	505	138	27.3%	39
Assisted Transportation	896	203	22.7%	108
Transportation	2,965	433	14.6%	325
Legal Assistance	1,205	160	13.3%	66
Nutrition Education	1,595	254	15.9%	153
Info and Assistance	2,370	233	9.8%	226
Outreach	2,047	199	9.7%	192

In 1995, AoA collected information on minority providers. It should be pointed out that Puerto Rico alone accounts for 94 minority providers in all but three services (case management, information and assistance and outreach) where Puerto Rico reports seven minority providers. The District of Columbia also has a high percentage of minority providers. In Figure 7 the count of minority providers is shown both with and without Puerto Rico and the District of Columbia.

As Figure 7 shows, the greatest number of providers are meals providers, closely followed by transportation providers. Some of the meal providers are likely to provide both home-delivered and congregate meals under Title III. Likewise, providers are likely to be funded to provide more than one home and community-based service. [5]

Based on the reported data, the average level of service offered by a Title III supported provider is relatively small. Two indicators were developed to establish the level of service of Title III-funded providers: 1) average service units and average number of clients. See Figure 8.

[5] In future years, AoA will be able to report on the number of unduplicated providers spanning all 14 services individually reported by state units on aging.

Figure 8. Size of Provider Operations Supported in Whole or Part by Title III

HCBC Service	Measure	Average Units Per Provider	Average Clients Per Provider
Personal Care	Hour	4,150	52
Homemaker	Hour	3,265	83
Chore	Hour	1,179	88
Home-Delivered Meals	Meal	34,010	283
Adult Day Care/Health	Hour	4,665	52
Case Management	Hour	3,625	NA
Congregate Meals	Meal	32,634	638
Nutrition Counseling	Hour	632	198
Assisted Transportation	1WayTrip	2,491	90
Transportation	1WayTrip	13,321	*
Legal Assistance	Hour	1,159	*
Nutrition Education	Session	865	*
Info and Assistance	Contact	5,228	*
Outreach	Contact	1,292	*

* *Data on persons served are not collected for these services.*

In certain cases area agencies on aging choose to provide services directly rather than issue a contract with providers. The absence of a viable local provider is often the reason. In other cases, direct service provision helps the area agency on aging ensure a vital feature of home and community-based care is in place; for example, the presence of an independent, objective case management service. See Figure 9 for a profile of AAA direct services provision.

Almost one-third of the AAAs are involved in the direct provision of congregate meals (31%). Thirty percent of the AAAs are directly providing home-delivered meals. AAAs are also likely to provide access services directly. Of all the AAAs, 36% are providing some form of case management directly and 61% provided information and assistance services and 40% are involved in outreach activities.

Looking at AAAs as a percentage of total providers, AAAs represent almost a third of the case management providers (29%). By contrast, AAAs represent less than 5% of the providers of personal care, homemaker, adult day care, transportation and assisted transportation.

Figure 9. Area Agency on Aging Service Provision, By Service

HCBC Service	# of AAAs Directly Providing Service	% Of All AAAs in U.S.	% AAAs Of Total Providers For Svc
Personal Care	55	8%	3%
Homemaker	76	12%	4%
Chore	50	8%	7%
Home-Delivered Meals	195	30%	5%
Adult Day Care/Health	27	4%	3%
Case Management	234	36%	29%
Congregate Meals	205	58%	5%
Nutrition Counseling	75	12%	15%
Assisted Transportation	53	8%	6%
Transportation	153	23%	5%
Legal Assistance	106	16%	9%
Nutrition Education	139	21%	9%
Inform and Assistance	401	61%	17%
Outreach	255	39%	13%

D. Senior Centers and Focal Points

Title III funds are an important source of support for senior centers. Every year states report on the number of focal points designated in the state, the number of senior centers considered focal points and the number of senior centers supported by the Older Americans Act.

In 1995 for the U.S. a total of 11, 463 senior centers were identified by states. Of those 6,397 were supported by OAA funding (55.8%). States report a total of 8,341 designated focal points. Seventy-five percent of the focal points are senior centers. For the U.S. there were a reported 1.85 senior centers for every 10,000 persons age 60 and over in 1995. States with the highest percent of senior centers per 10,000 residents include Alabama (52 per 10,000 persons 60 and over), New York (27/10,000) and North Dakota (17/10,000).

Several states report that all of their senior centers receive some level of Title III support. They include Alaska, Alabama, Arizona, Arkansas, Maryland, Missouri, Pennsylvania, Utah, West Virginia and Wyoming. By contrast three states report none of the senior centers in the state received Title III funding -- Delaware, Idaho, and New Hampshire.

Service Expenditures

A. OAA Appropriations for State and Community and Tribal Programs

In 1965, total OAA funding was small and little funding was available for services provision, approximately $5 million. However, in 1972 Congress inacted the Nutrition Program for the Elderly and made available in 1973 $167 million in grants for state and community programs. By 1973 there were 30 million persons age 60 and over in the U.S. For 1973, OAA service funding amounted to $5.44 per person age 60 and over. Since 1973 OAA funding for state and community programs has steadily increased. By 1995 OAA funding for state and community programs had increased four fold over the 1973 funding level. Despite these increases the effects of inflation and population growth diminished the actual impact of the increases in the annual OAA appropriation for state and community programs. See Figure 10 for an analysis of actual appropriations relative to the 1973 benchmark appropriation.

Figure 10. Analysis of OAA Appropriations for State and Community and Tribal Programs[6]

Funding Year *	Actual OAA Appropriation (In Mill. $)	OAA $/60+ (Uninflated)	Inflation Rate Multiplier (CPI)	Inflation Adjusted OAA$/60+	OAA 1973 Parity $ (In Mill. $)	Shortfall (Actual to Parity In Mill. $)	% Shortfall Relative to 1973
1973	$167.0	$5.44	100.0				
1974	172.8	5.51	104.9	$5.78	$181.3	$8.5	4.67
1975	207.0	6.45	109.4	7.06	226.5	19.5	8.59
1976	285.5	8.72	112.5	9.81	321.2	35.7	11.11
1977	325.7	9.73	116.2	11.31	378.5	52.8	13.94
1978	423.0	12.37	120.8	14.95	511.0	88.0	17.22
1979	443.0	12.66	128.2	16.23	568.0	124.9	22.00
1980	572.9	15.98	138.0	22.05	790.6	217.7	27.54
1981	630.1	17.23	146.5	25.24	923.2	293.0	31.74
1982	612.4	16.39	152.1	24.94	931.4	319.0	34.25
1983	649.4	18.03	155.4	28.02	1,009.1	359.8	35.65
1984	666.9	18.23	159.5	29.08	1,063.7	396.8	37.30
1985	676.4	17.65	163.2	28.81	1,103.9	427.5	38.73
1986	647.3	16.65	165.2	27.51	1,069.3	422.0	39.47
1987	700.5	17.34	169.2	29.33	1,185.2	484.7	40.90
1988	701.3	17.14	173.9	29.81	1,219.6	518.3	42.50
1989	726.0	17.54	179.6	31.50	1,304.0	577.9	44.32
1990	722.1	17.25	186.3	32.14	1,345.3	623.2	46.32
1991	766.6	18.10	191.8	34.72	1,470.3	703.7	47.86
1992	802.1	18.78	195.8	36.79	1,571.3	769.2	48.95
1993	797.0	18.53	200.1	37.07	1,594.8	797.8	50.02
1994	828.2	19.16	203.8	39.04	1,687.9	859.7	50.93
1995	830.9	19.07	206.3	39.33	1,714.1	883.2	51.53

Taking into account both annual inflation, as measured by the CPI, and net increases in the 60 and over population, the 1995 appropriation for state and community programs should have been $1.7 billion dollars to maintain parity with the 1973 funding level. Adjusting for inflation, per capita appropriations should have been $39 per person in 1995. Actual per capita funding was $19 per person. As a result actual appropriations have shrunk by just over 50% relative to the equivalent level in 1973.

B. Expenditures by Service

Total federal Title III expenditures for 1995 reported by states were $673 million. Typically Title III expenditures represent but a portion of the total expenditures for services supported through the OAA. State units on aging, area agencies on aging and service providers are able to leverage the federal Title III funding in the form of match resources, program income, and other state and federal funding sources. Total services expenditures for OAA supported services are estimated to be $1.714 billion for 1995. Title III federal expenditures in 1995 were 39% of the total service expenditures *which were either contractually or administratively linked to Title III funding.*

Beginning in 1995, AoA is examining service expenditures by service category. Fourteen listed services are divided into three categories (clusters) plus an "other category. Cluster 1 services include personal care, homemaker, chore, home-delivered meals, adult day care/health and case management. Cluster 2 services include congregate meals, nutrition counseling and assisted transportation. Cluster 3 services

[6]OAA appropriations are for state and community programs (all funding Title III parts, Title VII chapters and Title VI. Also see Figure 11. for a graph of the above data.

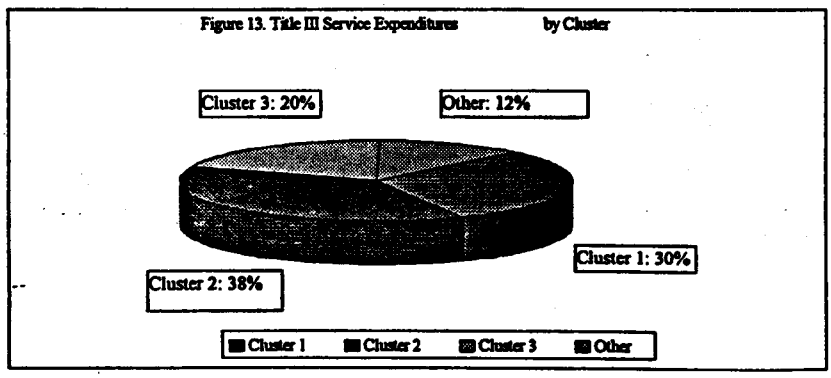
include information and assistance, transportation, legal assistance, nutrition education and outreach.

As can be seen in Figure 12 below, the 14 listed services account for the large majority of federal Title III expenditures (87.8%). The same 14 services account for 88.5% of total services expenditures reported by states.

Figure 12. Title III Expenditures by Service, U.S.

HCBC Service	Title III Federal Expenditures	% of Total Title III $	Total Service Expenditures*	% Title III Exp. of Total Service Expenditures
Cluster 1 Services:	***$203,577,533***	***30.3%***	***$679,580,533***	***29.9%***
Personal Care	11,572,841	1.8	87,850,174	13.2
Homemaker	23,775,356	3.5	68,792,393	34.6
Chore	4,406,215	0.7	8,726,806	50.5
Home-Delivered Meals	134,119,129	19.9	396,689,611	33.8
Adult Day Care/Health	7,084,660	1.1	30,659,639	23.1
Case Management	22,239,332	3.3	86,861,910	25.6
Cluster 2 Services:	***253,915,539***	***37.7%***	***536,309,087***	***47.4%***
Congregate Meals	249,687,321	37.1	523,043,994	47.7
Nutrition Counseling	1,284,944	0.2	2,303,275	55.8
Assisted Transportation	2,943,274	0.4	10,961,818	26.9
Cluster 3:	***133,288,911***	***19.8%***	***297,874,198***	***44.8%***
Transportation	62,657,467	9.3	158,007,250	39.7
Legal Assistance	20,134,558	3.0	36,903,429	54.6
Nutrition Education	3,267,008	0.5	4,685,252	69.7
Info. and Assistance	31,765,708	4.7	69,871,060	45.4
Outreach	15,464,170	2.3	28,407,206	54.4
Other	***82,024,622***	***12.2%***	***200,411,675***	***40.9%***
Total	***$672,606,605***	***100.0%***	***$1,714,175,492***	***39.2%***

**See definitions in Appendix II of the full report for an explanation of total service expenditures.*



Cluster one services account for approximately 30% of the Title III expenditures. Registered services (clusters 1 and 2 services) account for two thirds (67%) of Title III expenditures.

Data were collected on total services expenditures and the portion of total service funding provided through Title III. Figure 12 data show that Title III expenditures are approximately 40% of the total expenditures. Some services rely more heavily on Title III funding to cover the costs of services. Title III funding for nutrition education approaches 70% for the U.S. Approximately 56% of the nutrition counseling expenditures are attributable to Title III. By contrast Title III funding covers only 13% of the total services expenditures for personal care.

Figure 14. Distribution of Title III Funding by Service Category and Cluster

HCBC Services	U.S. %	State With Highest % Of Title III $ State	State %	State With Lowest % For The Cluster State	State %
Cluster 1 Services:	30.2%	Delaware	65.2%	New Mexico	11.9%
Personal Care	1.8%	Delaware	15.7%		
Homemaker	3.5%	Nevada	10.6%		
Chore	0.7%	Minnesota	5.1%		
Home-Del. Meals	19.9%	Massachusetts	43.6%.		
Adult Day Care/Hlth	1.1%	Dist of Col.	10.7%		
Case Management	3.3%	S. Dakota	18.7%		
Cluster 2 Services:	37.7%	Kansas	66.3%	Maine	18.1%
Congregate Meals	37.1%	Kansas	66.2%		
Nutrition Counseling	0.2%	Alabama	2.4%		
Assisted Transport.	0.4%	Alaska	11.6%		
Cluster 3:	19.8%	Maine	45.2%	Delaware	2.9%
Transportation	9.3%	S. Carolina	31.0%		
Legal Assistance	3.0%	Vermont	7.9%		
Nutrition Education	0.5%	Oklahoma	4.5%		
Info. and Assistance	4.7%	Rhode Island	22.7%		
Outreach	2.3%	Maine	30.1%		
Other	12.2%	Pennsylvania	35.4%	DE, IN, MI, OK, OR	0.0%
Total	100.0%				

There are notable differences in the distribution of Title III funding by service cluster and individual service by state. Figure 14 shows the variation.

Delaware leads all states in funding for cluster 1 services (65%), while Kansas tops all states in funding for cluster 2 services (66%) and Maine leads in funding for cluster 3 services (45%). Besides Pennsylvania, three other states spend more than 20% of Title III funds for other services – Vermont (34.86%), Arizona (34.6%) and New Jersey (20.72%).

Pennsylvania puts most of the "other" services expenditures toward senior centers reporting Title III expenditures of approximately $12 million. The Pennsylvania senior centers report serving approximately 194,000 persons and providing over 7.3 million client days of service. By contrast, Vermont lists 22 different "other" services that are supported by Title III funds ranging from assistive technology to utility assistance.

Various performance measures related to expenditures can be calculated based on the reported data. However, such measures should be used with caution. The data systems used to support Title III reporting are still under development and the data being reported are still subject to refinement. Furthermore, there

are many factors which can contribute to the comparability of performance measures from one state to another such as different interpretation of service definitions, different cost determination methodologies and different cost factors which are specific to a state or region within the state. Figure 15, 16, 17 and 18 provide several basic performance measures.

Figure 15. Service Expenditure Measures, U.S.

HCBC Service	Title III Fed $ Avg. Unit Cost	Title III Fed $ Avg. $/Client	Total Svc $ Avg. Unit Cost	Total Svc $ Avg. $/Client
Personal Care	$1.53	$121	11.40	$906
Homemaker	3.58	142	10.37	409
Chore	4.95	66	9.80	132
Home-Delivered Meals	1.13	136	3.33	401
Adult Day Care/Health	1.68	153	7.26	658
Case Management	7.47	45	29.19	174
Congregate Meals	2.02	104	4.24	216
Nutrition Counseling	12.84	35	23.02	63
Assisted Transportation	1.32	36	4.91	134
Transportation	1.59	*	4.00	*
Legal Assistance	14.42	*	26.43	*
Nutrition Education	2.86	*	4.10	*
Inform and Assistance	2.56	*	5.64	*
Outreach	5.85	*	10.74	*

* *No data are collected on the unduplicated count of persons served for these services.*

Unit costs in Figure 15 are shown for both Title III federal expenditures and total service expenditures. Unit costs are lower for Title III only because of the way the unit data are reported. States were asked to report total service units associated with total service expenditures, not just those attributable to the federal Title III resources used in the provision of the services. The unit costs, as calculated, reflect new service definitions and refined unit definitions introduced in 1995 by AoA and should be used with caution. Unit costs based on total service expenditures are the most useful performance measure for state comparison purposes. State and area agencies may only use small amounts of Title III funds to support a particular service. As a result, unit costs based on Title III expenditures reflect as much or more the funding strategies of the Aging Network as they do the relative efficiency of the service providers.

Figure 16. Unit Costs (Excluding Upper and Lower 5% of the Reported Unit Costs)

Service	Mean Unit Cost	Median Unit Cost	Standard Deviation
Personal Care	$15.35	$13.0	$9.30
Homemaker	11.54	11.50	5.30
Chore	9.83	9.03	5.64
Home-Delivered Meals	3.35	3.31	0.87
Adult Day Care/Health	18.53	7.20	38.30
Case Management	43.79	20.12	75.27
Congregate Meals	4.13	3.89	1.15
Nutrition Counseling	21.62	19.39	17.56
Assisted Transportation	5.79	3.98	4.83
Transportation	3.79	3.48	1.83
Legal Assistance	39.16	33.99	24.05
Nutrition Education	12.33	4.90	18.56
Inform. and Assistance	6.81	5.39	4.82
Outreach	13.74	11.30	9.86

There is substantial variation in unit costs based on total service expenditures across states for individual services. The extent of variation depends on the service. Outliers exist; some of which may be reporting inconsistencies. To compensate for the outliers (both high and low) the unit costs were reviewed by computing both the standard deviation and the variance. The results of this analysis are summarized in Figure 16. [7]

To address outliers, the data in Figure 16 for mean, median and standard deviation exclude the upper and lower 5% of the reported unit cost data, basically the two states with the most extreme values. The average unit cost includes all states. It should also be noted that average unit costs reported in Figure 14 were computed using the total service expenditures for the service for the U.S. and the total reported units for all states. The mean and median unit costs are based on the average unit costs computed for each state. Except for meal services, there remains considerable variation in reported total unit costs by service.

A similar profile was developed for another basic performance measure -- units per person served. The results are summarized below in Figure 17. The data in Figure 17 are organized and computed in the same way as the data in Figure 16. The variance is substantial for units per person.

Figure 17. Units Per Person Served (Excluded Upper and Lower 5%)

Service	Mean Units/Client	Median Units/Client	Standard Deviation
Personal Care	60.19	49.18	41.38
Homemaker	44.00	38.05	26.56
Chore	14.26	12.55	8.58
Home-Delivered Meals	124.33	120.48	29.63
Adult Day Care/Health	200.06	115.61	117.91
Case Management	8.26	6.11	6.18
Congregate Meals	58.65	48.44	26.73
Nutrition Counseling	2.88	1.57	2.66
Assisted Transportation	27.29	16.43	23.67

Another expenditure measure is the average level of funding for providers of individual services. See Figure 18.

Average Title III expenditures per provider are quite low except for home-delivered meals and congregate meals. Even the total service expenditures are relatively small for most services. While the average expenditures per provider are small, on a service specific basis, it is likely that many of the providers offer more than one service. Consequently the expenditures per provider, considering all services they provide, is likely to be higher.[8]

[7] Note: the unit costs for nutrition education do not reflect circumstances where the costs of nutrition education are included as part of the cost of the meal. Also, note that cost determination methodologies vary from state to state and often within individual states. As a result, variations in unit costs may be attributable to accounting methods as opposed to real differences in unit costs.

[8] Beginning in 1997, data on the unduplicated count of providers across services will be available.

Figure 18. Average Expenditures Per Provider, U.S.

HCBC Service	Total Providers	Average Title III $ Per Provider	Average Total Svc $ Per Provider
Cluster 1 Services			
Personal Care	1,856	$13,502	$50,560
Homemaker	2,032	13,553	47,623
Chore	755	9,676	19,866
Home-Delivered Meals	3,614	56,348	155,947
Adult Day Care/Health	905	12,145	50,510
Case Management	821	46,745	142,738
Cluster 2 Services			
Congregate Meals	3,902	106,435	219,758
Nutrition Counseling	505	877	2,220
Assisted Transportation	896	7,799	63,406
Cluster 3 Services			
Transportation	2,965	21,088	55,752
Legal Assistance	1,205	35,994	70,205
Nutrition Education	1,595	2,439	3,848
Inform and Assistance	2,370	19,499	34,596
Outreach	2,047	11,276	22,528

Differences in average expenditures per provider are attributable to both available levels of funding and different approaches to use of providers. One area agency on aging may choose to bundle funding for a service or a group of contracts into a single contract. Another area agency on aging may find it necessary to award several contracts, in lesser amounts, to account for such issues as access issues and cultural diversity of the participants.

C. Generation of Program Income

OAA-supported programs have historically benefited from substantial generation of program income. Until 1995 program income has been reported in aggregate. For 1995 data on program income are identified by individual service. Both home-delivered meals and congregate meals stand out in terms of development of program income. For the balance of the services, program income is a small portion of the total revenues used to support services operations. In terms of program reporting, 1995 is the first year that states reported program income by specific service. In the past, program income has only been reported by Title III Part – III B, C1, C2 etc. For this first year, no attempt has been made to reconcile the program income reported by states in their quarterly financial reports with the annual program report data reported here.

Based on fiscal (SF269) data, states generated approximately $200 million in program income from Title III related-grant activities. The breakdown by Title III part, excluding Part F, was:

- Title III B. Supportive Services – $30,898,999
- Title III C.1. Congregate Meals – $98,503,924
- Title III C.2. Home-Delivered Meals – $70,074,608
- Title III D. In-Home Services – $7,427,249

Figure 19. Program Income by Type of Home/Community Service

Type of HCBC Service	% of Total Program Income	% of Federal Title III $ For the Service
Supportive Services	14.9%	10.6%
Congregate Nutrition Services	47.6%	39.4%
Home-Delivered Nutrition Services	33.9%	53.4%
Total	100.0%	30.8%

For all but home-delivered meals and congregate meals, the level of program income generated relative to the Title III expenditures appears quite limited, 1-2% of Federal Title III funding.

D. Expenditures by Part

Individual Parts of Title III of the OAA have specific legislative mandates that identify the nature of services to be supported. Titles C1 and C2 are for nutrition related-services, Title III B for supportive services and centers, Title III D for in-home services and III F for preventive health services. In 1995, total U.S. Title III expenditures by part were reported to be:

- Title III B -- 37%
- Title III C1 -- 39%
- Title III C2 -- 20.1%
- Title III D -- 1.1%
- Title III F -- 2.0%

Another way to look at expenditures by part is to determine the distribution of expenditures for each Title III part by service; for example the percent of Title III B expenditures used for personal care. See Figure 20.

Figure 20. Distribution of Expenditures by Part for Each Service

Service	Total Title III Expenditures	Title III B	Title III C1	Title III C2	Title III D	Title III F
Cluster 1 Services	30.2%					
Personal Care	1.8%	3.77%	0.00%	0.00%	21.83%	0.20%
Homemaker	3.5%	8.14%	0.00%	0.00%	28.82%	0.00%
Chore	0.7%	1.58%	0.00%	0.00%	3.18%	0.01%
Home-Del. Meals	19.9%	0.64%	0.29%	98.36%	12.73%	0.41%
Adult Day Care	1.1%	2.38%	0.01%	0.01%	8.30%	0.66%
Case Management	3.3%	8.09%	0.18%	0.05%	2.44%	2.08%
Cluster 2 Services	37.7%					
Congregate Meals	37.1%	1.88%	95.74%	0.06%	0.00%	0.03%
Nutrition Counseling	0.2%	0.07%	0.22%	0.12%	0.00%	3.32%
Assisted Transport..	0.4%	1.07%	0.03%	0.00%	0.65%	0.00%
Cluster 3 Services	19.8%					
Transportation	9.3%	23.12%	0.71%	0.16%	0.00%	0.07%
Legal Assistance	3.0%	7.39%	0.29%	0.00%	0.06%	0.05%
Nutrition Education	0.5%	0.11%	0.70%	0.43%	0.00%	4.45%
Info. and Assistance	4.7%	11.76%	0.21%	0.01%	0.04%	2.33%
Outreach	2.3%	4.58%	0.91%	0.51%	0.58%	2.85%
Other Services	12.2%	25.41%	0.72%	0.30%	21.36%	83.26%
	100.0%	100.00%	100.00%	100.00%	100.00%	100.00%

Part III B and D funding predictably fund cluster 1 services other than home-delivered meals. Cluster 2 services are supported principally by Title III C 1 funds and Cluster 3 services are largely funded through Title III B funding.

As Figure 20 shows, the fourteen services account for 74% of the expenditures supported by Part III B versus 99% of III C1 funding, 99% of C2 funding, 79% of Part D funding and 17% of Part F funding. The greatest amount of Title III B is used for transportation and a range of "other" services. Case management and I&A comprise 20% of Title III B funding.

E. Transfers

Each state has a transfer authority which permits states to transfer funding between Title III, Parts B (supportive services), Subpart C-1 (congregate nutrition services) and Subpart C-2 (home-delivered nutrition services) with certain limitations specified in the law. For FY1995, no more than 30% may be transferred between Subparts C-1 and C-2 and no more than 25% may be transferred between Part B and Part C. A state may request a waiver from the AoA to increase the amounts transferred. In this report the focus is on transfers between Title III B (supportive services), Title III C1 (congregate meals) and Title C2 (home-delivered meals). See Figure 21.

Figure 21. 1995 Transfers between Title III Subparts, U.S. Summary

Transfers	To Title III B	To Title III C1	To Title III C2	Total
Subpart Funding After Reallotment	$304,340,980	$372,584,827	$93,331,778	$770,257,585
Transfers:				
From III B		0	1,050,916	1,050,916
From III C1	22,971,599		43,879,836	66,851,435
From III C2	352,889	0		352,889
Total	23,324,488	0	44,930,752	68,255,240
Final Allotment After Transfers	$327,665,468	$305,734,457	$138,262,530	$770,347,585

Source: AoA, Division of Grants Management, 1996.

As can be seen, Subpart transfers, in aggregate, are principally between Title III C1 and Title III C2. All but four states (including D.C. and Puerto Rico) transferred funds out of Title III C1. The highest transfer percentages were for the following states:

- To Title III B -- Minnesota (33% increase)
- Twenty-six states were able to double Title III C2 funding through transfers.

No state transferred funding to Title III C1.

Aging Network Staffing

In each state there is a designated state unit on aging responsible for administering the Older Americans Act. The OAA funding pays for state unit on aging staffing to carry out administrative, development, advocacy and related activities. Area agencies on aging are funded to perform similar activities within planning and service areas of the state. Forty-four states, including Puerto Rico, have designated planning and service areas. In 1995 there were 655 area agencies on aging.

In many states, the state unit on aging and the area agencies on aging have assumed additional responsibilities for aging services programs. Over half the state units on aging have a role in administration of a Medicaid waiver program. Many state units administer state-funded programs that

support the provision of home and community-based care services. As a result, the total staffing of state units on aging is frequently substantially more than the staff paid for with the OAA funding. Many area anagencies on aging have similar staffing arrangements.

In 1995 data were collected on the staffing profile of both state units on aging and area agencies on aging. In aggregate, state units on aging report a total of 3,676 staff. Of those, 32% are supported by Title III funds. Of the total staff, 17% are minority and 83% are paid professional staff. Few state units report the use of volunteers. The state staffing profile by functional responsibility is shown in Figure 22.

Figure 22. State Unit on Aging Staffing, All States

Type of Staff And Functional Responsibility	Total Staff	% of Total Staffing	Minority Staff	% Minority Staff (By Resp.)	Paid By Title III	% Paid By Title III (By Resp.)
Paid Professionals:						
1. Admin/Develop						
Executive/Mgt.	349	11.5%	61	17.5%	166	47.6%
Other*	1303	43.7%	265	20.3%	621	47.7%
2. Services Provision						
Access	537	17.6%	60	11.2%	61	11.4%
Dir. Svcs Delivery	868	13.1%	90	10.4%	99	11.4%
Other Staff:						
Clerical	565	18.2%	148	26.2%	236	41.7%
Volunteer	53	1.7%	8	15.1%		
Total Staff:	3,676	100.0%	631	17.2%	1,182	32.2%

** Includes planning, development, administration, and other professional staff assigned to management and administrative responsibilities.*

Approximately 31% of the SUA staff are reported to be providing access/care coordination or direct services. This is almost exactly the same percentage of area agency on aging staff who are reported to be providing access/care coordination services and/or direct services. It should be noted that Alaska accounts for 55% of the total state agencies on aging staff reported to be involved in direct service provision. Alaska is a single PSA state with no area agencies on aging. Arizona reports a high number of staff in direct services provision (134) as well. In Arizona, these staff are responsible for adult protective services.

Twenty-seven states report staff involved in direct services provision (e.g., transportation and meals.) Twenty-nine states report staff involved in the provision of access/care coordination functions.

Looking at paid staff, ten states report more than 100 full time equivalent staff – Alaska, Arizona, California, Florida, Illinois, Missouri, New Hampshire, New York, Ohio, and Pennsylvania.

For comparison purposes, a similar staffing profile has been prepared in Figure 23 for area agencies on aging. There were 655 identified area agencies on aging in 1995.

Figure 23. Area Agency on Aging Staffing, All States

Type of Staff	Total Staff	% of Total Staffing	Minority Staff	% Minority Staff	Paid By Title III	% Paid By Title III
Paid Professionals:						
1. Admin/Develop						
Executive/Mgt.	1,289	3.3%	154	11.9%	838	65.0%
Other*	3,970	10.2%	934	23.5%	2,246	56.6%
2. Access/Svcs Del	11,341	29.1%	2,397	21.1%	5,006	44.1%
Other Staff:						
Clerical	2,221	5.7%	461	20.8%	1,020	45.9%
Volunteer	20,137	51.7%	1,918	9.5%		
Total Staff:	38,958		5,864	15.1%	9,110	23.4%

* *Includes planning, development, administration, and other professional staff assigned to management and administrative responsibilities.*

Area agencies on aging report a total of 38,958 staff. Of this total, 52% are volunteers. There were 18,821 paid area agency on aging staff. Of the total staff, 23% are paid by Title III and 15% are minority staff. Looking just at paid staff, 48% of the staff are supported by Title III funding.

At the AAA level, almost 30% of the staff are either providing access/care coordination services or other home and community services such as meals and transportation. Of the 11,341 staff involved in the provision of access/care coordination or direct services, a total of 3,219 are providing access services and 8,122 are providing direct services.

Of the total staff involved in access/care coordination and direct services delivery, Title III funds 44% of the staff – less than what Title III pays for administrative/developmental staffing of area agencies on aging. Of the total staff, 3% are considered executive/management personnel. Taking out volunteers, executive/management personnel comprise 7% of the total staff.

Developmental Accomplishments

State and area agency on aging staff are a primary source of development and advocacy on issues affecting the elderly in every state. States are required to report on three significant developmental accomplishments in each of two areas: 1) development of home and community-based programs and 2) development of systems of elder rights. Clearly, the Aging Network in each state is responsible for many different developmental initiatives each year. As such, the data on developmental accomplishments submitted by states is not a complete inventory of Aging Network accomplishments. The accomplishments which are reported are those considered as important achievements and provide a sense of the diversity and type of developmental accomplishments of the Aging Network in each state.

As an overview, examples of the developmental accomplishments are summarized below in each of the two major categories of development:

A. Home and Community-Based Programs

Development of enhanced home and community-based services is a continuing priority of the national Network on Aging. A diverse set of developmental activities was pursued with many successes and accomplishments. Seven different types of development activities were used to classify developmental accomplishments related to home and community-based care: they were:

1. Public Education/Awareness
2. Resource Development
3. Training/Education
4. Research and Development
5. Policy Development
6. Legislative Development
7. Other

Of those states reporting developmental accomplishments accompanied by codes for developmental type, almost half of the states reporting had accomplishments which were consider either public education or resource development in nature. About 30% of the states reporting indicated accomplishments which were training and education or research and development projects; Policy development was also an activity in which 30% of the states reported accomplishments. Few states singled out legislative accomplishments during 1995, although some states reported what were essentially legislative activities under the resource development category.

Examples of developmental accomplishments by category and type of assistance include the following:

Public Education/Awareness

- New Mexico initiated a three-part Alzheimer's Disease Program: respite, consultation, and information and referral through an 800 number.
- Puerto Rico developed a health promotion/disease prevention program including 8 radio programs, a teleconference, 2 health campaign promotions and a training session.

Resource Development

- South Carolina continued its senior center development initiative, adding $1 million in state funds to support the development of three new centers in 1995.
- Utah applied for and received Medicaid Waiver renewal, including provision for two new services - companion services and respite care outside the home.
- Iowa's successful advocacy with the General Assembly expanded the case management program by 35% allowing it to expand into additional counties.
- Nevada obtained increased funding from $72,000 to $320,000 for home and community -based services.

Training/Education

- Kansas convened a conference on managed long-term care.
- North Carolina co-sponsored a six-day workshop series entitled " Improving the Management and Supervision of In-Home Aide Services".
- Oklahoma trained and certified 600 OAA network staff in the implementation of the Uniform Comprehensive Assessment Tool as its single entry tool.

Research and Development

- Florida developed a screening and counseling program utilizing audiologists to conduct screening sessions in 14 counties, 269 seniors were screened, and 90 clients received volume control telephones from Florida Telecommunications Relay.
- North Carolina implemented a pilot project in two counties to establish a single point of entry for non-Medicaid eligible older adults who are at risk of out of home placement.
- Virginia began the development of the Virginia Aging Information System with three components - client assessment, service utilization and service spending.

- North Dakota developed a computerized Title III service assessment to assess quality in service delivery.
- South Dakota developed an Intervention Care Program designed to respond to families and individuals that need overnight care after a brief illness or hospitalization.

Policy Development

- Nevada implemented a Group Care Waiver Program, providing support services in group homes for older adults at risk of nursing home care.
- Arkansas developed regulations for assisted -living facilities.
- Kentucky developed and implemented an adult day care certification process.

Legislative Development

- Missouri developed the Elderly Health and Nutrition Act that is designed to stimulate collaboration among state and private agencies.
- Virginia conducted a study for the state legislature on the feasibility of developing a program using volunteers to assist older adults in time of crisis.

Other

- Ohio Department of Aging eliminated the Medicaid Waiver waiting list. ODA served 15,282 clients and ended the year with 10,000 active clients.

Figure 24. Developmental Accomplishments for Home and Community -Based Care, By Development Type[9]

Public Education	Resource Development	Training and Education	Research and Development	Policy Development	Legislative Development	Other
Colorado	Alabama	Alabama	Colorado	Alabama	Colorado	Arkansas
Connecticut	Alaska	Hawaii	Connecticut	Alaska	Illinois	Dist of Col.
Delaware	Arkansas	Delaware	Delaware	Arkansas	Iowa	Florida
Georgia	Colorado	Dist of Col.	Georgia	Colorado	Nevada	Kansas
Hawaii	Florida	Florida	Hawaii	Illinois	S. Dakota	Ohio
Idaho	Georgia	Hawaii	Maine	Iowa	Vermont	
Kansas	Iowa	Idaho	Maryland	Maine		
Maine	Missouri	Maryland	New Jersey	Minnesota		
Maryland	Nevada	Missouri	N. Carolina	Missouri		
Missouri	N. Carolina	New Mexico	N. Dakota	Nevada		
New Jersey	Pennsylvania	N. Carolina	Ohio	New Mexico		
New Mexico	Puerto Rico	W. Virginia	Vermont	N. Dakota		
New York	S. Carolina		Virginia	S. Carolina		
North Dakota	S. Dakota			S. Dakota		
Puerto Rico	Utah					
Rhode Island	Virginia					
S. Carolina	Washington					
Washington	W. Virginia					
Wyoming	Wyoming					
New York						

[9]Note: Figure 24 includes only those states submitting developmental accomplishments that also coded the developmental accomplishments by type. Other states submitted substantial listings of accomplishments but the accomplishments were not coded to by type. See Appendix I for a listing of accomplishments by individual state.

B. System of Elder Rights

The Older Americans Act encourages the development of improved systems of elder rights. States enhance elder rights through a number of services such as the long-term care ombudsman programs, legal assistance, benefits counseling and programs addressing abuse and neglect. Many states are active in the promotion of improved service delivery for elder rights. The accomplishments focus on activities undertaken to prevent abuse and neglect and to uphold/advocate for the rights of older adults.

States with accomplishments in elder rights are listed in Figure 25.

Figure 25. Developmental Accomplishments for A System of Elder Rights, By Development Type[10]

Public Education	Resource Development	Training and Education	Research and Development	Policy Development	Legislative Development	Other
Alabama	Alabama	Alaska	Alabama	Colorado	Colorado	Virginia
Arkansas	Alaska	Arkansas	Colorado	Georgia	Dist of Col	
Colorado	Arkansas	Colorado	Delaware	Hawaii	Georgia	
Connecticut	Colorado	Connecticut		New Jersey	Iowa	
Delaware	Connecticut	Dist of Col		New Mexico	Maine	
Georgia	Dist. of Col.	Hawaii		N. Dakota	Missouri	
Illinois	Hawaii	Illinois		Puerto Rico	Nevada	
Iowa	Idaho	Iowa		Rhode Island	Puerto Rico	
Kansas	Kansas	Kansas		S. Dakota	Virginia	
Maryland	New Mexico	Minnesota		Virginia		
Minnesota	N. Carolina	Missouri		Wyoming		
Missouri	Ohio	N. Jersey				
Nevada	Pennsylvania	N. Carolina				
New Mexico	Vermont	N. Dakota				
N. Carolina	Washington	Pennsylvania				
Ohio	Wyoming	S. Carolina				
Puerto Rico		S. Dakota				
S. Carolina		Washington				
S. Dakota		W. Virginia				
Utah						
Vermont						
Washington						
Wyoming						

Examples of state initiatives are reported by category.

Public Education/Awareness

- Connecticut's information and referral program implemented the BOSS System to screen and determine eligibility for elders seeking benefits information,
- Hawaii developed plans and activities with the Elder Rights Section of the Hawaii Bar Association.

Resource Development

- Washington DC Office on Aging supported the establishment of an imprest fund and legal consultation fund for abused adults served by Adult Protective Services, when no other resources are available.

[10]Note: Figure 25 includes only those states submitting developmental accomplishments that also coded the developmental accomplishments by type. Other states submitted substantial listings of accomplishments but the accomplishments were not coded to by type. See Appendix I for a listing of accomplishments by individual state.

- Pennsylvania expanded the Abuse Intervention Program with $686,000 of state lottery funds, a 10% increase.

Training/Education

- Illinois' Statewide Elder Abuse and Neglect Program utilized multi-disciplinary teams to provide support to the program's service delivery activities.
- Pennsylvania provided Protective Services Training for all staff involved in the provision of Adult Protective Services - 700 persons attended.
- Hawaii co-sponsored a training conference for nurses aides on elder abuse and neglect, over 200 persons attended.

Research and Development

- Alabama co-chaired with the Department of Human Resources the Governor's Special Commission on Elder Abuse and submitted policy recommendations to the Governor for his consideration.
- Colorado collected statistical and descriptive data to enhance the Elder Rights System.

Policy Development

- New Mexico expanded the Qualified Medicare Beneficiary outreach efforts statewide, using simplified enrollment forms and on-site enrollment, screened approximately 2,200 persons.
- New Jersey proposed regulations for Adult Protective Services.

Legislative Development

- Nevada advocated for revision of Elder Rights Statutes. The bill was drafted by the Division Chief of Elder Rights. Division Staff discussed elder abuse issues with a variety of professionals.
- District of Columbia Office on Aging Adult Prevention Committee revised the District's Guardianship legislation.

Other

- Arkansas took over direct administration of Adult Protective Services

EXECUTIVE SUMMARY

Today, an increasing number of American Indian and Alaska Native elders need assistance, and most prefer to have long-term care services provided in their home and communities. While many people associate long-term care only with nursing homes, home and community-based long-term care is actually much broader than this kind of care. It consists of a range of services aimed at helping people with chronic conditions to compensate for limitations in their ability to function independently and helping caregivers to sustain their roles in assisting at-risk family members and friends. These home and community-based long-term care services range from the least restrictive services, usually provided in the community, to the most restrictive services, usually provided in an institution such as a nursing home.

To learn more about specific issues affecting home and community-based long-term care in Indian country, the Administration on Aging, the Native Elder Health Care Resource Center at the University of Colorado, and the National Resource Center on Native American Aging at the University of North Dakota surveyed key tribal program administrators from 108 Federally recognized tribes nationwide. Information was collected about:

1) **availability of home and community-based long-term care (HCBLTC) programs and resources in American Indian and Alaska Native (AI/AN) communities;**

2) **how the programs and services are funded; and**

3) **barriers to establishing such programs and services in AI/AN communities.**

FINDINGS IN BRIEF

Following are key findings of the survey:

Need and Availability of HCBLTC Services

- **The need for HCBLTC services in AI/AN communities is extensive but is largely unmet.**
- **Services reported as most often available and meeting the need are emergency medical care, congregate and home-delivered meals and religious and spiritual support.**

- Services such as case-management, health promotion, alcohol, drug, and mental health services, transportation, home-maintenance, and nutrition screening, education, and counseling are available some of the time and the need for these services is partially met.
- Alternative housing, including retirement villages, assisted living arrangements, personal care boarding homes, group homes, short-term rehabilitation facilities, and intermediate/skilled nursing facilities, are rarely available for elders living independently and the need for these services is rarely met.
- Hospice care and other services designed to enable family caregiving, such as adult day care and respite care, were reported as rarely available and the needs are rarely met.

Sources and Funding for HCBLTC Service

- Although there is an array of providers and funding sources for HCBLTC services, these are fragmented and insufficient to meet the need.
- Family and friends are important providers of HCBLTC services.
- Federal resources represent the greatest source of funding for HCBLTC services; tribes provide some financial support for virtually all services.
- Indian elders and their families pay part of the cost of HCBLTC services.

Accessibility, Acceptability, and Affordability

- Available HCBLTC services were rated as moderately to often accessible, acceptable, and affordable.

Barriers

- **Funding levels, lower priority services, little appreciation of local need, limited access to decision makers, and excessive regulations were unanimously identified as barriers to continuing previously authorized federal and state funded programs and to developing new federal and state funded programs.**
- **Limited financial resources available to the tribe is the main obstacle to developing programs and providing HCBLTC services.**
- **Bureaucratic procedures were identified as a barrier to using most HCBLTC services. Since there is no coordinated HCBLTC system, elders often must meet different eligibility criteria and complete separate applications for each service. The paperwork required to qualify for some programs may discourage elders with limited reading ability to apply for HCBLTC services.**
- **Tribes reported that excessive administrative regulations, inadequate information, and limited access to decision-makers were common barriers to developing and administering both federal and state funded programs, but especially true for state funded programs.**
- **The providers' assumptions about eligibility, actual eligibility criteria, and perceived quality of care are sometimes barriers to using many services.**
- **Elders' lack of awareness, uncertainty about eligibility, perceived need, and possible stigma are barriers to some services.**

4

RECOMMENDATIONS

Following are major recommendations from this survey.

- The IHS should investigate the possibility of a nationwide Medicaid waiver, covering the IHS user population, for developing an AI/AN specific Medicaid waiver for providing HCBLTC services in AI/AN communities.
- Larger tribes and self-governance tribes could investigate a tribal specific Medicaid waiver.
- There must be consistency in legislation authorizing the various HCBLTC services, coordination among all agencies and programs involved in delivering services, and flexibility to allow local programs to tailor services to meet the needs of their elders.
- Since many programs are currently providing information and referral assistance, it may be of value to review what information and referral assistance is available and how it is being provided to elders in order to better coordinate and improve the assistance.
- All service providers need to be trained in working with elders, including social and cultural considerations, in order to provide more sensitive and relevant services.
- As federal funding decreases for many HCBLTC services, advocates for elders must be involved in all discussions of Medicare, Medicaid, and health care reform to assure that the needs of AI/AN elders are included in any reform.

The development of comprehensive and coordinated HCBLTC programs and services will be a long process made up of many steps. Legislative reform is one important step. However, equally important are developing administrative and provider expertise and developing a network of providers with the service capacity to handle the scope and depth of potential demands for HCBLTC services.

NATIVE AMERICAN ELDERS, 1991-1995

(Title VI Program Under the Older Americans Act)

Setting

This document contains results from the Nutrition and Supportive Services Programs administered by the Administration on Aging under Title VI of the Older Americans Act. Congress enacted Title VI to target funds to elder Indians after Bureau of the Census figures showed older Indians considerably worse off than other older American populations. So the Title VI Program provides additional help for elder Indians; it does not lessen States and Area Agencies on Aging responsibilities to all older Indians under other Older Americans Act Programs. This document contains six charts with 1995 data and two detailed tables covering the period 1991-1995. The figures were derived from required reports submitted by Title VI grantees.

Findings

The yearly grants the Administration on Aging awards under Title VI to Tribal organizations and the organization representing Native Hawaiians continue to ensure that essential services are provided to Native American elders, according to reports from grantees. During grant year 1995, the 228 Title VI grantees provided nearly 5.4 million Nutrition and Supportive Services under the Indian Program (Part A) and 220 thousand services under the Native Hawaiian Program (Part B - one grantee). A look by categories at the services Title VI grantees provided during grant year 1995 reveals that:

- Meals under the elder Indian Program represented more than half (51%) of the 5.4 million services provided, an increase of two percentage points over 1994 (Chart 1);

  Access Services which include Information and Referral, outreach, and transportation represented the next largest proportion (28%); and

  In-Home Services such as homemaker, health aid, and chore, ranked third--making up 14% of the 5.4 million services provided under the Indian Program.

- Meals under the Native Hawaiian Program represented nearly a fifth of the 220 thousand Meals provided

(19%), also increasing two percentage points over 1994 like the Indian Program (Chart 2); and

Services other than Access and In-Home ranked first (52%).

When the Meals category is excluded:

- Access Services under the elder Indian Program represent nearly three-fifths (57%) of the remaining 2.6 million services (Supportive Services) Title VI grantees provided in 1995 (Chart 3); and

  In-Home Services represent over a fourth (28%).

- Access Services under the Native Hawaiians Program represent slightly more than a third (34%) of the 179 thousand services provided in 1995 (Chart 4); and

  Services other than Access and In-Home represent nearly two-thirds (65%).

Tables 1 and 2 show the trend in Supportive and Nutrition Services Title VI grantees provided under the elder Indian and Native Hawaiian Programs for the five-year period 1991 through 1995.

- For Supportive Services under the Indian Program, the tables reveal a drop in the number of services provided in 1995 from the previous year (2.8 vs 2.6 million).

  The number of Meals provided increased gradually each year between 1991 and 1995 (with a slight decline in 1994), ranging from 2.3 to 2.7 millions. During the same period, Home-Delivered Meals continued to comprise slightly more than half of the meals served each year.

- For Supportive Services under the Native Hawaiian Program, the number of services provided declined in 1994 and 1995 (193 thousand and 179 thousand respectively).

  The number of meals served during 1995 (slightly more than 41 thousand) was somewhat similar to the previous four years. In 1995, grantee for the Native Hawaiian Program continued to develop the In-Home Meals Program.

Graphics

The attached charts and tables contain data derived from information reported by grantees of the Title VI Program. The document provides results based on unduplicated counts (Unduplicated counts represent the total number of different people served under the Nutrition and Supportive Services Programs.).

SUPPORTIVE AND NUTRITION SERVICES

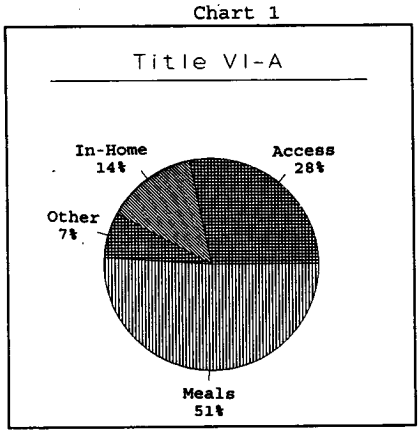
FOR ELDER INDIANS - 1995

CHARTS

PERCENT AND TOTAL NUMBER OF UNITS OF SUPPORTIVE AND NUTRITION SERVICES PROVIDED NATIVE AMERICAN ELDERS - TITLE VI 1995

(Persent may not add to 100 because of rounding)

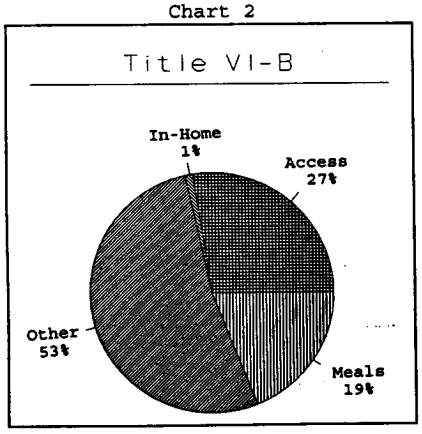
Chart 1



Title VI-A

Supportive Services:		
Access	1,511,484	(28%)
In-Home	738,688	(14%)
Other	396,244	(7%)
Nutrition Services:		
Meals	2,736,190	(51%)
TOAL	5,382,606	(100%)

Chart 2



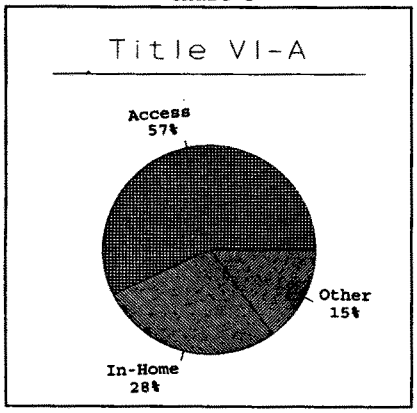
Title VI-B

Supportive Services:		
Access	60,332	(27%)
In-Home	3,171	(1%)
Other	115,402	(52%)
Nutrition Services:		
Meals	41,449	(19%)
TOTAL	220,354	(100%)

PERCENT AND NUMBER OF UNITS OF SUPPORTIVE SERVICES PROVIDED NATIVE AMERICAN ELDERS - TITLE VI 1995

(Percent may not add to 100 because of rounding)

Chart 3

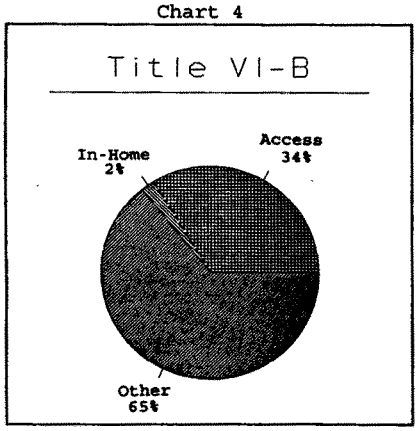


Title VI-A

Access Services:		
Information & Referral	630,085	
Outreach	141,624	
Transportation	739,775	
TOTAL	1,511,484	(57%)
In-Home Services:		
Homemaker	72,189	
Health Aid	44,417	
Chore	68,540	
Visit	359,528	
Telephone	142,538	
Family Support	51,476	
TOTAL UNITS	738,688	(28%)
Legal & Ombudsman	5,005	(*)
Other Services	391,239	(15%)
TOTAL UNITS	2,646,416	(100%)

* Less than 0.05%

Chart 4

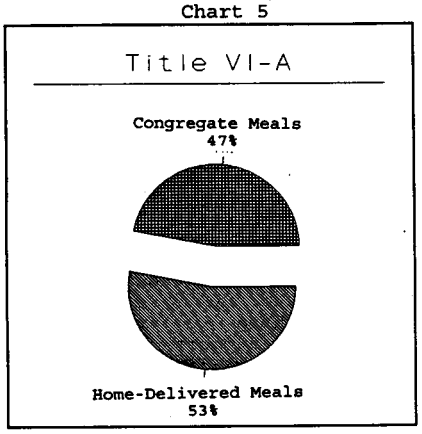


Title VI-B

Access Services	60,332	(34%)
In-Home Services	3,171	(2%)
Other Services	115,402	(65%)
TOTAL UNITS	178,905	(100%)

PERCENT AND NUMBER OF UNITS OF NUTRITION SERVICES PROVIDED NATIVE AMERICAN ELDERS, TITLE VI 1995

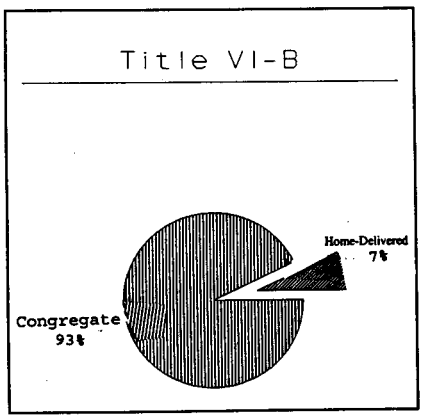
Chart 5



Title VI-A

Meals		
Congregate	1,283,093	(47%)
Home Delivered	1,453,097	(53%)
TOTAL	2,736,190	(100%)

Chart 6



Title VI-B

Meals		
Congregate	38,635	(93%)
Home Delivered	2,814	(7%)
TOTAL	41,449	(100%)

Table 1

NATIVE AMERICAN ELDERS
NUMBER AND PERCENT OF UNITS OF SUPPORTIVE AND NUTRITION
SERVICES PROVIDED - GRANT YEARS 1991 - 1995
(Percent may not add to 100 because of rounding)

Services and Grants	1991		1992		1993		1994		1995	
	Number (unduplicated count)	Percent	Number (unduplicated count)	Percent	Number (unduplicated count)	Percent	Number (unduplicated count	Percent	Number (unduplicated count	Percent
Title VI-A Grants	210	--	216	--	218	--	227	--	227	--
Supportive Services	2,502,239	100	2,776,718	100	2,770,278	100	2,818,683	100	2,646,416	100
Access Services	1,519,258	61	1,555,066	56	1,533,598	55	1,608,013	57	1,511,484	57
Info. & Referral	658,902		637,613		625,719		673,362		630,085	
Outreach	156,120		168,849		199,045		146,421		141,624	
Transportation	704,236		748,604		708,834		788,230		739,775	
In-Home Services	582,189	23	651,228	23	709,552	26	715,039	25	738,688	28
Homemaker	62,868		61,767		49,728		50,535		72,189	
Health Aid	60,208		57,401		31,661		29,567		44,417	
Chore	59,208		46,247		51,538		58,742		68,540	
Visit	254,444		328,487		338,469		403,757		359,528	
Telephone	106,114		108,057		189,399		118,847		142,538	
Family Support	39,347		49,269		48,757		53,591		51,476	
Legal and Ombudsman	7,822	#	11,964	#	3,551	#	8,252	#	5,005	#
Other Services	392,970	16	558,460	20	523,577	19	487,379	17	391,239	15
Nutrition Services										
Meals	2,312,309	100	2,470,991	100	2,638,720	100	2,633,460	100	2,736,190	100
Congregate	1,101,865	48	1,186,545	48	1,208,073	46	1,184,437	45	1,283,093	47
Home Delivered	1,210,444	52	1,284,446	52	1,430,647	54	1,449,023	55	1,453,097	53

SUPPORTIVE AND NUTRITION SERVICES FOR ELDER INDIANS, 1991-1995

TABLES

Services and Grants	1991		1992		1993		1994		1995	
	Number (unduplicated count)	Percent	Number (unduplicated count)	Percent	Number (unduplicated count)	Per cent	Number (unduplicated count	Percent	Number (unduplicated count	Percent
Title VI-B										
Grant	1	—	1	—	1	—	1	--	1	--
Supportive Services	162,285	100	180,767	100	197,266	100	193,027	100	178,905	100
Access Services	48,818	30	53,614	30	53,578	27	55,888	29	60,332	34
In-Home Services	2,752	2	4,529	3	3,271	2	2,230	1	3,171	2
All Other Services	110,715	68	122,624	68	140,417	71	134,909	70	115,402	65
Nutrition Services										
Meals	40,270	100	40,150	100	41,056	100	39,148	100	41,449	100
Congregate Meals	--	--	39,652	99	39,840	97	37,294	95	38,635	93
Home-Delivered	--	--	498	1	1,216	3	1,854	5	2,814	7

Less than 0.05%

Table 2

NATIVE AMERICAN ELDERS
NUMBER AND PERCENT CHANGE IN UNITS OF SUPPORTIVE AND NUTRITION SERVICES PROVIDED GRANT YEARS 1991 - 1995*

Grants and Services	Number (Unduplicated count)					Percent Change
	1991	1992	1993	1994	1995	1991-95
Title VI-A						
Grants	210	216	218	227	227	8
Supportive Services	2,502,239	2,776,718	2,770,278	2,818,683	2,646,416	6
Nutrition Services						
Meals	2,312,309	2,470,991	2,638,720	2,633,460	2,736,190	18
Title VI-B						
Grants	1	1	1	1	1	--
Supportive Services	162,285	180,767	197,266	193,027	178,905	10
Nutrition Services						
Meals	40,270	40,150	41,056	39,148	41,449	3

* Figures based on reports from grantees on the number of grants noted in this table.

ADMINISTRATION FOR CHILDREN AND FAMILIES

TITLE XX SOCIAL SERVICE BLOCK GRANT PROGRAM

The major source of Federal funding for social services programs in the States is Title XX of the Social Security Act, the Social Services Block Grant (SSBG) program. The Omnibus Budget Reconciliation Act of 1981 (Public Law 97–35) amended Title XX to establish the SSBG program under which formula grants are made directly to the 50 States, the District of Columbia, and the eligible jurisdictions (Puerto Rico, Guam, the Virgin Islands, American Samoa, and the Commonwealth of the Northern Mariana Islands) for use in funding a variety of social services best suited to the needs of individuals and families residing within the State. Public Law 97–35 also permits States to transfer up to ten (10) percent of their block grant funds to other block grant programs for support of health services, health promotions and disease prevention activities, and low-income home energy assistance.

Under the SSBG, Federal funds are available without a matching requirement. In fiscal year 1995, a total of $2.8 billion was allotted to States. $2.381 billion was appropriated for these activities in fiscal year 1996. Within the specific limitations in the law, each State has the flexibility to determine what services will be provided, who is eligible to receive services, and how funds are distributed among the various services within the State. State and/or local Title XX agencies (i.e., county, city, regional offices) may provide these services directly or purchase them from qualified agencies and individuals.

A variety of social services directed at assisting aged persons to obtain or maintain a maximum level of self-care and independence may be provided under the SSBG. Such services include, but are not limited to adult day care, adult foster care, protective services, health-related services, homemaker services, chore services, housing and home maintenance services, transportation, preparation and delivery of meals, senior centers, and other services that assist elderly persons to remain in their own homes or in community living situations. Services may also be offered which facilitate admission for institutional care when other forms of care are not appropriate. Under the SSBG, States are not required to submit data that indicate the number of elderly recipients or the amount of expenditures provided to support specific services for the elderly. States are required, prior to the expenditures of funds under the SSBG, to prepare a report on the intended use of the funds including information on the type of activities to be supported and the categories or characteristics of individuals to be served. States also are required to report annually on activities carried out under the SSBG. Beginning with fiscal year 1989, the annual report must include specific information on the numbers of children and adults receiving services, the amount spent in providing each service, the method by which services were provided, i.e., public or private agencies, and the criteria used in determining eligibility for each service.

Based on an analysis of post-expenditure reports submitted by the States for fiscal year 1995, the list below indicates the number

of States providing certain types of services to the aged under the SSBG.

	Number of States [1]
Services:	
Home-Based Services [2]	45
Adult Protective Services	35
Transportation Services	29
Adult Day Care	29
Health Related Services	21
Information and Referral	27
Home Delivered/Congregate Meals	22
Adult Foster Care	15
Housing	12

[1] Includes 50 States, the District of Columbia, and the five eligible territories and insular areas.
[2] Includes homemaker, chore, home health, companionship, and home maintenance services.

In enabling the elderly to maintain independent living, most States provide Home-Based Services which frequently includes homemaker services, companion and/or chore services. Homemaker services may include assisting with food shopping, light housekeeping, and personal laundry. Companion services can be personal aid to, and/or supervision of aged persons who are unable to care for themselves without assistance. Chore services frequently involve performing home maintenance tasks and heavy housecleaning for the aged person who cannot perform these tasks. Based on the FY 95 data, 35 States provided Adult Protective Services to persons generally sixty years of age and over. These services may consist of the identification, receipt, and investigation of complaints and reports of adult abuse. In addition, this service may involve providing counseling and assistance to stabilize a living arrangement. If appropriate, Adult Protective Services also may include the provision of, or arranging for, home based care, day care, meal service, legal assistance, and other activities to protect the elderly.

LOW INCOME HOME ENERGY ASSISTANCE PROGRAM

The Low Income Home Energy Assistance Program (LIHEAP) is one of six block grant programs administered within the Department of Health and Human Services (HHS). LIHEAP is administered by the Office of Community Services (OCS) in the Administration for Children and Families.

LIHEAP helps low income households meet the cost of home energy. The program is authorized by the Omnibus Budget Reconciliation Act of 1981, as amended most recently by the Augustus F. Hawkins Human Services Reauthorization Act of 1990, the NIH Revitalization Act of 1993 (P.L. 103–43), and the Human Services Amendments of 1994 (P.L. 103–252). In fiscal year 1989, Congress appropriated $1.383 billion for the program. Congress appropriated $1.443 billion for LIHEAP in fiscal year 1990, which included $50 million in supplemental appropriations. In fiscal year 1991, Congress appropriated $1.415 billion plus a contingency fund of $195 million, which went into effect when fuel oil prices went above a certain level. For FY 1992, $1.5 billion was appropriated, plus a contingency fund of $300 million that would have been triggered if the President had declared an emergency and had requested the funds from Congress. Congress appropriated funding of

$1,346,029,877 for FY 1993, plus a contingency fund of $595,200,000 that would have been triggered if the President had declared an emergency and had requested the funds from Congress. For FY 1994, Congress appropriated $1,437,408,000, of which $141,950,240 could be used by grantees to reimburse themselves for FY 1993 expenses. In addition, Congress rescinded some funds and appropriated energy emergency contingency funds of $300,000,000, which were released when the President declared an emergency and requested the funds from Congress, thus providing a total of $1,737,392,360 for FY 1994. The FY 1994 appropriations act provided advance FY 1995 funds of $1.475 billion. The FY 1995 HHS appropriations act rescinded part of the advance FY 1995 appropriations included in the FY 1994 appropriations law, leaving funding of $1,319,202,479 for FY 1995. In addition, Congress appropriated energy emergency contingency funds of $300,000,000, of which $100 million were released when the President declared an emergency and requested the funds from Congress, thus providing a total of $1,419,202,479 for FY 1995. The FY 1995 HHS appropriations law also provided for advance FY 1996 funding of $1,319,204,000. Congress rescinded part of the advance funding for FY 1996 in the FY 1995 supplemental appropriations law and in the FY 1996 appropriations law, leaving funding of $899,997,500. In addition, Congress appropriated energy emergency contingency funds of $300,000,000, of which $180 million were released when the President declared an emergency and requested the funds from Congress, thus providing a total of $1,079,997,500 for FY 1996. Congress did not appropriate in advance for FY 1997.

Block grants are made to States, territories, and eligible applicant Indian Tribes. Grantees may provide heating assistance, cooling assistance, energy crisis interventions, and low-cost residential weatherization or other energy-related home repair to eligible households. Grantees can make payments to households with incomes not exceeding the greater of 150 percent of the poverty level or 60 percent of the State's median income.[1] Most households in which one or more persons are receiving Aid to Families with Dependent Children, Supplemental Security Income, Food Stamps or need-tested veterans' benefits may be regarded as categorically eligible for LIHEAP.

Low income elderly households are a major target group for energy assistance. They spend, on average, a greater portion of their income for heating costs than other low income households. Grantees are required to target outreach activities to elderly or handicapped households eligible for energy assistance. In their crisis intervention programs, grantees must provide physically infirm individuals the means to apply for assistance without leaving their homes, or the means to travel to sites where applications are accepted.

In fiscal year 1995, about 34 percent of households receiving assistance with heating costs included at least one person age 60 or over, as estimated by the March 1995 Current Population Survey.

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[1] Beginning with fiscal year 1986, States are prohibited from setting income eligibility levels lower than 110 percent of the poverty level.

OCS is a member of the National Energy and Aging Consortium, which focuses on helping older Americans cope with the impact of high energy costs and related energy concerns.

No major program and policy changes for the elderly occurred in the 1990 or 1993 reauthorization legislation. The 1994 reauthorization legislation specifically allows grantees to target funds to vulnerable populations, mentioning by name "frail older individuals" and "individuals with disabilities". No new initiatives commenced in 1995 or 1996 that impacted on the status of older Americans.

THE COMMUNITY SERVICES BLOCK GRANT (CSBG) AND THE ELDERLY

I. Community Service Block Grant—The Community Service Block Grant Act (Subtitle B, Public Law 97–35 as amended) is authorized through fiscal year 1998. The Act authorizes the Secretary, through the Office of Community Services (OCS), an office within the Administration for Children and Families in the Department of Health and Human Services, to make grants to States and Indian tribes or tribal organizations. States and tribes have the authority and the flexibility to make decisions about the kinds of local projects to be supported by the State or tribe, using CSBG funds. The purposes of the CSBG program are:

(A) to provide a range of services and activities having a measurable and potentially major impact on causes of poverty in the community or those areas of the community where poverty is a particularly acute problem.

(B) to provide activities designed to assist low income participants including the elderly poor—

(i) to secure and retain meaningful employment;

(ii) to attain an adequate education;

(iii) to make better use of available income;

(iv) to obtain and maintain adequate housing and a suitable living environment;

(v) to obtain emergency assistance through loans or grants to meet immediate and urgent individual and family needs, including the need for health services, nutritious food, housing, and employment-related assistance;

(vi) to remove obstacles and solve problems which block the achievement of self-sufficiency;

(vii) to achieve greater participation in the affairs of the community; and

(viii) to make more effective use of other programs related to the purposes of the subtitle,

(C) to provide on an emergency basis for the provision of such supplies and services, nutritious foodstuffs and related services, as may be necessary to counteract conditions of starvation and malnutrition among the poor;

(D) to coordinate and establish linkages between governmental and other social services programs to assure the effective delivery of such services to low income individuals; and

(E) to encourage the use of entities in the private sector of the community in efforts to ameliorate poverty in the community; (Reference Section 675(c)(1) of Public Law 97–35, as amended).

It should be noted that although there is a specific reference to "elderly poor" in (B) above, there is no requirement that the States or tribes place emphasis on the elderly or set aside funds to be specifically targeted on the elderly. Neither the statute nor implementing regulations include a requirement that grant recipients report on the kinds of activities paid for from CSBG funds or the types of indigent clients served. Hence, it is not possible for OCS to provide complete information on the amount of CSBG funds spent on the elderly, or the number elderly, or the numbers of elderly persons served.

II. Major Activities or Research Projects Related to Older Citizens in 1995 and 1996—The Office of Community Services made no major changes in program or policy related to the CSBG program in 1995 or 1996. The Human Services Reauthorization Act of 1986 contained the following language: "each such evaluation shall include identifying the impact that assistance . . . has on . . . the elderly poor." The reauthorization act of 1994 requires local community action agencies to include a description of how linkages will be developed to fill identified gaps in services through information, referral, case management, and followup consultations as well as a description of outcome measures to be used to monitor success in promoting self sufficiency, family stability and community revitalization. As a result, the CSBG Task Force on Monitoring and Assessment, a representative body of eligible entities, established a goal which states, "Low-income people, especially vulnerable populations, achieve their potential by strengthening family and other support systems". This goal assists local, state and federal agencies to focus jointly on vulnerable populations, particularly the frail elderly.

III. Funding Levels—Funding levels under the CSBG program for States and Indian Tribes or tribal organizations amounted to $389.6 million in fiscal year 1995. For fiscal year 1996, $389.5975 million was appropriated.

Aging and Developmental Disabilities Program

critical audiences project

Grantee: Institute for the Study of Developmental Disabilities, Indiana University.

Project Director: Barbara Hawkins, Ph.D., (812) 855–6506; Fax (812) 855–9630.

Project Period: 7/1/90–6/30/96, FY '90–$90,000, FY '91–$90,000, FY '92–$90,000, FY '93–$90,000, FY '94–$90,000, FY '95–$99,000, FY '96–$72,364.

The project provides training in a late-life functional-developmental model for audiences that are critical to effective planning and care of older persons. Activities include developing training modules and instructional videos for interdisciplinary university credit courses, and illustrating the model by demonstration projects in community retirement settings.

center on aging and developmental disabilities/cadd

Grantee: University of Miami/CADD, Miami, FL.

Project Director: John Stokesberry, Ph.D., (305) 325–1043.

Project Period: 7/1/90–6/30/96, FY '90–$90,000, FY '91–$90,000, FY '92–$90,000, FY '93–$90,000, FY '94–$90,000, FY '95–$99,000, FY '96–$72,364.

CADD is providing education and training to service providers, parents and families; advocacy and outreach for consumers, information to the public on aging and developmental disabilities; networking, policy direction and community-based research. Materials will include a manual for parents/ caregivers, a resource guide and a handbook on developing a peer companion project.

INTERDISCIPLINARY TRAINING CENTER

Grantee: UAP—Institute for Human Development, University of Missouri-Kansas City.

Project Director: Gerald J. Cohen, J.D., M.P.A., (816) 235–1770; Fax (816) 235–1762.

Project Period: 7/1/90–6/30/96, FY '91–$90,000, FY '92–$90,000, FY '93–$90,000, FY '94–$90,000, FY '95–$99,000, FY '96–$72,364.

The Center addresses personnel preparation needs with a focus on administration, interdisciplinary training, exemplary services, information/technical assistance/research; and evaluation. Materials include training guide for aging, infusion models, inservice fellowship curriculum, resource bibliography, guide for training volunteers, and course syllabus.

TRAINING MODELS FOR RURAL AREAS

Grantee: Montana University Affiliated Rural Institute on Disabilities, Missoula, MT.

Project Director: Philip Wittekiend, M.S., (406) 243–5467; Fax (406) 243–2349.

Project Period: 7/1/90–6/30/96, FY '90–$90,000, FY '91–$90,000, FY '92–$90,000, FY '93–$90,000, FY '94–$90,000, FY '95–$99,000, FY '96–$72,364.

Montana's focus is on linking exiting networks and expertise to meet the unique needs of a rural area with sparse populations and limited professional resources. The project will develop audio conference packages with simultaneous long distance training for remote areas and involve nontraditional networks such as churches and senior groups.

CONSORTIUM OF EDUCATIONAL RESOURCES

Grantee: UAP—University of Rochester Medical Center, Rochester, NY.

Project Director: Jenny C. Overeynder, ACSW, (716) 275–2986; Fax (716) 256–2009.

Project Period: 7/1/90–6/30/96, FY '90–$90,000, FY '91–$90,000, FY '92–$90,000, FY '93–$90,000, FY '94–$90,000, FY '95–$99,000, FY '96–$72,364.

An inter-university interdisciplinary consortium of educational resources in gerontology and developmental disabilities is being established in western New York, to be linked to local and state networks. The project will develop and implement preservice and inservice education curriculum for direct care and nursing home staff.

AGING AND DEVELOPMENTAL DISABILITIES CLINICAL ASSESSMENT, TRAINING AND SERVICE

Grantee: Waisman Center UAP, University of Wisconsin-Madison.

Project Director: Gary B. Seltzer, Ph.D. (608) 263–1472; Fax (608) 263–0529.

Project Period: 7/1/90–6/30/96, FY '90–$90,000, FY '91–$90,000, FY '92–$90,000, FY '93–$90,000, FY '94–$90,000, FY '95–$99,000, FY '96–$72,364.

Waisman Center operates an interdisciplinary clinic, provides training to health care and other professionals, and disseminates information and technical assistance to director care networks. Materials include a functional assessment instrument and curricula for medical students, geriatric fellows and physician assistants.

INTERDISCIPLINARY TRAINING MODELS (IDT)

Grantee: UAP, College of Family and Consumer and Consumer Sciences.

Project Director: Zolinda Stoneman, Ph.D., (404) 542–4827; Fax (404) 542–4815.

Project Period: 7/1/90–6/30/96, FY '91–$90,000, FY '92–$90,000, FY '93–$90,000, FY '94–$90,000, FY '95–$99,000, FY '96–$72,364.

This project is using IDT models for graduate and undergraduate training, developing community-based internship and practicum sites; collecting audiovisual materials for dissemination; and providing information to the UAP regional information and referral service. Products will include training videotapes and modules, course materials, and radio program recordings.

TRAINING INITIATIVE IN AGING AND DEVELOPMENTAL DISABILITIES

Grantee: Institute for the Study of Developmental Disabilities, University of Illinois at Chicago.

Project Director: David Braddock, Ph.D., (312)–413–1647.

Project Period: 7/1/93–6/30/96, FY '93–$90,000, FY '94–$90,000, FY '95–$99,000, FY '96–$72,364.

The project addresses three priority areas emerging from the UAP's research activities and clinical programs: (1) advocacy and futures planning for older adults with developmental disabilities and their families; (2) to maintain functioning and promote community inclusion for aging persons with cerebral palsy; and (3) to enhance the psychosocial well-being of aging persons with Down Syndrome and bolster older families' caregiving efforts.

COMMUNITY MEMBERSHIP THROUGH PERSON-CENTERED PLANNING

Grantee: Eunice Kennedy Shriver Center, Inc. Shriver Center UAP.

Project Director: Karen E. Gould, Ph.D., (617) 642–0238.

Project Period: 7/1/92–6/30/96, FY '92–$89,999, FY '93–$89,999, FY '94–$89,999, FY '95–$99,000, FY '96–$72,364.

The Center has two primary goals which are: (1) to implement a service delivery model that creates a new vision for individuals who are labeled "old" and "developmentally disabled" in Massachusetts, one in which entry into valued adult roles is expected and ca-

pacities and interests form the basis for structuring support; and (2) to provide training to persons with developmental disabilities, family members and friends, graduate students, professionals and community members so that they can develop the skills necessary to support community entry and inclusion in valued roles and relationships for older adults with developmental disabilities, and learn to use these skills in other settings.

A COLLABORATIVE INTERDISCIPLINARY TRAINING APPROACH TO IMPROVE SERVICES TO AGING PERSONS WITH DEVELOPMENTAL DISABILITIES

Grantee: Institute for Disability, University of Southern Mississippi.

Project Director: Valerie M. De Coux, (601) 266–5163.

Project Period: 7/1/93–6/30/96, FY '93–$90,000, FY '94–$90,000, FY '95–$99,000, FY '96–$72,364.

The project develops a collaborative interdisciplinary training approach to meet pre-service, in-service, and consumer needs. Training of professionals and paraprofessionals occurs at both the pre-service and in-service levels and focuses on cross-network training in best practices which ensures an optimal quality of life for older persons with developmental disabilities.

NORTH DAKOTA PROJECT FOR OLDER PERSONS WITH DEVELOPMENTAL DISABILITIES

Grantee: North Dakota Center for Disabilities, Minot State University.

Project Director: Dr. Rita Curl and Dr. Demetrios Vassiliou, (701) 857–3580.

Project Period: 7/1/93–6/30/96, FY '93–$90,000, FY '94–$90,000, FY '95–$99,000, FY '96–$72,364.

The project seeks to upgrade the training opportunities available to North Dakotans; (1) project staff works with pre-service geriatric programs to develop strong DD components; (2) project staff expands on an existing inservice training program to provide information on aging DD service provision; and (3) the project supports the development of training opportunities for secondary consumer and advocates.

INTERDISCIPLINARY TRAINING INITIATIVE ON AGING AND DEVELOPMENTAL DISABILITIES

Grantee: Graduate School of Public Health, University of Puerto Rico—Medical Sciences.

Project Director: Dr. Margarita Miranda, (809) 758–2525, ext. 11453, (809) 754–4377.

Project Period: 8/2/94–6/30/97, FY '94–$90,000, FY '95–$90,000, FY '96–$72,364, FY '97–$90,000.

The project provides pre-service training including practical experience on best practices in serving the older population with developmental disabilities to three (3) graduate and to three (3) undergraduate students from different disciplines per year (from the second funding year on); provides culturally adapted in-service training to the Catano Family Health Center's interdisciplinary team

and to at least 40 professionals in the aging service per year through the Graduate School and implementation of five regional Seminars on Aging and Developmental Disabilities throughout Puerto Rico.

OFFICE OF THE ASSISTANT SECRETARY FOR PLANNING AND EVALUATION

The Office of the Assistant Secretary for Planning and Evaluation (ASPE) serves as the principal advisor to the Secretary on policy and management decisions for all groups served by the Department, including the elderly. ASPE oversees the Department's legislative development, planning, policy analysis, and research and evaluation activities and provides information used by senior staff to develop new policies and modify existing programs.

ASPE is involved in a broad range of activities related to aging policies and programs. It manages grants and contracts which focus on the elderly and coordinates other activities which integrate aging concerns with those of other population groups. For example, the elderly are included in studies of health care delivery, poverty, State-Federal relations and public and private social service programs.

ASPE also maintains a national clearinghouse which includes aging research and evaluation materials. The ASPE Policy Information Center (PIC) provides a centralized source of information about evaluative research on the Department's programs and policies by tracking, compiling, and retrieving data about ongoing and completed HHS evaluations. In addition, the PIC data base includes reports on ASPE policy research studies, the Inspector General's program inspections and investigations done by the General Accounting Office and the Congressional Budget Office. Copies of final reports of the studies described in this report are available from PIC.

During 1995 and 1996, ASPE undertook or participated in the following analytic and research activities which had a major focus on the elderly.

1. POLICY DEVELOPMENT—AGING

Task force and Alzheimer's disease

As a member of the DHHS Council on Alzheimer's Disease, ASPE helps prepare the annual report to Congress on selected aspects of caring for persons with Alzheimer's Disease. The report focuses on the Department's current and planned services and research initiatives on the disease.

Federal Interagency Forum on Aging-Related Statistics

ASPE is a member of the Federal Interagency Forum on Aging-Related Statistics. The Forum was established to encourage the development, collection, analysis, and dissemination of data on the older population. The Forum seeks to extend the use of limited resources among the agencies through joint problem-solving, identification of data gaps, and improvement of the statistical information bases on the older population.

Departmental Data Planning and Analysis Work Group

The Data Planning and Analysis Work Group chaired by ASPE analyzes Departmental data requirements and develops plans for fostering the full utilization of such data. The Group identifies needs for data within DHHS, evaluates the capacity of current systems to meet these needs and prepares recommendations for the effective performance of DHHS data systems.

Long-term care microsimulation model

During 1995 and 1996, ASPE continued to use extensively the Long-Term Care Financing Model developed by ICF and the Brookings Institution. The model simulates the use and financing of nursing home and home care services by a nationally representative sample of elderly persons. It gives the Department the capacity to simulate the effects of various financing and organizational reform options on public and private expenditures for long-term care services.

2. RESEARCH AND DEMONSTRATION PROJECTS

Panel Study of Income Dynamics

University of Michigan, Institute for Social Research—Principal investigators: Sandra Hofferth, Frank Stafford

Through an interagency consortium coordinated by the National Science Foundation, ASPE assists in the funding of the Panel Study of Income Dynamics (PSID). This is an ongoing nationally representative longitudinal survey that began in 1968 under the auspices of the Office of Economic Opportunity (OEO). The PSID has fathered information on family composition, employment, sources of income, housing, mobility, health and functioning, and other subjects. The current sample size is over 7,000 persons, and an increasing number of them are elderly. The data files have been disseminated widely and are used by hundreds of researchers in this and other countries to get an accurate picture of changes in the well-being of different demographic groups, including the elderly.

Funding: ASPE and HHS precursors: FY67 through FY79—$10,559,498; FY80—$698,952; FY81—$600,000; FY82—$200,000; FY83—$251,000; FY84—$550,000; FY85—$300,000; FY86—$225,000; FY87—$250,000; FY88—$250,000; FY89—$250,000; FY90—$300,000; FY93—$300,000; FY94—$800,000; FY95—$300,000; FY96—$300,000; FY97—$300,000.

End date: Ongoing.

Assets and health dynamics (AHEAD) of the oldest old

University of Michigan, Survey Research Center—Principal investigators: Regula Herzog, U. Michigan, Beth Soldo, Georgetown Univ.

Beginning in 1992 the Health and Retirement Survey, which is funded principally by the National Institute in Aging, began to follow a cohort of men and women aged 51 to 61 to track various aspects of health status, retirement patterns and use of health and other services.

The AHEAD survey is a companion to the HRS. It surveys a nationally representative community sample of persons aged 70 and over. It was first fielded in 1993 and is administered every two years longitudinally. AHEAD focuses on a variety of key aging-related issues, such as health and functional status, family structure and transfers, income and wealth; health insurance; and work activities. In 1994, ASPE funded an Early Results Workshop at the University of Michigan, at which a number of papers were presented using AHEAD data. The workshop papers subsequently became the basis for a Special Issue of the Journal of Gerontology: Psychological and Social Sciences (May 1997) on AHEAD.

Funding: FY94—$30,000 (for Early Results Workshop).

End date: September 1994.

Analysis of State Board and Care Regulations and Their Effects on the Quality of Care

Research Triangle Institute—Principal investigator: Catherine Hawes

As the nation's long-term care system evolves, more emphasis is being placed on home and community-based care as an alternative to institutional care. Community-based living arrangements for dependent populations (disabled elderly, mentally ill, persons with mental retardation/developmental disabilities) play a major role in the continuum of long-term care and disability-related services. Prominent among these arrangements are board and care homes. There is a widespread perception in the Congress and elsewhere that too often board and care home residents are the victims of unsafe and unsanitary living conditions, abuse and neglect by operators, and fraud.

This project analyzed the impact of State regulations on the quality of care in board and care homes in ten States and documented the characteristics of board and care facilities, their owners and operators, and collect information on the health status, level of dependency, program participation and service needs of residents. Key findings were the B&C residents are significantly older and more frail than was true a decade ago. Appropriate regulation and licensure requirements result in homes that are better prepared to meet the needs of the resident population. Thee include: (1) greater availability of supportive services (2) lower use of psychotropic drugs and medications and (3) more operator training in the care of the frail elderly and other persons with disabilities.

Funding: FY 1989—$350,000; FY 1990—$300,000; FY 1991—$400,000.

End date: September 1995.

Evaluation of the Elderly Nutrition Program

Mathematica Policy Research—Principal investigator: Michael Ponza

At the request of Congress (Section 206 of the 1992 Older Americans Act Amendments), the Department of Health and Human Services in conducting an evaluation of the Elderly Nutrition Program. The evaluation, which is co-sponsored by ASPE and the Administration on Aging, provided estimates of the impact of the pro-

gram's nutritional components on the nutrition, health, functioning, and social well being of participants. It described how the program is administered, operated and funded, and the effectiveness of those components. The study also described and compared the characteristics of congregate and home-delivered meal participants, and assessed how well the program reached special populations, such as low-income and minority elderly. The study covered 57 State Units on Aging, 250 Area Agencies on Aging, 100 Indian Tribal Organizations and 200 Nutrition Projects. The key findings were that people who participated in the Elderly Nutrition Program have higher daily intake of key nutrients than similar nonparticipants, that participants have more social contacts per month than similar nonparticipants and that most participant are satisfied with ENP services.

Funding: FY 1993—$1,200,000; FY 1994—$1,245,000.

End date: September 1995.

A national study of assisted living for the frail elderly

Research Triangle Institute—Principal investigator: Catherine Hawes

ASPE has commissioned a national study of assisted living. Assisted living refers to residential settings that combine housing, personal assistance and other supportive service arrangements for persons with disabilities. These settings are thought to offer greater autonomy and control to consumers over their living and service arrangements than is typically provided by more traditional residential settings, such as nursing homes or board and care homes. The study will focus on such issues as (a) trends the supply of assisted living facilities, (b) barriers to development (c) the existing regulatory structure, (d) the extent to which assisted living embodies in reality the principles of consumer autonomy and choice in a supportive residential setting, and (e) the effect of such features (or their absence) on persons who live and work in assisted living facilities. The study will include data from owner/operators, staff and residents from a national sample of 690 assisted living facilities.

Funding: FY94–$200,000; FY 96–$200,000.

End date: July 1999.

Creating a multistate database for dual eligibles

Mathematica Policy Research (MPR)—Principal investigator: Sue Dodds

There has been growing interest in the service utilization and expenditure patterns of individuals enrolled in both Medicare and Medicaid (i.e., dual eligibles). In order to provide important data on these populations, two ASPE offices (HP and DALTCP) collaborate with HCFA to fund a project that will link Medicare and Medicaid data in 10–12 states. This is an effort to develop a uniform database that can be utilized by both States and the Federal Government to improve the efficiency and effectiveness of both acute and long-term care services provided to these populations. More specifically, the project strengthens the ability of HHS and States to develop effective risk-adjusted payment methods for dual eligibles,

and further understanding of how interactions between the Medicare and Medicaid programs affect the access, costs and quality of services received by dually eligible beneficiaries.

Funding information: FY 97—$1,024,000 (ASPS funds—$350,000)

End date: Fall 2000

Impact of Medicare HMO Enrollment on health care costs in California

RAND—Principal investigator: Glenn Melnick

This work is an extension of previous APSE—funded work. The contractor performs three major activities including: (1) updating the earlier analysis of competition and selective contracting in California to the most recent year available; (2) analyzing the effects of Medicare managed care penetration on hospital Medicare Costs and Utilization at the county level; and (3) analyzing the effects on beneficiary utilization and costs of joining managed care plans. In addition, the feasibility of conducting a fourth analysis will be assessed; namely to replicate analysis number three for beneficiaries who have withdrawn from Medicare managed care plans in the recent past to try to see if such beneficiaries are different from those who remain in managed care. The contractor will put out a public use file with documentation of the materials gathered since 1980 with ASPE support beginning in 1987.

The project builds upon previous ASPE-funded work. It compares pre-managed care enrollment characteristics, service utilization, and costs among demographically-matched individuals in standard Medicare and Medicare HMOs. In addition, the project includes comparisons with a third group of persons who disenrolled from Medicare HMOs. This data will then be used to build prediction models for subsequent years.

Funding: FY 94—$531,000; FY 97—$160,000.

End date: Fall 1998.

SENATE SPECIAL COMMITTEE ON AGING'S ANNUAL REPORT—CDC UPDATE FOR 1995 AND 1996

(1) National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP)

In the paragraph regarding Quality-of-Life, page 175, please change "1993" to "1993–1996" (with respect to BRFSS).

There are about three paragraphs of program-specific language at the end of the report, regarding Diabetes and Breast and Cervical Cancer.

(2) National Center for Environmental Health

The following programs should be added to update the information for 1995–1996:

The National Center For Environmental Health (NCEH) has collaborated in a study of 180 women to determine risk factors for osteoporosis, including vitamin D receptor polymorphisms.

NCEH has spearheaded the establishment of the Cholesterol Reference Method Laboratory Network (CRMLN) that helps assure the quality of total cholesterol and HDL cholesterol measurements in

clinical laboratories in the United States. High quality cholesterol measurements assure correct diagnosis and treatment of elevated cholesterol levels.

The Office on Disability and Health (ODH) at NCEH is collaborating with the NCCDPHP in two activities that relate to the process of aging. First, ODH is partnering with the Health Care and Aging Branch in the Johnston County Osteoarthritis Longitudinal Study to describe the epidemiology of secondary conditions in persons with hip and knee osteoarthritis that result in functional limitation and disability.

Second, ODH provides technical assistance to disability related activities within the University of Washington Center for Health Promotion in Older Adults, A NCCDPHP Prevention Research Center. Aims of this prevention center related to disabilities include (a) implementing community-wide elderly chronic disease and disability reduction efforts under the auspices of a public health department; (b) design and evaluate strategies for recruiting people with disabilities to participate in health promotion interventions; (c) develop measures of attitudes, behaviors, performance, and health related quality of life for persons with disabilities; and (d) develop a method to evaluate prevention effectiveness for interventions on disability.

(3) National Center for Health Statistics

The following changes and additions should be made for 1995–1996 (The Section for NCHS begins on p. 177):

International Collaborative Effort on Measuring the Health and Health Care of the Aging

Page 178 top of the page—

Strike "Health Promotion and Disease Prevention Among the Aged: USA and the Netherlands," and add "and" to the end of the last phrase on p. 177.

1st full paragraph on p. 178, 2nd sentence should read: A third and final international symposium was held in 1996 to present final research results and address issues of implementation. Proceedings will be published.

3rd sentence fine. Add to publications:

LTC In Five Nations, Canadian Journal on Aging, Vol. 15, Suppl. 1, 1996. The journal issue contains individual articles about LTC in Australia, Canada, The Netherlands, Norway, and the U.S. Articles on LTC in the U.S. include one on institutional care by J. Van Nostrand and another on home care by R. Clark.

E. Bacon, S. Maggi, A Looker, *et al,* International Comparisons of Hip Fracture Rates in 1988–89, *Osteoporosis International,* Vol. 6, pp. 69–75, 1996

Last paragraph, last sentence, strike "NCHS Coordinator of Data on Aging" replace with: Project Director, ICE on Aging, * * * Room 1100, * * * 20782 * * * (301) 436–7062.

Federal Interagency Forum on Aging-Related Statistics

Second paragraph, strike to end of section and replace with:

In 1995–96, the Forum produced the following publications:

Trends in the Health of Older Americans: United States, 1994 *Vital Health Statistics* 3(30), 1995.

a bibliography, *Health of an Aging America: 1994 Bibliography, guide to Reports About Older Americans* from the National Center for Health Statistics.

Policy for Aging over the Next Decade: Priority Data Needs for Health and Long Term Care

Summary of Data Sources on Alzheimer's Disease and Related Dementia from the National Center for Health Statistics

Measuring Cognitive Impairment in Population-Based Surveys

Replace with the following:

A Work Group has been established by the Federal Interagency Forum on Aging-Related Statistics with the task of strengthening the measurement of cognitive impairment in national, population-based surveys. This activity builds on the previous work of the Forum in developing research recommendations for strengthening assessment of cognitive impairment. Specific activities for 1995–96 were to: (1) identify the state-of-the-art in measuring cognitive impairment of the elderly in national surveys, and (2) implement a research agenda for strengthening its measurement in national surveys. Results of the research activity include:

B. Gurland, D. Wilder, *et al,* A flexible system of detection for Alzheimer's Disease and related dementias, *Aging: Clinical and Experimental Research,* Vol. 7, No. 3, pp. 165–172, 1995.

R. Herzog, "Approaches to Measuring Cognitive Functioning in Large Scale Surveys: Review of the Literature and Analysis of Data form the Assets and Health Dynamics Among the Oldest-Old Survey, Occasional Paper of the Forum.

National Mortality Followback Survey: 1986 and 1993

Replace paragraph 4 with:

The 1993 Survey is comprised of a nationally representative sample of approximately 23,000 decedents 15 years of age or over who died in 1993, with over-sampling of some groups including black decedents, females, persons under 35 years, and centenarians. The design parallels that of the 1986 survey, with additional emphasis on deaths due to external causes, that is, accidents, homicides, and suicides, as well as disability in the last year of life. Hospital records are not included in the 1993 survey, but medical examiner/coroner records are included. A preliminary file is planned for release to the public in February 1998, and a final file containing the medical examiner/coroner information will be released later in 1998.

National Health Interview (NHIS): Special Topics

Insert the word "Survey" after Interview in the section title above.

Paragraph 1—after 1st sentence revise to read: Data collection has been completed for the special health topics on disabilities. The disability topic had two phases. The first phase questionnaire iden-

tified persons with disabilities. The second phase collected detailed * * *.

Change the beginning of the next 2 paragraphs to read:

Disability Phase 1 included questions on: sensory, * * *
Disability Phase 2 included questions on: housing * * *

Add to the end of the last paragraph: The first year of the Phase I Disability file was released in 1996. The remainder of the Disability files will be released in 1998.

Note: Reverse the order of the next 2 sections placing the SOA II writeup after the LSOA writeup.

Longitudinal Study of Aging

Replace the entire section with the following:

The Longitudinal Study of Aging (LSOA) is a collaborative effort of the National Center for Health Statistics and the National Institute on Aging. The baseline information for the LSOA came from the Supplemental on Aging (SOA), a supplemental to the 1984 National Health Interview Survey (NHIS).

The SOA is comprised of a nationally representative sample of 16,148 civilians 55 years of age and over living in the community at the time of the 1984 NIHS. The Supplement obtained data on the health of older Americans, information on housing, including barriers and ownership; social and familial support, including number and proximity of children and recent contacts in the community; retirement, including reasons for retirement and sources of retirement income; and physical functioning measures, including activities of daily living, instrumental activities of daily living, and work-related activities.

The sample for the LSOA is comprised of the 7,527 persons who were 70 years of age and over at the time of the SOA. The survey was designed to measure changes in functional status and living arrangements, including institutionalization, as persons moved into and through the oldest ages. The baseline SOA interviews were conducted in-person. Follow up reinterviews, conducted in 1986, 1988 and 1990, were conducted by telephone using Computer Assisted Telephone Interviewing (CATI). In addition to the interview data, permission was obtained from sample persons or their proxies to match interview data with other records maintained by the Department of Health and Human Services.

The fourth version of the LSOA public-use data was released in October, 1991. The Version 4 files are available on magnetic tape and include the following information: all four waves of interview data (1984, 1986, 1988, 1990), National Death Index data (1984–1989), and Medicare records data (1984–1989. A diskette containing detailed multiple cause-of-death data for the LSOA sample is available. The fifth version of the LSOA public-use data, released in September, 1993, is available on CD–ROM. This

version includes all interview data available in Version 4 and updates the administrative data through 1991.

The LSOA public-use datasets are available from three sources: The National Technical Information Service (NTIS), the Division of Health Interview Statistics, NCHS, and the National Archives of Computerized Data on Aging. The multiple cause-of-death diskette is available from NITS.

Second Supplement on Aging (SOA II)

Replace the entire section with the following:

From 1994–1996, the National Center for Health Statistics conducted the Second Supplement on Aging (SOA II) as part of the National Health Interview Survey. Interviews were conducted with a nationally representative sample of 9,447 civilian noninstitutionalized Americans 70 years of age and over. The study will provide important data on the elderly that can be compared with similar data from the 1984 SOA. In addition, the SOA II will serve as a baseline for the Second Longitudinal Study of Aging (LSOA II), which will follow the baseline cohort through one or more reinterview waves.

Information for the SOA II comes from several sources: the 1994 NHIS core questionnaire, Phase 1 of the National Health Interview Survey on Disability (NHIS–D), and Phase 2 of the NHIS–D, conducted approximately one year after Phase 1. The survey questions and methodology are similar to the first LSOA, but improvements reflect a number of methodological and conceptual developments that have occurred in the decade between the LSOA and LSOA II, as well as suggestions made by users of the LSOA and others in the research community.

A primary objective of the SOA II is to examine changes which may have occurred in the physical functioning and health status of the elderly over the past decade. To this end, questions concerning physical functioning and health status and their correlates were repeated in the SOA II. These include questions on activities of daily living, instrumental activities of daily living, and work-related activities, as well as medical conditions and impairments, family structure and relationships, and social and community support. In addition to these repeated items, the SOA II questionnaire was expanded to include information on risk factors (including tobacco and alcohol use), additional detail on both informal and formal support services, and questions concerning the use of prescription medications.

These data, when used in conjunction with data from the LSOA, will enables users to identify changes in functional status, health care needs, living arrangements, social support, and other important aspects of life across two cohorts with different life course perspectives. This will provide researchers and policy planners with an opportunity to examine trends and determinants of "healthy aging."

National Health and Nutrition Examination Survey III

Replace the entire section with the following:

The National Health and Nutrition Examination Survey (NHANES) provides valuable information available through direct physical examinations of a representative sample of the population. The most recently completed cycle of this survey, NHANES III (1988–94), provides a unique data base for older persons. A number of important methodologic changes were made in the survey design. There was no upper age limit, (previous surveys had an age limit of 74) and the sample was selected to include approximately 1,300 persons 80 or older. Data for 1988–94 will be released in 1997.

The focus of the survey included many of the chronic diseases of aging that cause morbidity and mortality, including cardiovascular disease, osteoarthritis, osteoporosis, pulmonary disease, dental disease, and diabetes. Additional information on diet and nutritional status and on social, cognitive, and physical function was incorporated in the survey. An abbreviated exam in the home was included for many of those unable or unwilling to travel to the survey's mobile examination center. A sampling of reports already produced from the NHANES III information include:

Looker A, Johnson C, Wahner H, Dunn W, Calvo M, Harris T, Heyse S, Lindsay R (1995): Prevalence of low femoral bone density in older US women from NHANES III. J Bone Mineral Research 10(5): 796–802.

Redford M, Drury TF, Kingman A, Brown LJ (1996): Denture use and the technical quality of dental prostheses among persons 18–74 years of age: United States, 1988–1991. J Dent Res 75 (Spec Iss): 714–725.

Sempos CT, Johnson CL, Carroll MD, Briefel RR (1995): Current levels and trends in serum total cholesterol in the United States adults 65 years of age and older. The NHANES. In: Nutritional Assessment of Elderly Populations. Raven Press, New York, pp. 121–134.

Planning is underway for the survey to return to the field in 1999. NHANES is to become a continuous program, with changing focus on a variety of health and nutrition measurements to meet emerging needs. Current plans are for a continued emphasis on the health of older Americans, and persons 60 and over will be oversampled for the survey.

NHANES I Epidemiologic Follow up Study

Replace the entire section with the following:

The first National Health and Nutrition Examination Survey (NHANES I) was conducted during the period 1971–75. The NHANES I Epidemiologic Follow up Study (NHEFS) tracks and reinterviews the 14,407 participants who were 25–74 years of age when first examined in

NHANES I. NHEFS was designed to investigate the relationships between clinical, nutritional, and behavioral factors assessed at baseline (NHANES I) and subsequent morbidity, mortality, and hospital utilization, as well as changes in risk factors, functional limitation, and institutionalization.

The NHEFS cohort includes the 14,407 persons 25–74 years of age who completed a medical examination at NHANES I. A series of four Follow up studies have been conducted to date. The first wave of data collection was conducted from 1982 through 1984 for all members of the NHEFS cohort. Interviews were conducted in person and included blood pressure and weight measurements. Continued followups of the NHEFS population were conducted by telephone in 1986 (limited to persons age 55 and over at baseline), 1987, and 1992.

Tracing and data collection rates in the NHEFS have been very high. Ninety-six percent of the study population has been successfully traced at some point through the 1992 Follow up. While persons examined in NHANES I were all under age 75 at baseline, by 1992 more than 4,000 of the NHEFS subjects had reached age 75, providing a valuable group for examining the aging process. Public use data tapes are available from the National Technical Information Service for all four waves of Follow up. The 1992 NHEFS public use data is also available via the Internet. NHEFS data tapes contain information on vital and tracing status, subject and proxy interviews, health care facility stays in hospitals and nursing homes, and mortality data from death certificates. All NHEFS Public Use Data can be linked to the NHANES I Public Use Data.

National Health Care Survey (NHCS)

Replace with the following:

The National Health Care Survey (NHCS) is an integrated family of surveys conducted by the National Center for Health Statistics to provide annual national data describing the Nation's use of health care services in ambulatory, hospital and long-term care settings. Use of health care services by the elderly may be investigated using NHCS data. Currently, the NHCS includes six national probability sample surveys and one inventory. These seven data collection activities include:

the National Hospital Discharge Survey—discharges from non-Federal, short-stay and general hospitals;

the National Survey of Ambulatory Surgery—visits to hospital-based and freestanding ambulatory surgery centers;

the National Ambulatory Medical Care Survey—office visits to non-Federal, office-based physicians;

the National Hospital Ambulatory Medical Care Survey—visits to emergency and outpatient depart-

ments of non-Federal, short-stay and general hospitals;

the National Health Provider Inventory—a national listing of nursing homes, hospices, home health agencies and licensed residential care facilities;

the National Home and Hospice Care Survey—hospices and home health agencies and their patients; and

the National Nursing Home Survey—nursing homes and their residents.

Details on specific surveys relevant to the elderly are presented below by specific survey.

The following sections are recorded to match the order of the indented items above.

National Hospital Discharge Survey

Replace with the following:

The National Hospital Discharge Survey (NHDS) is the principal source of national information on inpatient utilization of non-Federal, short-stay and general hospitals. The NHDS was redesigned in 1988 as one of the components of the National Health Care Survey. This national sample survey collects data on the demographic characteristics of patients, expected source of payment, diagnoses, procedures, length of stay, and selected hospital characteristics.

Data reports and public use data tapes are available from 1970–1995. A multi-year data set covering the years 1979–92 is also available from the National Technical Information Service. Diskettes containing tabulations published in the Series 13, Detailed Diagnoses and Procedures Report, are available for 1985–94.

National Survey of Ambulatory Surgery (NSAS)

Replace with the following:

The National Survey of Ambulatory Surgery was initiated in 1994 as an annual national survey to provide data on patients and their treatment in hospital-based and freestanding ambulatory surgery centers. The NSAS was conducted in 1995–96. The NSAS provides data on patient demographics, diagnoses and procedures, anesthesia, source of payment, and facility type.

Data from the 1994 and 1995 surveys have been published in NCHS Advance Data and Series reports. Public use data are available in electronic form from the National Technical Information Service.

Insert new section:

National Ambulatory Medical Care Survey

The National Ambulatory Medical Care Survey (NAMCS) is a national probability sample survey of office visits made by ambulatory patients to non-Federal physi-

cians, who are in office-based practice, and who are primarily engaged in direct patient care. Included are visits to physicians in solo, partnership, and group practice settings, and visits that occur in private non-hospital-based clinics and health maintenance organizations. Excluded are visits to specialists in radiology, anesthesiology, or pathology, and visits to physicians who are principally engaged in teaching, research or administration. Telephone contacts and non-office visits also are excluded.

The NAMCS provides information on office visits in terms of patient, physician and visit characteristics. Data include: patient demographics, the patient's reason for visit, type of physician seen, physician's diagnoses, expected source of payment, ambulatory surgical procedures, medication therapy, disposition, and duration of the visit.

The NAMCS was conducted from 1973–81, in 1985, and has been conducted annually from 1989–96. Data through 1996 have been released in NCHS Advance Data and Series reports.

Public use data are available in electronic form from the National Technical Information Service.

Insert new section:

National Hospital Ambulatory Medical Care Survey

The National Hospital Ambulatory Medical Care Survey (NHAMCS) is a national probability sample survey of visits to the emergency and outpatient departments of non-Federal, short-stay and general hospitals. The NHAMCS was initiated in 1992 and has been conducted annually since that time. The survey includes data on the demographic characteristics of the patient, expected source of payment, patient's complaints, physician's diagnoses, procedures, medication therapy, disposition, and types of health professionals seen.

Data through 1996 have been released in NCHS Advance Data and Series reports. Public use data are available in electronic form from the National Technical Information Service.

National Health Provider Inventory (NHPI)

Replace with the following:

The National Health Provider Inventory, formerly called the National Master Facility Inventory, was last conducted in 1991. This mail survey includes the following categories of health care providers; nursing and related care home, licensed residential care facilities, facilities for the mentally retarded, home health agencies, and hospices. Data from the 1991 NHPI was used to provide national statistics on the number, type and geographic distribution of these health providers and to serve as sampling frames for future surveys in the Long-Term-Care component of the National Health Care Survey. The NHPI public use data tapes are available at the National Technical Information Service.

National Home and Hospice Care Survey

Replace with the following:

The National Home and Hospice Care Survey (NHHCS) is a national probability sample survey of home health and hospice care agencies, and their patients. The NHHCS was conducted annually from 1992–94 and in 1996. Agencies providing home health and hospice care were included in the survey without regard to licensure or to certification status under Medicare and/or Medicaid. Information about the agency was collected through personal interviews with the administrator. Information was collected on a sample of current patients and discharged patients through personal interviews with designated agency staff.

Data from the NHHCS may be used to examine the relationships between utilization, services offered, and charges for care, as well as provide national baseline data about home health and hospice care agencies, and their patients. Data through 1996 have been released in NCHS Advance Data and Series reports. An Advance Data report (based on data from the 1994 NHHCS) on the use of home health care by the elderly has been published. Public use data are available in electronic form from the National Technical Information Service.

National Nursing Home Survey

Replace with the following:

During 1995, the National Center for Health Statistics conducted the National Nursing Home Survey (NNHS) to provide information about the residents in nursing homes. The NNHS was conducted in 1973–74, in 1997, and again in 1985. The NNHS data are from two perspectives—that of the provider and that of the recipient of services. Data about the facilities includes: size, ownership, Medicare/Medicaid certification, and services provided. Data about the residents include: demographic characteristics, marital status, place of residence prior to admission, health status and services received. Data from the 1995 survey has been published. An Advance Data report (based on data from the 1995 NNHS) on the use of nursing home services by the elderly has been published. Public use data tapes are available through the National Technical Information Service. Plans call for the NNHS to be fielded in 1997 and in 1999.

National Nursing Home Survey Follow up

Replace with the following:

The National Nursing Home Survey Follow up (NNHSF) is a longitudinal study which follows the cohort of current residents and discharged residents sampled from the 1985 NNHS described above. The NNHSF builds on the data collected from the 1985 NNHS by extending the period of observation by approximately 5 years. Wave I was con-

ducted from August through December 1987, and Wave II was conducted in the fall of 1988. Wave III began in January of 1990 and continued through April. The study was a collaborative project between NCHS, HHS, and the National Institute on Aging (NIA). The Follow up was funded primarily by NIA and was developed and conducted by NCHS.

The NNHSF interviews were conducted using a computer-assisted telephone interview system. Questions concerning vital status, nursing home and hospital utilization since the last contact, current living arrangements, Medicare number, and sources of payment were asked. Respondents included subjects, proxies, and staff of nursing homes.

The NNHSF provides data on the flow of persons in and out of long-term care facilities and hospitals. These utilization patterns can be examined in relation to information on the resident, the nursing home, and the community. Public-use computer tapes for Waves I, II, and III of the NNHSF are available through the National Technical Information Services (NTIS). In addition, the National Nursing Home Survey Follow up Mortality Data Tape, 1984–1990 is also available through NTIS.

National Employer Health Insurance Survey (NEHIS)

Replace with the following:

The National Employer Health Insurance Survey was jointly conducted by the National Center for Health Statistics, the Health Care Financing Administration, and the Agency for Health Care Policy and Research in 1994 to provide data necessary to produce national and State level estimates of total employer sponsored private health care insurance premiums, the employer and employee premium share, the total amount of benefits provided, and the administrative cost. In addition to the number of workers, retirees, and former workers covered, the survey provides the breadth of policy benefits and the number and characteristics of plans in each establishment.

The NEHIS was conducted in all 50 States and the District of Columbia. Computer assisted telephone interviews were completed for approximately 39,000 business establishments, sampled from several size categories. Data will be released to the public in the form of published reports and electronic data products.

The estimates will be used to investigate the geographic variations in spending for health care and the probable differential impacts that proposed health policy initiatives will have by State. As the private sector, State and Federal Governments develop and implement reforms of the health care system, there are likely to be major changes in the extent and form of private health insurance coverage, benefits, and premium sharing. No discussion of the impact of the reform upon business and individuals can be complete without analysis of these changes. Over the past

several years, the task of producing national private health insurance premiums and benefit estimates has increased in difficulty as the industry has become more complex. Simultaneously, the importance of accurate health care costs estimates has increased as the pressure or burden of health care costs have mounted on the primary health care payers such as government, business and households and as initiatives to contain cost growth have been discussed and implemented

Replace title "Improving Questions on Functional Limitations" with new title "The Questionnaire Design Research Laboratory" and replace text with following:

Testing of cognitive functioning question.—In 1996, NCHS collaborated with the Survey Research Laboratory of the University of Illinois to test a variety of questions dealing with cognitive functioning in persons age 70 or older. Methods used in this investigation included a focus group and face-to-face and telephone cognitive interviews. The study found that when testing cognitive functioning and memory in a survey environment, questions of various types should be asked. These include subjective memory appraisals, current behaviors, and short-term memory tests. Any single question or type of question may be confounded with measurement problems, social desirability issues, and other physical problems.

Results will be presented at the Conference on Cognition, Aging, and Survey Measurement, February 8, 1997, Ann Arbor, Michigan. Study results are also forthcoming in O'Rourke, D., Sudman, S., Johnson, T., & Burris, J., "Cognitive testing of cognitive functioning question", in N. Schwarz, D. Park, B. Knauper, & S. Sudman (Eds.), Aging, cognition, and self-reports. Washington, DC: Psychology Press.

Improving our understanding of responses to health status and quality of life questions.—This study investigated issues related to question interpretation, strategies used by respondents, and adequacy of response scales for health status measures currently used in the Behavioral Risk Factor Surveillance System. Cognitive interviews were conducted with 18 subjects 70 years of age or older and 30 subjects under the age of 70; a field experiment was also conducted to validate laboratory findings. Results indicated that elderly respondents may have difficulty providing responses to survey questions that ask for reports of number of days (e.g., "...how many days during the past 30 days was your physical health not good?") Ease or difficulty of formulating a response may depend on the complexity of the pattern of health status that represents the person's life. Because elderly people are more likely to have complex health patterns, it may be that their difficulty derives not from cognitive processes associated with aging, but rather with measurement problems inherent in assessing quality of life for this age group.

Results will be presented at the Conference on Cognition, Aging, and Survey Measurement, February 8, 1997, Ann Arbor, Michigan. Study results are also forthcoming in Schechter, S., Beatty, P., and Willis, G. "Asking survey respondents about health status: Judgement and response issues", in N. Schwarz, D. Park, B. Knauper, & S. Sudman (Eds.), Aging, cognition, and self-reports. Washington, DC: Psychology Press.

Cognitive Laboratory Testing of Cognitive Functioning Questions.—The Questionnaire Design Research Laboratory conducted two rounds of testing with senior respondents during the summer of 1996 in collaboration with the staff of LSOA II. The LSOA II staff has been directed by the funding agency (NIA) to produce a survey that combined questions from earlier surveys of aging in order to bring consensus to the results. The goal of the lab testing was to conduct validity and reliability research on the modules as the questionnaire was developed, by testing the adequacy and suggesting improvements to the questions which had been removed from their contextual framework in the earlier surveys.

(4) National Center for Infectious Disease

Paragraph 4

Line A—delete "80–90" and insert "about 60"

Lines 8 & 9—delete the phrase "however, the benefits to the population, and to society in general, would significantly increase with a more effective vaccine."

Paragraph 5

Line 2—Change 20 to 15

Line 5—After "antiviral drugs." Add the sentence: "Respiratory syncytial virus vaccines are being evaluated for use by the elderly population."

Corrected paragraph should read:

Recent studies have suggested that noninfluenza viruses such as respiratory syncytial virus and the parainfluenza viruses may be responsible for as much as 15 percent of serious lower respiratory tract infections in the elderly. These infections can cause outbreaks that may be controlled by infection control measures and be treated with antiviral drugs. Respiratory syncytial virus vaccines are being evaluated for use by the elderly population. Consequently, it is important to define the role of these viruses and risk factors for these infections among the elderly population. CDC is completing a collaborative investigation of RSV, the parainfluenza viruses, and adenovirus infections associated with lower respiratory tract infections among hospitalized adults to determine the proportion caused by these viruses and associated risk factors.

Paragraph 8

Line 3—After "with diarrhea in the United States." Add the sentence: "In the elderly, caliciviruses (also called Norwalk-like viruses or Small Round Structured Viruses) are likely to be the most common cause of both epidemics and sporadic hospitalizations for acute gastroenteritis but the diagnostic tests needed for confirmation are now in rapid development. This could lead to new strategies for detection of etiologic agents and prevention of disease through the interruption of patterns of transmission."

Then continue with the rest of the paragraph "The recent identification * * *

Add a new paragraph to the section:

> The role of infections in chronic diseases (e.g., chlamydia pneumoniae and cardiovascular disease; H. pylori and gastric cancer; hepatitis B and C and liver cancer) is becoming increasingly evident. CDC is developing research activities to better define relations between infectious agents and chronic disease sequelae; infections may play a role in many chronic diseases which severely impair quality of life and length of life among the elderly.

(5) National Center for Injury Prevention Control

The following intramural projects should be included in the report for 1995–1996:

Medical Conditions and Driving.—It is hypothesized that certain medical conditions increase the risk of motor vehicle crashes and may also affect the decision to stop driving. With data from a longitudinal data base we will be vetter able to understand the interrelationships between medical conditions, crashes, and why senior citizens stop driving. Some of the questions to be asked are: (1) What is the vehicle crash experience over the last five years of older drivers, and (2) which drivers are at high risk of crashes?

Longitudinal Study of Older Drivers: Medical Conditions and Risk.—A longitudinal data base that will allow for additional older driver information to be analyzed is being used to ask several research questions: (1) Are driving patterns related to alcohol/medication use, smoking, or other socio-psychological and lifestyle factors, and (2) are driving patterns (e.g. miles/week) associated with medical conditions or health status?

Older Drivers: Why Do They Stop Driving?—A module was added to one state's Behavioral Risk Factor Surveillance System to assess driving decisions made by older drivers in that state. Data were collected throughout 1995 and include the additional demographic information collected routinely in this survey. Descriptive information will enable a closer look at why older drivers stop driving.

Older Drivers Risk to Other Road Users.—A study was conducted using a linked data base (hospital discharge data and police accident reports for one state) to determine the degree to which older drivers impose an excess risk of death or injury serious enough to require hospitalization on other road users.

(6) National Immunization Program

On page 187, please delete the second paragraph and replace with: "CDC continues to include adult immunization issues in its annual National Immunization Conferences. Posters and oral presentations are consistently used to address numerous adult immunization issues."

Please delete the fourth paragraph and replace with: "In September, the Department of Health and Human (HHS) approved a department-wide action plan to enhance activities to protect adults against vaccine-preventable diseases and maximize accruable health care cost savings. The strategy for addressing adult immunization includes developing nationwide prevention strategies that focus on providers to reduce missed opportunities. Though no additional resources have been identified to support this effort, a CDC Working Group is assessing ways in which current activities on adult immunization can be used to monitor progress on increasing coverage in adult populations."

The fifth paragraph, second line should read "* * * a network of more than 95 private, professional, volunteer organizations * * *"

The fifth paragraph, last sentence should read: "The objectives of the NCAI are accomplished by three working Action Groups—Influenza/Pnuemococcal, Measles-Mumps-Rubella-Varicella, and Hepatitis B—that conduct * * *"

The sixth paragraph, first sentence should read: "* * * at risk of complication is 58 percent."

The sixth paragraph, second sentence should read: "* * * have steadily improved from 23 percent in 1985 to 58 percent in 1995."

Please delete the third sentence from paragraph 6 regarding preliminary data from the National Health Interview survey as more current data is reflected in the sentence change above.

Last paragraph, please add this as a second sentence: "Data through 1996 are being collected and analyzed for this study."

FOOD AND DRUG ADMINISTRATION

As the percentage of elderly in the Nation's population continues to increase, the Food and Drug Administration [FDA] has been giving increasing attention to the elderly in the programs developed and implemented by the Agency. FDA has been focusing on several areas for the elderly that fall under its responsibility in the regulation of foods, drugs, biologics and medical devices. Efforts in education, labeling, drug testing, drug utilization, and adverse reactions are of primary interest. Working relationships exist with the National Institute on Aging, the Centers for Disease Control, and the Administration on Aging of the Department of Health and Human Services to further strengthen programs that will assist the elderly now and in the future. Some of the major initiatives that are underway are described below.

PROJECT ON CALORIC RESTRICTION

The National Center for Toxicological Research (NCTR) in partnership with the National Institute on Aging has been working for several years on the role caloric restriction (CR) plays in the aging process and what effect a reduced caloric diet has on disease etiol-

ogy. Scientists working on the Project on Caloric Restriction have concentrated on determining the mechanisms by which caloric restriction inhibits spontaneous disease, modulates agent toxicity and effects the normal aging process. Studies over the last year have focused on the premise that by using a single paradigm (caloric manipulation) and through interdisciplinary studies a comprehensive integrated approach can be developed to understand the effect diet has on the initiation and development of disease. The hypotheses that support this paradigm are mechanistically based and include the following: CR acts through its effects on body growth, on glucocorticoids and inflammation, on DNA damage, repair and/or gene expression, on toxicokinetics and/or its modification of oxidation and fat metabolism. All of these hypotheses have been explored through interdisciplinary studies being conducted at NCTR or at other institutions in collaboration with scientists at NCTR.

Body Growth

Rodent studies at NCTR have found that body weight can be used to predict tumorigenicity. For most organs, size is directly proportional to the body weight of the animal and it has been shown that organ weight can be used to predict tumorigenicity. CR inhibits the induction of tumor expression and growth and changes the state of differentiation in replicating cells. It has also been that CR can specifically alter drug metabolism and reduce drug toxicity. This could be very useful in treating and diagnosing disease. In addition, the relevance of CR to the human population has been strengthened by the fact the biomarkers observed in rodents are associated with the risk of chronic disease in humans. Plans are in place to extend the CR observation in rodents to clinical studies in humans.

Oxidation and Fat Metabolism

A common hypothesis for tumor induction suggests that DNA, the blue print of the cell, is damaged by oxidative chemical species in the cell released by the metabolism of fat. CR has been shown to reduce the impact of oxidative damage at the organ level by increasing the oxygen scavengers in the liver and in muscle. Similarly, it has been shown that CR reduces high fat induced oxidative damage in cellular DNA/

Glucocorticoids and Inflammation

Glucocorticoids are used to diminish normal but undesirable body responses to noxious stimuli and trauma, advantages are gained by their use in counteracting stressful situations and in decreasing pain and discomfort. Another group of normal protective agents are stress proteins, which are produced in the body whenever the body undergoes a stress induced response. CR has been shown to elevate glucocorticoid levels shortly after inception, and has also been shown to alter stress proteins levels in the brain.

DNA Damage, Repair and/or Gene Expression

As mentioned above DNA is the blueprint of the cell, therefore any damage done to DNA has the potential of resulting in a disease response. CR has been shown to inhibit genes that are associated with tumor induction and enhances various forms of DNA repair. One hypothesis for tumor induction suggests that chemicals exert their damage to DNA by binding to the components of DNA forming adducts. Animals exposed to a CR regime and carcinogenic insult show an altered induction of various forms of DNA adducts.

Toxicokinetics

Toxicokinetics refers to the compartmentalization of a toxicant within the body. Organs are complicated structures that are made up of different kinds of cells, transport structures and biological functioning units. CR has been shown to alter water transport, fat deposition and waste transport, thus complicating cellular compartmentalization, and toxic exposure of certain cells to damaging substances.

Although the work over the last year has concentrated on the mechanisms of toxic interaction in the body and the role CR has on this process, studies with calorically restricted animals have repeatedly shown that CR extends the lifetime of animals. How this effects aging is still in question; however, the research being conducted in this area is continuing to chip away at the problem of how diet effects the aging process, and what elements or lack thereof in the human diet may help to extend human life.

Rare Diseases Affecting Primarily Older Americans

It is the intent of the Orphan Drug Act, and the Office of Orphan Products Development [OPD], to stimulate the development and approval of products to treat rare diseases. The OPD plays an active role in helping sponsors meet agency requirements for product approval. Between 1983—when the Orphan Drug Act was passed—through the end of 1996, 145 products to treat small populations of patients were approved by FDA.

By the end of 1996, there were 645 designated orphan products. One hundred and two [16 percent] of these designated orphan products represent therapies for diseases predominately affecting older Americans. Sixty-seven are for treating rare cancers in the elderly—for instance ovarian cancer, pancreatic cancer, and metastatic melanoma. Twenty of the orphan products designated for treating elderly populations are for rare neurological diseases, such a amyotrophic lateral sclerosis [ALS], and advanced Parkinson's disease. Twenty-one orphan-designated therapies for elderly populations have received FDA market approval: Most noteworthy among these is Eldepryl for treatment of idiopathic Parkinson's disease, postencephalitic Parkinsonism, and symptomatic Parkinsonism; riluzole for treatment of ALS; and Novantrone for treatment of refractory prostate cancer.

FDA's orphan products grants had their beginning in 1983 as one of the incentives of the Orphan Drug Act. This incentive of the Act provides financial support for clinical studies [clinical trials] to determine the safety and efficacy of products to treat rare disorders,

and to achieve marketing approval from the FDA under the Federal Food, Drug, and Cosmetic Act. Studies funded by the orphan products grants program have contributed to the marketing approval of twenty-one of these products.

Because the orphan products program is issue-specific/indication-specific, it is typical for an approved product to be funded under the orphan products grant program for study in an indication unique to a distinct group of people: for example, women, children, or a population of elderly. Under the orphan drug program, disease populations are small; in many instances, the firms themselves are very small. The goal of orphan product development is to bring to market products for rare diseases or conditions. In so doing, it is evident that the goals of the Orphan Drug Act promote research and labeling of drugs for use by and for special populations.

The orphan products grant program has funded 39 studies specifically aimed at treatment of diseases affecting adults and older adults. The IV Formulations of Busulfan is being studied for use in geriatric patients and undergoing bone marrow transplantation.

ALZHEIMER'S DISEASE RESEARCH

Alzheimer's disease currently affects approximately four million people age 65 and older, with the number produced to increase to fourteen million by the year 2050. Development of new drugs to diagnose, treat, and prevent this disease represents a goal of profound importance. Alzheimer's drug research efforts depend in part upon the availability of patients who can participate in clinical studies of these new drugs.

During 1996, FDA's Office of Special Health Issues [OSH] conducted a search and assessment of information in the public domain regarding Alzheimer's drug development, and particularly opportunities to participate in Alzheimer's drug research. It was learned that little information is publicly available regarding Alzeimer's research and opportunities to participate in Alzheimer's drug development.

To address this problem, OSHI has undertaken an initiative with the National Institute on Aging [NIA] to develop a database containing information regarding opportunities to participate in clinical trials of Alzheimer's drugs. This database, which received some initial funds from the FDA, will be maintained at the NIA's Alzheimer's Disease Education and Referral [ADEAR] Center, and will be accessible by toll-free telephone and the NIA home page on the world wide web. OSHI and NIA developed the database and announced the initiative to pharmaceutical manufacturers involved in domestic development of Alzheimer's drugs. Some manufacturers have submitted information for entry into the database, which will be operational in Spring 1998.

FDA APPROVES FIRST TREATMENT FOR STROKE

On June 18, 1996, the FDA approved the first therapy shown to improve neurological recovery and decrease disability in adults following acute ischemic stroke, the most common type of stroke, caused by blood clots that block blood flow. Treatment must start within 3 hours of the start of the stroke and only after bleeding in

the brain has been ruled out by a cranial computerized tomography [CT] scan.

The drug, alteplase, a genetically engineered version of tissue plasminogen activator [t-PA], is already approved as a blood clot dissolver to treat heart attacks and to dissolve blood clots in the artery going to the lungs.

Because of the known risks of bleeding with alteplase and other thrombolytic therapies, selecting stroke patients who are most likely to benefit from treatment is critical. It is also critical that patients be treated within 3 hours of the onset of a stroke with the correct dose.

Each year, about 500,000 people in the United States have strokes, with approximately 150,000 dying as a result. Of these strokes, 400,000 are ischemic, or caused by a blood clot reducing or blocking blood flow to the brain. The rest are hemorrhagic strokes, caused by bleeding into and around the brain.

POSTMARKET DRUG SURVEILLANCE AND EPIDEMIOLOGY

The Office of Epidemiology and Biostatistics, FDA Center for Drug Evaluation Research [CDER], prepares an annual report—entitled "Annual Adverse Drug Experience [ADE] Report"—which provides summary statistics describing some of the activities of the postmarketing drug risk assessment program. Each year this report contains a number of tabulations which show the number of reports received and evaluated by such factors as age group, sex, source of report, drug or type of outcome. In 1995, there were 130,950 evaluable reports that were evaluated and added to the database. In this same year, 30, 190 or 23 percent of the reports of adverse drug experiences were for individuals age 60 or older. There were 41,427 reports [31.6 percent] that did not specify age. In 1996, the Agency added 159,504 reports to the evaluation database, 41,841 [26.2 percent] for persons 60 years of age or older who experienced an adverse drug reaction with 43,352 [27.2 percent] for whom no age was specified.

INTRAOCULAR LENSES

Over 1 million intraocular lenses are implanted each year in the U.S. predominately in the senior population. These implants have revolutionized the treatment of cataracts, which a few decades ago were the leading cause of blindness in the adult population. A number of flexible lens models have been aprpoved by FDA in the last few years and are now on the market. These lenses permit smaller incisions which heal more rapidly with less scarring and subsequent distortion of the optics of the eye.

However, flexible lenses have led to a number of unexpected post-approval consequences. Discoloration, haziness, and glistening have all been reported. In 1996, primarily because of FDA laboratory testing and discovery of such problems, one company voluntarily recalled all distributed units of its recently approved flexible IOL model. FDA verified that the recall was effective and that monitoring was in place to access patients implanted before the recall. FDA tasked all involved firms with identifying the sources of these problems and revising their quality control to prevent future

occurrences. FDA's devise laboratory developed methods and tested lenses to assess the effect of these problems on vision.

Data on intraocular lenses (IOLs) have demonstrated that a high proportion (85–95 percent) of the patients who have undergone cataract surgery and IOL implantation will be able to achieve 20/40 or better corrected vision with a low risk of significant postoperative compliactions. Because of the proven safety and effectiveness of IOLs, they have become the treatment of choice for the correction of visual loss caused by cataracts. This has allowed elderly patients to maintain their sight and a normal lifestyle. FDA continues to monitor some investigational IOLs and to date has approved thousands of models that have demonstrated safety and effectiveness.

The first IOLs were all "monofocal," which were designed to provide good vision at one distance, usually far. Patients who receive monofocal IOLs usually need spectacles to obtain satisfactory near vision. Typically, these patients will need bifocal spectacles to obtain optimal distance and near vision. On September 5, 1997, FDA approved the first "multifocal" IOL. The multifocal IOL is designed to provide clear distance and near vision. The advantage of the multifocal IOL is that there is a greater chance that the patient may have satisfactory distance and near vision without spectacles, or will only need "monofocal" (not bifocal) spectacles to improve both distance and near vision. The disadvantages of multifocal IOLs are: (1) distance vision may not be quite as "sharp" as with a monofocal IOL; (2) there is a higher chance of difficulty with glare and holos than with a monofocal IOL; and (3) under poor visibility conditions, vision may be worse than with a monofocal IOL.

Throughout the time period of this update, FDA has worked closely with industry, ophthalmologists, and researchers to assure that the regulatory requirements for new intraocular lens models are scientifically valid, but not overly burdensome. This activity has occurred via work with both the ANSI and ISO standards organizations. FDA also participates in the Eye Care Forum, an annual meeting sponsored by the National Eye Institute to address issues of mutual interest to the clinical, research, and regulatory communities.

PROSTHETIC HEART VALVES

Approximately 80,000 people in the U.S. have artificial heart valves implanted every year, both mechanical and bioprosthetic (pig, bovine valves). The characteristics of the blood flow through these valves can affect the risk of thrombo-embolism and ultimate valve failure. Turbulence, stagnation and caviation (bubble formation and collapse) may all cause adverse effects. For the past few years, and currently, the FDA has had programs in place, both research and regulatory, to evaluate the flow characteristics of these devices and their impact on the valves and blood components.

These programs include the development of: (1) improved techniques to directly measure the flow patterns associated with valves using fluorescent particle visualization and Dopplier ultrasound; (2) mathematical models to assess flow patterns as a function of valve design and aortic geometry; (3) guidance for manufacturers to standardize and improve their testing; (4) techniques to acous-

tically detect flow induced caviation; (5) methods to directly assess effects on red blood cells. Also evaluation of specific valve designs, both currently implanted and protype is ongoing. Finally, analysis of a much used diagnostic tool, color Doppler, is being undertaken to improve diagnosis or diseased or faulty valves.

PACEMAKERS

On October 28, 1994, the EP Technologies, Inc.'s Cardiac Ablation System, the first radio frequency powered catheter ablation system was approved. It is indicated for interruption of accessory atrioventricular (AV) conduction pathways associated with tachycardia, treatment of AV nodal re-entrant tachycardia, and for creation to complete AV block in patients with a rapid ventricular response to an aerial arrhythmia.

On December 20, 1995, the Thoratec Ventricular Assist Device System was approved. It is indicated for use as a bridge to cardiac transplantation to provide temporary circulatory support for cardiac failure in potent transplant recipients at imminent risk of dying before donor heart procurement. The System may be used to support patients who have left ventricular (LVAD), right ventricular (RVAD), or biventricular failure (BVAD). The Thoratec VAD differs from the other two previously approved VADs in that it can be used for right heart and/or biventricular failure.

On May 15, 1996, a new indication for use was approved for CPI Guidant's family of Implantable Cardioverter Defibrillators (ICDs). The PMA supplement was received in six days and contained clinical data in electronic format from the Multicenter Defibrillator Implant Trial (MADIT). The new patient population consists of patients who have a Left Ventricular Ejection Fraction of less than 35%, and a documented episode of non-sustained ventricular tachycardia with inducible, non-suppressible, ventricular tachycardia. Previously, only patients who had sustained ventricular tachycardia were candidates for implantation. The MADIT data provided evidence that an ICD used in high risk, asymptomatic patients produces significantly better results than drugs in reducing deaths.

RENAL DIALYSIS

There were a projected 244,000 patients with kidney failure in the United States in 1996. More than 100 individuals are diagnosed with end sage renal disease (ESRD) each day. ESRD patients will need to remain on either hemodialysis or peritoneal dialysis for the rest of their lives unless they are able to receive a successful kidney transplant. Therapy can be delivered at dialysis facilities or in the home, depending on various factors.

Today, more than 50 percent of the ESRD population is over 60 years of age. Through age 50, the average remaining life span is grater than 5 years for ESRD patients. Although the remaining lifetimes are shorter for the elderly ESRD population, the general population also faces higher mortality with aging. The projected expected remaining lifetime for dialyzed patients with ESRD is approximately one-fourth to one-sixth that for the general population through age 50, while the ratio is often closer to one-third for older patients. These figures are based on actuarial calculations and as-

sumed death rates, and are taken from the U.S. Renal Data System 1997 Annual Data Report.

Because of the nature of the underlying disease and necessary supportive therapy, ESRD patients are at risk for a number of potential complications during or as a result of their therapy. Many of the potential complications can occur from a failure to correctly maintain or use dialysis equipment, insufficient attention to safety features of the individual dialysis system components, or insufficient staffing or personnel training. FDA's Center for Devices and Radiological Health (CDRH), in conjunction with major hemodialysis organizations, such as the Health Industries Manufacturers Association (HIMA), the Renal Physicians Association (RPA), and the American Nephrology Nurses Association (ANNA), developed several educational videotapes which address human factors, water treatment, infection control, reuse, and delivering the prescription, as well as manuals on water treatment and quality assurance. Complimentary videos illustrating health and safety concerns and the use of proper techniques have been distributed to very ESRD facility in the United States. These videos have received a favorable acceptance from the nephrology community.

On October 6, 1995, CDRH completed the final draft of the Guidance Document on Hemodialyzer Reuse labeling for safe and effective reprocessing for reuse manufacturers. A letter was issued to Manufacturers and Initial Distributors of Hemodialyzers on May 23, 1996 to inform them of the requirement to obtain 510(k) clearance for ReUse labeling for all hemodialyzers which were being marketed for clinics reusing their dialyzers. They were given until February 25, 1997, to comply with the request. A video on the methods for correct reprocessing and reuse of hemodialyzers developed by the FDA, RPA, and other concerned groups is available. The video attempts to follow the standard protocols that have been detailed in the Association for the Advancement of Medical Instrumentation (AAMI) Recommended Practice for the Reuse of Hemodialyzers. These practices also have been adopted by HCFA as a condition of coverage to ESRD providers that practice reuse.

A multistate study conducted for the FDA in 1987 indicated that dialysis facilities appeared to have inconsistent quality assurance (QA) techniques for many areas of dialysis treatment. To address this problem, FDA funded a contract to develop guidelines that could be used by all dialysis facility personnel to establish effective QA programs. The guidelines printed in February 1991 were mailed to every dialysis facility in the United States free of charge.

During 1995–1996, FDA prepared a Draft Guidance Document for the Content of Premarket Notifications for Water Purification Components and Systems for Hemodialysis. This document was circulated for comment by regulated industry and other government agencies and was presented at both AAMI and Water Quality Association Meetings. The purpose for preparing this document was to remind the water treatment community of the Federal requirement for submission of premarket notifications for these types of device systems (21 CFR 876.5665). The importance of the quality of the water used for preparation of hemodialysate solutions used during hemodialysis was strongly emphasized in these presentations and the Guidance Document.

In September 1996, seven patients in Alabama received hemodialysis when the blood alarms activated on six of the seven patients. Subsequently, the patients began to exhibit serious central nervous (CNS) symptoms. FDA field staff, CDRH and CDC investigated the various aspects of the incident. The epidemiological analysis suggests a causal relationship between the age of the dialyzer filters used (ten plus years), and the injuries reported to the patients. As a result, CDRH and CDC issued a joint Public Health Advisory in December 1996, with the simple message to "rotate your dialysis stock using first-in-first-out practices," to avoid this type of problem in the future. FDA laboratories began a research program to investigate the effects of aging on dialyzer filters, with the objective of establishing safe expiration dating labeling.

FDA has continued to work cooperatively with the nephrology community and the ESRD patient groups to improve the quality of dialysis delivery. These efforts appear to be yielding positives results. CDRH has also been cooperating with CDC and HCFA in the exchange of information to try to increase the safety of dialysis delivery.

FLUOROSCOPICALLY-GUIDED INTERVENTIONAL PROCEDURES

An increasing number of therapeutic procedures are being employed for a variety of conditions, such as coronary artery disease or irregular heart rhythms, which require x-ray fluoroscopy to provide visualization and guidance during the procedures. Due to the time required to complete these procedures, the potential for large radiation exposures leading to acute skin injury exists. During the early 1990s, the FDA received reports of such injuries, investigated the circumstances and issued an FDA Public Health Advisory to alert physicians and health care facilities to this concern. This advisory was sent to hospitals and specialist physicians who perform such procedures. During 1995 and 1996, the FDA continued activities to increase the awareness of physicians to this problem, including publishing supporting information for physicians, an article in the radiology literature and numerous presentations at medical professional meetings. These activities brought the attention of physicians to this issue and resulted in activities in many healthcare facilities to assure proper attention is given to this concern. As may of these interventional procedures are performed on older patients, this activity contributed to improved care for older Americans.

MAMMOGRAPHY

Since 1975, CDRH [formerly the Bureau of Radiological Health (BRH) has conducted a great many mammography activities. These have been done with several goals in mind:

To reduce unnecessary radiation exposure of patients during mammography to reduce the risk that the examination itself might induce breast cancer; and

To improve the image quality of mammography so that early tiny carcinoma lesions can be detected at the state when breast cancer is most treatable with less disfiguring and more successful treatments.

THE NATIONAL STRATEGIC PLAN FOR THE EARLY DETECTION AND CONTROL OF BREAST AND CERVICAL CANCER

FDA, the National Cancer Institute, and the Centers for Disease Control have coordinated a combined effort to cover 75 professional, citizen, and government groups to develop the National Strategic Plan for the Early Detection and Control of Breast and Cervical Cancer. The goal of this plan, approved by the Secretary of Health and Human Services on October 16, 1992, is to mount a unified effort by all interested groups to combat these two serious cancer threats. FDA staff took the lead in writing the Breast Cancer Quality Assurance section, one of six components of the plan, and participated in the development of the other components.

MAMMOGRAPHY QUALITY STANDARDS ACT OF 1992

On October 27, 1992, the president signed into law the mammography Quality Standards ACT [MQSA} of 1992. This Act requires the Secretary of Health and Human Services to develop and enforce quality standards for all mammography of the breast, regardless of its purpose or source of reimbursement.

Since October 1, 1994, any facility wishing to produce, develop, or interpret mammograms has had to meet these standards to remain in operation. The Secretary delegated the responsibility for implementing the requirements to FDA on June 1, 1993, and Congress first appropriated funds for these activities on June 6, 1993. Implementation of MQSA is a key component of Secretary Shalala's National Strategic Action Plan Against Breast Cancer.

FDA's accomplishments since the Agency was delegated authority to implement MQSA in June 1993 include—staffing of a new division; development of final standards; approval of four accreditation bodies; certification of 10,000 facilities by the statutory deadline of October 1, 1994, implementation of a rigorous training program for inspectors; development of a compliance and enforcement strategy [coordinated with the Health Care Financing Administration (HCFA); outreach to facility and consumer communities; and planning for program evaluation.

MQSA inspections have supplanted the Health Care Financing Administration's Medicare Screening Mammography Inspections. Under MQSA, HCFA has agreed to recognize FDA-certification of a mammography facility as meeting quality standards for reimbursement purposes.

BLOOD GLUCOSE MONITORING

A proposed ISO standard [draft ISO TC 212/WG3] was proposed for evaluating the performance of self-monitoring blood glucose monitors by comparing monitor results to those obtained by clinical laboratory methods. Because the draft standard did not address how to select a clinical laboratory method, an attempt was made, based upon telephone surveys and discussions with CAP, the three most commonly used clinical methods for analysis of blood glucose. A strategy was developed to evaluate the accuracy of these methods by comparison to the recently released Standard Reference Material from the National Institute of Standards and Technology that has three certified levels of glucose in human sera. Criteria

were developed for selection of high performance clinical laboratories in order to minimize effects due to analysts.

PATIENT RESTRAINTS

Patient restraints are intended to limit the patient's movement to the extent necessary for treatment, examination, or for the protection of the patient or others.

One of the most common uses of these devices has been to protect the elderly from falls and other injuries. Seventy-nine documented deaths have been reported to FDA's Medical Device Reporting System (MDR) related to patient restraint use. Scientific literature suggests that annual deaths related to the use of restraints may be as high as 200. These alarming numbers of deaths, with the use of protective restraints raised serious concerns regarding the safe use of these devices and prompted the FDA to alert the healthcare community about these problems.

The agency worked closely with industry in arriving at solutions to help reduce the risk of injury and death associated with the use of these devices. As a result, in November 1991, FDA moved to make protective restraints prescription devices to be used under the direction of licensed health care practitioners. In addition, manufacturers were required to label patient restraints as "prescription only" to help ensure appropriate medical intervention with the use of these devices. In July 1992, FDA issued a Safety Alert to healthcare providers to heighten their awareness of the potential hazards associated with the use of these devices. FDA identified labeling as its primary focus for intervention in resolving this issue, and provided additional labeling recommendations as guidance to manufacturers to ensure safer designs. Education and training of personnel in the application of these devices has also been emphasized.

Today, healthcare providers are electing the restraint-free alternative. As a result, current literature reports that restraint use is dropping.

HEARING AIDS

Several events occurred in 1995–1996 which related to FDA's development of a guidance document that indicated criteria for clinical hearing aid study protocols. Manufacturers met with FDA staff to review proposed clinical studies, consultants met with FDA to discuss interpretations of the guidance document and how they might best interface with the regulated industry, and FDA had meetings with the Hearing Industries Association (HIA), representing many of the major manufacturers of hearing aids, wherein the use of the guidance document was discussed.

In addition, members of FDA's Hearing Aid Working Group completed its draft of the proposal to amend the 1977 hearing aid regulation. This new regulation, if adopted, would cover 21 CFR 801.420 and 801.421, Hearing Aids, Professional and Patient Labeling and Conditions for Sale.

ORTHOPAEDIC IMPLANT POROUS COATINGS

Porous coatings are widely used in both the orthopedic and dental implant industries to fix prosthetic devices through the process of bony in-growth without the aid of cements. However, the coating qualities such as strength, solubility, and abrasion resistance vary considerably depending on manufacturing methods and have significant impact on durability of the implants. Concern over the long-term revision rates for plasma sprayed porous coatings prompted the FDA to require post-market surveillance studies for these types of coatings. FDA also began a program to evaluate tests to assess the durability of such coatings in order to help in the development of longer-lived implants.

HAZARDS WITH HOSPITAL BEDS

On August 21, 1995, FDA issued a Safety Alert, Entrapment Hazards with Hospital Bed Side Rails. The Alert noted that the majority of deaths and injuries reported to FDA involving bed rails were to elderly patients, and recommended a number of actions to prevent deaths and serious injuries. This Alert was sent to nursing homes, hospitals, hospices, home healthcare agencies, nursing associations, and biomedical and clinical engineers throughout the United States.

RETINAL PHOTIC INJURIES

On October 16, 1995, FDA issued a Public Health Advisory, Retinal Photic Injuries from Operating Microscopes During Cataract Surgery. Cataract surgery is most frequently performed on elderly patients. The Advisory discussed the types of injuries to patients reported to FDA, and recommended actions to reduce the risk of retinal photic injury. The Advisory was sent to ophthalmologists and cataract centers throughout the United States.

ELECTRIC HEATING PADS

On December 12, 1995, FDA working with the CPSC, issued a Public Health Advisory, Hazards Associated with Use of Electric Heating Pads. At the time of the Advisory, 45% of those reporting injuries from using heating pads, were over the age of 65. The Advisory pointed out that patients who may be unable to feel pain to the skin because of advanced age, diabetes, spinal cord injury, or medication, are at high risk for injury. This Advisory was sent to hospitals, nursing homes, hospices, home healthcare agencies, and biomedical and clinical engineers throughout the United States.

FDA PROBLEM REPORTING SYSTEM FOR MEDICAL DEVICES

The Office for Surveillance and Biometrics receives reports involving medical devices through reporting from consumers, medical professionals, manufacturers, distributors, and user facilities. On the 191,537 reports received during the calendar years 1995 and 1996 from all sources, 22,749 (12 percent) reported the age of the patient. Of these, 10,855 (48 percent) were for individuals 60 years of age or older. Prior to August 1, 1996, manufacturers of medical devices were not required to provide age information. In many in-

stances when manufacturers were required to provide age information, the information was unknown and therefore not reported.

MARKERS OF BONE METABOLISM

Osteoporosis is a major health concern. It is estimated that 1.5 million fractures are attributable to osteoporosis in the United States each year. One third of women older than 65 years suffer vertebral crush fractures, and the lifetime risk of hip fracture is 15%. The mortality rate accompanying hip fracture may be as high as 20%. Twenty-five percent of the survivors are confined to long-term care in nursing homes. The estimated cost of medical care for osteoporosis each year is more than $10 billion.

If a woman has postmenopause-associated osteoporosis, an assessment of bone turnover may be helpful. Because of an increasing interest in bone disease and a greater understanding of bone metabolism, a number of urinary markers of bone turnover were cleared by the FDA in 1995 and 1996. The rate of bone loss is related to an overall increase of bone turnover which can be assessed using these biochemical indicators.

YEAR 2000 HEALTH OBJECTIVES

A consortium of over 300 government and private agencies developed a set of health objectives for the Nation which is serving as a national framework for health agendas in the decade leading up to the year 2000. The overall program is called "Healthy People 2000." FDA co-chairs the working group responsible for monitoring progress on the set of 21 objectives that focus on nutrition, dietary improvements and availability of nutrition services and education. In the food and drug safety area, objective 12.6 sets as a target to:

> Increase to at least 75 percent the percentage of health care providers who routinely review all prescribed and over-the-counter medicines taken by their patients 65 years and older each time medication is prescribed or dispensed.

Objective 12.8 sets as a target to:

> Increase to at least 75 percent the proportion of people who receive useful information verbally and in writing for new prescriptions from prescribers or dispensers.

FDA's Marketing Practices and Communications Branch conducted a number of studies that track patients' receipt of medication information from doctors and pharmacists from 1982 to 1996. The most recent survey shows that 67% of Americans 65 and over received at least some oral information about prescriptions from physicians and 43% from pharmacists, while 13% received written information about their prescription medications from physicians and 62% received such information from pharmacists. Only 2% reported asking questions at the doctor's office, and 3% at the pharmacy. The survey is being conducted again in 1998 to track progress toward meeting this objective. An article outlining results of the surveys from 1982–1994 will be published in Medical Care in October 1997.

During the coming year, FDA will work with private sector organizations to advance medication counseling activities.

FOOD LABELING

Food labeling is very important to the elderly. Elderly people have a greater need for more information about their food to facilitate preparation of special diets, maintain adequate balance of nutrients in the face of reduced caloric intake, and ensure adequate levels of specific nutrients which are known to be less well absorbed as a result of the aging process [e.g., vitamin B12].

The new food label, which is now required on most foods offers more complete, useful, and accurate nutrition information to help the elderly meet their nutritional needs. Significant labeling changes include: nutrition labeling for almost all foods; information on the amount per serving of saturated fat, cholesterol, dietary fiber, and other nutrients of major concern to today's consumers; nutrient reference values to help consumers see how a food fits into an overall daily diet; uniform definitions for terms that describe a food's nutrition content [e.g., light, low fat, and high-fiber], claims about the relationship between specific nutrients and disease, such as sodium and hypertension; standardized serving sizes; and voluntary quantitative nutrition information for raw fruit, vegetables, and fish.

Manufacturers were required to comply with most of the new labeling requirements as of May 1994—although a 3-month extension was granted to firms who were unable to meet the May deadline. Regulations pertaining to health claims became effective a year earlier in May 1993. A recent survey indicates that a vast majority of food in the stores now carries the new food label and that more than 87 percent of the nutritional information accurately measures what is in the package. A second survey of retail stores was completed and showed that there continues to be substantial compliance with FDA's voluntary nutrition labeling program for raw fruits, vegetables, and fish. This is an important indication to consumers that they can trust what it says on the food label.

To help consumers get the most from the new food label, educational materials are being widely disseminated. Among materials now available is a large-print brochure, "Using the New Food Label to choose Healthier Foods," which is easier to read for senior citizens who may have vision problems.

A food label education program has been developed that coordinates the efforts of FDA and USDA with various public and private sector organizations to educate consumers about the availability of new information on the food label and the importance of using that information to maintain healthful dietary practices. Consumer Research was used to guide the development of educational materials and their messages. Print and video materials were developed for diverse target audiences, emphasizing skills and tips on how to use the food label quickly and easily to achieve a healthier diet. The agency has released two "Questions and Answers" documents, giving answers to about 400 frequently asked questions. Volume II, released in August 1995, primarily addresses questions pertinent to restaurants and other related establishments.

FDA's food labeling education program seeks to coordinate the Government's efforts with those of the public and private sector to insure consistent, action-oriented label education messages. A key goal is to promote integrating label education into new and existing nutrition education programs for diverse target audiences (for example, through national video teleconferences on nutrition interventions, children's games and nutrition-oriented programs on CD ROM's, and community-based programs for multi-cultural populations). Public information and education materials are available from FDA's Office of Consumer Affairs and have also been posted on CFSAN's home page of the World Wide Web (WWW).

DIETARY SUPPLEMENTS

The Dietary Supplement Health and Education Act of 1994 was signed by the President in 1994. This Act required FDA to withdraw its Advanced Notice of Proposed rulemaking requesting comment on approaches to assuring the safety of dietary supplements. The Act also defines supplements, defines new dietary ingredients as dietary ingredients that were not marketed in the U.S. before October 15, 1994, places the burden of proof for safety on FDA, and sets standards for the distribution on third party literature [e.g. books, publications, and articles].

The law also allows statements of nutritional support under certain conditions. Such statements may describe the role of a nutrient or ingredient intended to affect the structure or function in humans or describe general well-being from consumption of a nutrient or dietary supplements ingredient. The manufacturer must be able to substantiate that such a statement is truthful and not misleading, and the statement must contain the following disclaimer, "This statement has not been evaluated by the FDA. This product is not intended to diagnose, treat, cure, or prevent disease."

The law authorizes the FDA to issue regulations for Good Manufacturing Practices for dietary supplements, including expiration date labeling. It also establishes a 7-member Commission on Dietary Supplement Labels to conduct a study and issue a report making recommendations on the regulation of label claims for dietary supplements by October 25, 1996. The law further requires the Secretary of HHS to establish an "Office of Dietary Supplements" at the National Institutes of Health.

FDA published proposed regulations for the nutrition labeling of dietary supplements in December 1995. The regulations, when finalized, will require that dietary supplement labels contain information on the nutrient content and composition of dietary supplements that will enable the elderly to make informed choices on whether a particular dietary supplement is appropriate for their particular needs.

TOTAL DIET STUDIES

The Total Diet Study, as part of FDA's ongoing food surveillance system, provides a means of identifying potential public health problems related to the diets of the elderly and other age groups. Through the Total Diet Study, FDA is able to measure the levels of pesticide residues, toxic elements, chemicals, and nutritional ele-

ments in selected foods of the U.S. food supply. In addition, the study allows FDA to estimate the levels of these substances in the diets of 14 age groups: infants 6 to 11 months old; children 2, 6, and 10 years old; 14- to 16-year-old-boys; 14- to 16-year-old girls; 25- to 30-year-old men; 25- to 30-year-old women; 40- to 45-year-old men; 40- to 45-year-old women; 60- to 65-year-old men; 60- to 65-year-old women; men 70 years and older; and women 70 years and older. Because the Total Diet Study is conducted yearly, it also allows for the determination of trends and changes in the levels of substances in the food supply and in daily diets.

POSTMARKET SURVEILLANCE OF FOOD ADDITIVES

FDA's Center for Food Safety and Applied Nutrition (CFSAN) monitors complaints from consumers and health professionals regarding food and color additives and dietary practices as part of its Adverse Reaction Monitoring System. Currently, the database contains 11,939 records. Of the complainants who reported their age, approximately 18 percent were individuals over age 60.

CFSAN also monitors complaints regarding dietary supplements as part of the Adverse Reaction Monitoring System and has an additional 5057 reports. There is no information in the database on the age of the complainants for these products.

MEDICAL FOODS

The Orphan Drug Amendments of 1988 enacted a definition for a medical food. It defined the term "medical food" to mean "[a] food which is formulated to be consumed or administered enterally under the supervision of a physician and which is intended for the specific dietary management of a disease or condition for which distinctive nutritional requirements, based on recognized scientific principles, are established by medical evaluation." FDA published an advanced notice of proposed rulemaking (ANPR) in November 1996. The ANPR announced that FDA intended to initiate a reevaluation of its regulatory approach to these products. Its purpose was to ensure that the products marketed as medical foods bear claims that are truthful and not misleading, that such claims are supported by sound science, and that label information is adequate to inform consumers and health care providers how to use them in a safe manner. The initiative is important to the elderly because they may often rely on these products during periods of illness or to supplement their diets to meet specific nutrient needs not being met by their regular diets.

MEDICARE COVERAGE DETERMINATIONS

FDA provides representatives and scientific input to the Health Care Financing Administration's Technology Advisory Committee (TAC). The TAC is a committee of government employees, which advises HCFA on national coverage decisions for Medicare recipients. FDA also provides input and expert review for technology assessments produced by the Agency for Health Care Policy and Research (AHCPR). AHCPR technology assessments are used by HCFA and the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) as a basis for coverage decisions.

During the 1995–1996 reporting period, FDA and HCFA formulated an arrangement to afford beneficiaries Medicare coverage for investigational medical devices determined by FDA to constitute only a minor change from an already covered device. This arrangement allows manufacturers to validate the safety and efficacy of improved products without denying coverage during the period of study.

PHARMACY INITIATIVE

During 1995 and 1996, DHHS and FDA have sought to encourage greater pharmacy-based counseling. Through speeches, articles, and editorials in major medical and pharmacy journals, DHHS and FDA have encouraged the increased role of pharmacists, using computers to print information to informing patients about the uses, directions, risks and benefits of prescription medications. The pharmacy profession has responded positively, bringing many examples of their initiatives to FDA's attention. In particular, several organizations have informed FDA of the expanded use of new technology to provide patient instructional materials to their customers. In August of 1996 Congress took up this issue and developed performance goals for the private sector to meet. In December of 1996 the private sector had developed an Action Plan with criteria on how to determine the usefulness of information for consumers. The Plan would then be presented to the Secretary of HHS for concurrence. A survey by FDA, with data collected beginning December 1996, showed 67% of patients reporting that they received written information with their prescription drugs. FDA will conduct studies in the future to review the usefulness of that information and will continue to work closely with private sector organizations in an effort to increase the dissemination of useful information to patients about their prescription medications.

HEALTH FRAUD

Health fraud.—the promotion of false or unproven products or therapies for profit—is big business. These fraudulent practices can be serious and often expensive problems for the elderly. In addition to economic loss, health fraud can also pose direct and indirect health hazards to those who are misled by the promise of quick and easy cures and unrealistic physical transformations.

The elderly, more often than the general population, are the victims of fraudulent schemes. Almost half of the people over 65 years of age have at least one chronic condition such as arthritis, hypertension, or a heart condition. Because of these chronic health problems, senior citizens provide promoters with a large, vulnerable market.

To combat health fraud, the FDA uses a combination of enforcement and education. In each case, the Agency's decision on appropriate enforcement action is based on considerations such as the health hazard potential of the violative product, the extent of the product's distribution, the nature of any mislabeling that has occurred, and the jurisdiction of other agencies.

The FDA has developed a priority system of regulatory action based on two general categories of health fraud: direct health haz-

ards and indirect hazards. The Agency regards a direct health hazard to be extremely serious, and it receives the Agency's highest priority. FDA takes immediate action to remove such a product from the market. When the fraud does not pose a direct health hazard, the FDA may choose from a number of regulatory options to correct the violation, such as a warning letter, a seizure, or an injunction.

The Agency also uses education and information to alert the public to health fraud practices. Both education and enforcement are enhanced by coalition-building and cooperative efforts between government and private agencies at the national, State, and local levels. Also, evaluation efforts help ensure that our enforcement and education initiatives are correctly focused.

The health fraud problem is too big and complex for any one organization to effectively combat by itself. Therefore, FDA is working closely with many other groups to build national and local coalitions against health fraud. By sharing and coordinating resources, the overall impact of our efforts to minimize health fraud will be significantly greater.

FDA has worked with the National Association of Attorney's General [NAGS] and other organizations to provide consumers with information to help avoid health fraud. Since 1986, FDA has worked with the National Association of consumer Agency Administrators [NCAA] to establish the ongoing project called the NCAA Health Products and Promotions Information Exchange Network. Information from FDA, the Federal Trade Commission [FTC], the U.S. Postal Service [USPS], and State and local offices is provided to NCAA periodically for inclusion in the Information Exchange Network. This system provides information on health products and promotions, consumer education materials for use in print and broadcast programs, and the names of individuals in each contributing agency to contact for additional information.

In 1995 and 1996, FDA's Public Affairs Specialists [PASs] continued to alert diverse and culturally specific elderly populations throughout the United States by sponsoring community-based education programs, information exchanges, and outreach efforts. Dietary supplements remained a key issue. In addition to health fraud workshops and other community-based programs, the PASs also convey this important information through additional networks such as radio, television shows, and public service announcements. With respect to enforcement, in 1995 and 1995, the Agency took action against distributors of common gas grill ignitors that were promoted for the relief of pain due to arthritis and other conditions.

WOMEN'S HEALTH

INFORMATION ABOUT DRUG EFFECTS IN CERTAIN POPULATIONS

Over the past decade there has been growing concern that the drug development process does not provide sufficient information about drug effects in certain populations, including minorities and women of all ages. On September 8, 1995, the FDA, in an effort to collect this necessary information, proposed to amend its regulations regarding the format and content of investigational new drug applications (INDs) and new drug applications (NDAs). The pro-

posed rule would require IND sponsors of drugs and biological products to include in their annual reports a characterization of study subjects by subgroups, such as age, gender, and race. Sponsors would also be required to present safety and efficacy data by subgroup when submitting NDAs. This rule has since gone into effect and will assist in the determination of the optimal use of drugs in special populations which have a variety of factors that can lead to different responses to medical products.

WOMEN'S HEALTH RESEARCH AGENDA

During 1995 and 1996, FDA participated with the NIH Office of Women's Health in defining specific objectives of the research agenda for the 21st century. The effort culminated in plans for a workshop including experts from the federal government and universities to be held in 1997. Some specific age-related conditions were evaluated including cardiovascular and pulmonary diseases, oral health, bone and musculoskeletal disorders, kidney conditions, and cancer.

HISPANIC WOMEN'S HEALTH CONFERENCE

On May 9–10, 1996, the Office of Women's Health sponsored the Hispanic Women's Health Conference held in Miami, Florida. Over 150 people attended the conference which was designed as a grassroots effort to bring together community based organizations, academia, federal, state and local agencies and public/private health care providers concerned with Hispanic women's health issues, many of which affect aging American women. The two day meeting featured national and local speakers who addressed key Hispanic health concerns in the areas of diabetes, heart disease, cancer, mental health, substance abuse, osteoporosis, and HIV/AIDS. Its purposes were to create an ongoing network of health professionals in Southern Florida to address this community's health needs, and to consider priority issues on which ongoing public education should occur.

MINORITY WOMEN HEALTH EMPOWERMENT: WORKSHOPS

The office sponsored this series of Conferences in 1995, 1996 and 1997. The purpose of the workshops was to equip minority women, including the aging, in urban areas of the New Jersey and Delaware Valley with information on how to take care of themselves, how to prevent illness and disease, and what the benefits are of early detection and treatment. This project targeted women who were at high risk for HIV/AIDS, cardiovascular disease, breast and other cancers, and diabetes. The programs were conducted in community centers, Head Start Centers, local parish halls, school auditoriums, and hospital conference rooms. Audiotapes in English and Spanish were given to participants at the end of the workshop.

WOMEN'S HEALTH: TAKE TIME TO CARE

In 1996, the FDA Office of Women's Health (OWH) conceived of a new program partnering with American women. In order to enhance the health of women, the FDA wanted to provide mid-life and older women, particularly in under served populations, with

the information they need to promote and protect their own health. OWH met with 46 advocacy groups representing women, the elderly, and disease conditions, to discuss their health concerns. The theme, Women's Health: Take Time To Care, will be used for a variety of health prevention messages. Women, as represented by these organizations, told us that the first message should be presented Use Medicines Wisely. As major consumers of pharmaceuticals, women and their health are significantly affected by the use of medications. In 1997, Pilot programs using this message were conducted in Chicago, IL and Hartford, CT. FDA provided the printed materials and information and community organizations sponsored numerous public awareness events. This program will be rolled out nationally in 1998 and will be brought to 15 cities, rural empowerment zones, and Native-American reservations across the country.

"BEFORE TIME RUNS OUT"

Breast cancer is the number one cause of cancer related deaths among African American women. The FDA Office of Women's Health provided funds to educate African American women in the Houston area about the importance of screening and the impact of breast cancer on the African American community through the use of a locally-inspired play. This drama, which was written and produced by an African American playwright (Thomas Meloncon) entitled "Before Time Runs Out" was inspired by Mr. Meloncon's sister who died of breast cancer. The play was followed by a panel discussion and pertinent brochures were distributed. This series was presented in selected churches in under served communities in Houston in 1996 and 1997.

PUBLIC EDUCATION BROCHURES

Asian Pacific Islander women have low rates of utilization of breast and cervical cancer screening procedures due to language barriers and a subsequent lack of understanding of the importance of these tests. In 1995, the Office of Women's Health sponsored the translation of mammography and cervical cancer screening materials into several languages to address the needs of linguistically isolated Asian Pacific Islander women.

OUTREACH AND EXHIBITS

The Office of Consumer Affairs [OCA] sent information to older Americans through "Dear Consumer" letters, faxes, phone calls, and personal visits to notify, inform, and elicit feedback from consumers in the areas of Mammography Quality Standards, MedGuide, direct-to-consumer advertising for prescription drugs, plasma product withdrawals and recalls, food labeling, informed consent and issues pertaining to FDA advisory committees.

OCA participated in and exhibited at the Native American Aging Council. Over 300 publications were distributed on nutrition for the elderly as well as "The Age Page" publications from the National Institutes of Health.

COMMUNITY-BASED PROGRAMS

Public Affairs Specialists, located throughout the country in FDA field offices, conducted a variety of community-based programs in 1995–1996 to address the health concerns and information needs of older Americans. The topics addressed by field programs and outreach efforts are timely and diverse, including such topics as food labeling [how to get the most for your dollars and how to meet the requirements of special diets]; the safe use of medications; questions to ask your physician or health care provider; health fraud; clinical trials; blood safety; vaccines; hormone replacement therapy; and cancer screening.

One of the major ongoing initiatives undertaken by FDA Public Affairs Specialists focused on informing older Americans about the Nutrition Labeling and Education Act and how to use the new food label for a healthy or special diet. These Specialists developed information kits for older people and distributed these kits in communities throughout the country. These kits included wallet cards on the new food labeling law; large-print face sheets; place mats; and trainer guides. Senior volunteers were trained in a nutrition program sponsored by DHHS Region V Administration on Aging in Chicago, Illinois to disseminate information on food labeling to senior citizen, especially older people in minority communities.

Examples of other community-based programs and outreach initiatives carried out by FDA Public Affairs Specialists include:

Health fraud activities focusing on health fraud scams and products that target older people such as a statewide health fraud conference held in Kentucky; a health fraud symposium in New Jersey with a federal panel comprised of the FDA, Federal Trade Commission, and the Consumer Product Safety Commission, addressing "Knowing Your Rights is the Key to Consumer Protection"; and working with state officials in Hawaii to assemble a task force to teach older people about health fraud products and ploys; and

Workshops addressing proper medication storage, understanding OTC/Rx labeling, food and drug interactions, drug and drug interactions and medication usage; and

Participating with community organizations such as the local health department, Alzheimer's Association, Arthritis Foundation, local department on aging, and other partners to sponsor health fairs for older people; and

Carrying out daily activities with state and local agencies, local media, nonprofit organizations, professional associations, and public health institutions to meet the information and service needs of older people within communities across the country.

HEALTH CARE FINANCING ADMINISTRATION

LONG-TERM CARE

The mission of the Health Care Financing Administration (HCFA) is to promote the timely delivery of appropriate, quality health care to its beneficiaries—over 75 million aged, disabled, and poor Americans.

Medicaid and Medicare are the principal sources of funding long term care in the United States. The primary types of care reimbursed by these programs of HCFA are a variety of institutional (e.g., skilled nursing facilities (SNFs), intermediate care facilities for the mentally retarded (ICFs/MR), inpatient rehabilitation) and home and community based care services (e.g., home health, personal care).

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

DEMONSTRATION ACTIVITIES

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

Alternative methods of service delivery for post acute and long term care, focusing on service delivery systems that integrate acute and long term care;

Innovative quality assurance systems and methods; and

Alternative payment systems for post acute and long term care systems.

In 1996, HCFA continued work on several major initiatives to test innovative systems of integrated acute and long term care. ORD has devoted extensive effort to the testing of capitated payment systems for a combination of acute and long term care services, including conducting and evaluating the Program of All-inclusive Care for the Elderly (PACE) and the Social Health Maintenance Organization (Social HMO) demonstrations. The PACE demonstration has the purpose of replicating a unique model of managed care service delivery for very frail community dwelling elderly, most of whom are dually eligible for Medicare and Medicaid coverage and all of whom are assessed as being eligible for nursing home placement. Work continued on the evaluation of this demonstration, as well as the development of a quality assurance system that could be used by HCFA and State Medicaid agencies in monitoring providers, as well as by the providers for internal quality improvement activities. Work is also continuing to develop and implement a "second generation" model of the Social HMO, and the first of these sites began enrollment and service delivery in 1996. The first State-initiated integrated system of care for dually eligible beneficiaries was also implemented in Minnesota, the Minnesota Senior Health Options demonstration. The provision of integrated acute and long term care services to children and youth who are disabled and eligible for Supplemental Security Income is being test in the District of Columbia's Health Services for Children with Special Needs. Implementation of this prepaid, capitated project began in late 1995, and 3,000 children and youth with disabilities are targeted for voluntary enrollment.

In 1996, ORD continued testing capitation payment systems for home health care and long term nursing home care, under the auspices of the Community Nursing Organization (CNO) and EverCare demonstrations. HCFA awarded contracts to four CNO sites in

1992. This demonstration tests the feasibility and effect on patient care of a capitated, nurse-directed delivery system for home health and other community based services. The CNO sites completed a 1-year development period and began a 3-year operational period in January 1994. HCFA is also working with the United HealthCare Corporation, Inc. to implement the EverCare demonstration. This demonstration tests the effectiveness of managing acute care needs of nursing home residents by pairing physicians and geriatric nurse practitioners who will function as primary medical care givers and case managers. Payment is on a prepaid, capitated basis. Five sites were operational by the close of 1996.

In 1996 HCFA also continued operation of major demonstrations designed to test prospective payment of home health and SNF care. The Medicare home health prospective payment demonstration is being conducted in two phases. The first phase involved testing of prospectively established per-visit payment rates for Medicare covered home health visits. A second phase, implemented in 1995, is testing per-episode payment rates for an episode of Medicare covered home health care. In 1995, ORD also implemented the MultiState Nursing Home Case Mix and Quality demonstration in four States. This demonstration is testing innovative quality assurance and prospective case-mix adjusted payment for nursing homes that participate in Medicare and Medicaid.

New demonstrations designed to provide greater consumer direction and autonomy were under development in 1996. The Consumer-Directed Durable Medical Equipment demonstration, designed to provide greater consumer direction and control in the purchase and maintenance of Medicare durable medical equipment was designed in 1996, with site selection targeted for 1997. HCFA also worked collaboratively with the Assistant Secretary for Planning and Evaluation and the Robert Wood Johnson Foundation to develop a demonstration of cash payments and counseling services for Medicaid personal assistance services. Four sites were selected for demonstration participation in 1996, and implementation of this demonstration is expected in late 1997.

HCFA continues its interest in the development and testing of outcome based quality assurance systems. A demonstration to test the effectiveness of outcome based quality assurance activities in Medicare home health was implemented in 46 home health agencies in 1996, while a demonstration of outcome based quality assurance for persons with developmental disabilities was implemented in the State of Minnesota in 1996.

RESEARCH ACTIVITIES

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

Examining trends in disability and the relationship between disability, need for and use of long term care services;

Examining the effect of the Medicare Catastrophic Coverage Act on subacute and long term care services and providers as well as ongoing changes in the use of post acute and long term care;

Examining alternative quality assurance, financing and payment systems for long term care; and

Supporting data development and analyses.

Because the long term care population is diverse and its composition continues to change over time, it is important to examine changes in rates of disability as well as the relationship between types of disability, need for and use of long term care services. For example, the most rapidly growing segments of the Medicare population are beneficiaries under age 65 with disabilities and those who are 85 years or older—both segments with significantly higher rates of disability and related use of services.

A major responsibility of ORD is assessing the effects of various Medicare and Medicaid programs and policies on subacute and long term care services. Since the passage of the Medicare Catastrophic Coverage Act and its subsequent repeal, ORD has been assessing the effects of this change on other parts of the health care system. Included in this research is the examination of changes in subacute and long term care case mix, utilization, quality, and costs. Changes in the supply of long term care providers are also being studied. Major research projects are underway to analyze the appropriateness of post hospital care and the course and outcomes of that care. In recent years, there has been an increased emphasis on examining episodes of care rather than utilization of just one type of services. Medicare files, which link hospital with post hospital care, continue to be analyzed to provide information on trends in the post acute care utilization. In addition, another purpose of funding this research was to gather information about decision making at the point of hospital discharge and the types of patients who are referred to the various post acute modalities of care. These research studies involve collection and analysis of data in order to provide Medicare coverage, quality assurance and payment policy recommendations relating to subacute care (e.g., nursing homes, rehabilitation hospitals and home health).

Several studies address alternative financing, payment and quality assurance systems. Although the majority of the elderly are covered by both Medicare and supplemental insurance, a large portion of long term care services remain uncovered. Medicaid covers long term nursing home and community based care, but only after elderly individuals have depleted personal resources. Research is being conducted that identifies sources of financing long term care, examines beneficiaries' personal resources to purchase long term care insurance, and examines the risk of catastrophic expenditures. Other research is continuing in the payment area, as work was initiated to develop case-mix payment systems for home health, as well as for Medicaid payments for persons with disabilities. Work to develop outcome-based quality assurance systems also continues.

Efforts are also underway to improve the data bases, statistics and baseline information upon which future assessment of needs, problem identification, and policy decisions will be based. HCFA continues to support the Disability Supplement to the 1994 and 1995 National Health Interview Survey, the Medicare Current Beneficiary Survey, the National Recurring Data Set project and the Long Term Care Program and Market Characteristics data base.

One subgroup of increasing importance to both the Medicare and Medicaid programs is individuals who receive services under both programs. ORD began analysis with the Medicare Current Bene-

ficiary Survey, designed to improve our understanding of the demographic characteristics of dually eligible individuals, their service use and costs, as well as any potential access problems they might experience. These analyses are also intended to support the development of demonstrations targeted to dually eligible individuals, in which service delivery, quality and payment innovations will be tested.

Information follows on specific HCFA demonstrations and research.

On Lok's Risk-Based Community Care Organization for Dependent Adults: On Lok Senior Health Services

Period: November 1983–Indefinite.

Funding: Waiver only.

Grantee: On Lok Senior Health Services, 1333 Bush Street, San Francisco, CA 94109 and California Department of Health Services, 714–744 P Street, P.O. Box 942732, San Francisco, CA 94234–7320.

As mandated by sections 603(c) (1) and (2) of Public Law 98–21, the Health Care Financing Administration granted Medicare waivers to On Lok Senior Health Services and Medicaid waivers to the California Department of Health Services. Together, these waivers permitted On Lok to implement an at-risk, capitated payment demonstration in which more than 300 frail elderly persons, certified by the California Department of Health Services for institutionalization in a skilled nursing facility, are provided a comprehensive array of health and health-related services in the community. The current demonstration maintains On Lok's comprehensive community-based program but has modified its financial base and reimbursement mechanism. All services are paid for by a predetermined capitated rate from both the Medicare and Medicaid (Medi-Cal) programs. The Medicare rate is based on the average per capita cost for the San Francisco county Medicare population. The Medi-Cal rate is based on the State's computation of current costs for similar Medi-Cal recipients, using the formula for prepaid health plans. Individual participants may be required to make copayments, spenddown income, or divest assets based on their financial status and eligibility for either or both programs. On Lok has accepted total risk beyond the capitated rates of both Medicare and Medi-Cal, with the exception of the Medicare payment for end stage renal disease. The demonstration provides service funding only under the waivers. Research and development activities are funded through private foundations.

Section 9220 of Public Law 99–272 has extended On Lok's Risk-Based Community Care Organization for Dependent Adults indefinitely, subject to the terms and conditions in effect as of July 1, 1985, with the exception of the requirements relating to data collection and evaluation. On Lok is continuing to develop collaborative projects with other organizations in the San Francisco Bay area. A pilot agreement with the Institute on Aging (IOA) has been completed and the two organizations have entered in a venture agreement in which IOA will be establishing an adult day health center and operating it under the rules of the Program of All-Inclusive Care for the Elderly protocol. The site will be established in the

Richmond area of San Francisco. On Lok will provide quality assurance oversight as well as marketing and enrollment support. IOA will receive a portion of On Lok's capitation it receives via the HCFA demonstration and a portion will be retained by On Lok to cover administrative expenses.

Program of all-inclusive care for the elderly

Period: June 1990–January 1997 (yearly continuation).
Funding: Waiver only.
Grantees: See below.

Mandated by Public Law 99–509, as amended by section 4118(g)(1)(2) of Public Law 100–203 and section 4744 of Public Law 101–508, the Health Care Financing Administration will conduct a demonstration that replicates, in not more than 15 sites, the model of care developed by On Lok Senior Health Services in San Francisco, California. The Program of All-Inclusive Care for the Elderly demonstration replicates a unique model of managed-care service delivery for 300 very frail community-dwelling elderly persons, most of whom are dually eligible for Medicare and Medicaid coverage and all of whom are assessed as being eligible for nursing home placement, according to the standards established by participating States. The model of care includes—as core services—the provision of adult day health care and multidisciplinary case management through which access to and allocation of all health and long-term-care services are arranged. Physician, therapeutic, ancillary, and social support services are provided on site at the adult day health center whenever possible. Hospital, nursing home, home health, and other specialized services are provided off site. Transportation is provided for all enrolled members who require it. This model is financed through prospective capitation of both Medicare and Medicaid payments to the provider. Demonstration sites are to assume financial risk progressively over 3 years, as stipulated in the Omnibus Budget Reconciliation Act of 1987. The ten sites and their State Medicaid agencies that have been granted waiver approval to provide services are:

Elder Service Plan

Period: June 1990–January 1997 (yearly continuation).
Grantee: East Boston Geriatric Services, Inc., 10 Gove St., East Boston, MA 02128.
Period: June 1990–January 1997 (yearly continuation).
Grantee: Massachusetts State Department of Public Welfare, 180 Tremont St., Boston, MA 02111.

Providence Elder Place

Period: June 1990–January 1997 (yearly continuation).
Grantee: Providence Medical Center, 4805 Northeast Glisan Street, Portland, OR 97213.
Period: June 1990–January 1997 (yearly continuation).
Grantee: Oregon State Department of Human Services, 313 Public Service Building, Salem, OR 97310.

Comprehensive Care Management

Period: February 1992–January 1997 (yearly continuation).

Grantee: Beth Abraham Hospital, 612 Allerton Ave., Bronx, NY 10467.
Period: February 1992–January 1997 (yearly continuation).
Grantee: New York State Department of Social Services, 40 North Pearl Street, Albany, NY 12243–0001.

Palmetto Senior Care

Period: October 1990–January 1997 (yearly continuation).
Grantee: Richland Memorial Hospital, Fifteen Richland Medical Park, Columbia, SC 29203.
Period: October 1990–January 1997 (yearly continuation).
Grantee: South Carolina State Health and Human Services Finance Commission, P.O. Box 8206, Columbia, SC 29202–8206.

Community Care for the Elderly

Period: October 1990–January 1997 (yearly continuation).
Grantee: Community Care Organization, 5228 West Fond du Lac Avenue, Milwaukee, WI 53216.
Period: October 1990–January 1997 (yearly continuation).
Grantee: Wisconsin State Department of Health and Social Services, P.O. Box 7850, Madison, WI 53707–7850.

Total Longterm Care, Inc.

Period: August 1991–January 1997 (yearly continuation).
Grantee: Total Longterm Care, Inc., 3202 West Colfax, Denver, CO 80204.
Period: August 1991–January 1997 (yearly continuation).
Grantee: Colorado Department of Social Services, 1575 Sherman Street, Denver, CO 80203–1714.

Bienvivir Senior Health Services

Period: June 1994–January 1997 (yearly continuation).
Grantee: Bienvivir Senior Health Services, 6000 Welch, Suite A–2, El Paso, TX 77905–1753.
Period: December 1991–November 1997 (yearly continuation).
Grantee: Texas Department of Human Services, P.O. Box 149030 (MC–E–601), Austin, TX 78714–9030.

Independent Living for Seniors

Period: March 1992–March 1997 (yearly continuation).
Grantee: Rochester General Hospital, 311 Alexander Street, Rochester, NY 14604.
Period: March 1992–March 1997 (yearly continuation).
Grantee: New York State Department of Social Services, 40 North Pearl Street, Albany, NY 12243–0001.

Sutter Senior Care

Period: May 1994–April 1997 (yearly continuation).
Grantee: Sutter Health System, 2800 L Street, Sacramento, CA 95816.
Period: May 1994–April 1997 (yearly continuation).
Grantee: California Department of Health Services, 714/744 P Street, P.O. Box 942732 Sacramento, CA 94234–7320.

Center for Elders' Independence

Period: April 1995–March 1997 (yearly continuation).

Grantee: Center for Elders' Independence, 1411 East 31st Street, Ward B2, Oakland, CA 94602.

Period: April 1995–March 1997 (yearly continuation).

Grantee: California Department of Health Services, 714/744 P Street, P.O. Box 942732 Sacramento, CA 94234–7320.

Evaluation of the Program of All-inclusive Care for the Elderly demonstration

Period: June 1991–January 1997.

Funding: $4,486,514.

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

Investigator: David Kidder, Ph.D.

The Program of All-Inclusive Care for the Elderly (PACE) Demonstration replicates a unique model of managed-care service delivery for 300 very frail community-dwelling elderly, most of whom are dually eligible for Medicare and Medicaid coverage and all of whom are assessed as being eligible for nursing home placement according to the standards established by participating States. The model of care includes—as core services—the provision of adult day health care and multidisciplinary team case management through which access to and allocation of all health and long-term-care services are arranged. This model is financed through prospective capitation of both Medicare and Medicaid payments to the provider. One purpose of the evaluation is to examine PACE sites before and after assumption of full financial risk, with the purpose of determining whether the PACE model of care, as a replication of the On Lok Senior Health Services model of care, is cost-effective to the existing Medicare and Medicaid programs. Another purpose is to examine the decision to enroll in PACE in order to understand how PACE enrollees differ from those who are eligible for PACE but refuse to enroll in the program; to determine the impact of PACE on participant health services utilization, expenditures, and outcomes; and to explore the subobjectives of PACE or the link between PACE and the outcomes of interest.

This project initiated primary data collection in January 1995 that will continue through the end of this contract. Reports based on site visits to demonstration sites operating under capitated Medicare and Medicaid payments have been received annually. Preliminary impact results have been received and suggest the following: (1) PACE reduces nursing home and hospital use, while increasing use of ambulatory and other non-institutional services; (2) PACE is associated with improved health status, quality of life and satisfaction, though not with measurable improvement in physical function; (3) although PACE participants survive longer than nonparticipants, the difference is not statistically significant; and (4) PACE appears to be more effective at reducing institutional utilization and improving health status and satisfaction for participants with high levels of physical impairment than for the less impaired.

Program for All-inclusive Care for the Elderly data management

Period: March 1992–August 1995.

Funding: $613,014.

Contractor: On Lok, Inc., 1333 Bush Street, San Francisco, CA 94109.

Investigator: Marleen L. Clark, Ph.D.

The purpose of this project is to provide continuing data management through out the Program for All-Inclusive Care for the Elderly (PACE) demonstration period to ensure that a valid, reliable data set is maintained for monitoring project operations and for use by the Health Care Financing Administration's independent evaluator. The PACE demonstration replicates a unique model of managed-care service delivery for very frail community-dwelling elderly persons, most of whom are dually eligible for Medicare and Medicaid coverage and all of whom are assessed as being eligible for nursing home placement according to the standards established by the participating States. DataPACE maintains a data set on PACE enrollees, including demographic and enrollment information, health and functional status, and service use. For the PACE demonstration project, On Lok has established a minimum dataset and has implemented data collection procedures at the PACE sites for this data set. This dataset includes the variables and program information originally designed to be used by evaluators. This contract has been concluded.

Program of All-inclusive Care for the Elderly data management

Period: September 1995–August 1998.

Funding: $590,630.

Contractor: On Lok, Inc., 1333 Bush Street, San Francisco, CA 94109.

Investigator: Marleen L. Clark, Ph.D.

The purpose of this contract is to provide data management for the Program of All-Inclusive Care for the Elderly (PACE) demonstration period to ensure that a valid, reliable data set is maintained for monitoring project operations and for use by the Health Care Financing Administration's independent evaluator. This is a continuation of the previous contract with On Lok, Inc. to provide this service. DataPACE maintains a data set on PACE enrollees and manages data collection procedures at the PACE sites. In the course of this second contract, service utilization data are scheduled to be used by the PACE demonstration programs's independent evaluator. The DataPACE software and data management routines have been implemented at all sites and continue to be used to monitor data quality and provide feedback to the sites. The first round of data transmissions to the independent evaluator have taken place.

External assessment of quality assurance in the Program for All-inclusive Care for the Elderly

Period: September 1993–March 1996.

Funding: $389,218.

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

Investigator: David Kidder, Ph.D.

The purpose of this study is to develop and test an external quality assurance program for the Program for All-Inclusive Care for

the Elderly (PACE) model of care based on structured implicit review. These measures may be used by the Health Care Financing Administration and State Medicaid agencies in quality assurance monitoring of the PACE program. The two key approaches that form the basis for the development of a quality assurance program are: (1) a "tracer approach" that identifies certain events whose existence represents a sign of unsatisfactory care; and (2) "general patient-centered measures" of health outcomes that reflect the total effects of care on the individual patient. The quality assurance approach encompasses both process and outcome elements. Tracer conditions have been developed by the University of Minnesota, the subcontractor for this delivery order. The University of Minnesota has obtained copies of medical records from each of the PACE sites and has abstracted the necessary information from the medical records. Final reports describing the success of structured implicit review, information about patient satisfaction and the feasibility of conducting this type of monitoring system on a group of control patients have been submitted. The results suggest cautious optimism about using structured implicit review on a wide scale. Although this approach can detect differences in patterns of care, inter-rater reliability is not high.

Program for All-inclusive Care for the Elderly (PACE) Quality Assurance

Period: September 1996–March 1999.

Funding: $1,837,148.

Contractor: Center for Health Policy Research, 1355 S. Colorado Blvd, Suite 306, Denver, CO 80222.

Investigator: Peter Shaughnessy, Ph.D.

This project will develop an outcome-based quality assurance and performance improvement system for the Program for All-Inclusive Care for the Elderly (PACE) for use by Health Care Financing Administration (HCFA) and States in monitoring sites and for continuous quality improvement (CQI). The CQI system will consist of two phases. In the first phase risk-adjusted outcome reports will be produced, while during the second phase the PACE sites will examine why and how they are achieving specific outcomes and make recommendations for improvements in the case of poor outcomes. This project is currently in its design phase.

Social Health Maintenance Organization Project for long-term care

Period: August 1984–December 1997.

Funding: Waiver only.

Grantees: See below.

In accordance with section 2355 of Public Law 98–369, this project was developed to implement the concept of a social health maintenance organization (S/HMO) for acute and long-term care. A S/HMO integrates health and social services under the direct financial management of the provider of services. All services are provided by or through the S/HMO at a fixed, annual, prepaid capitation sum. Four demonstration sites were selected to participate; of the four, two were health maintenance organizations that have added long-term-care services to their existing service packages and two were long-term-care providers that have added acute-care

service packages. The demonstration sites use Medicare and Medicaid waivers, and all initiated service delivery by March 1985. HealthPartners (formerly Group Health in Minneapolis-St. Paul, Minnesota), one of the original sites, discontinued participation on January 1, 1995. On three separate occasions, this demonstration has been extended by legislation. Current legislation, Public Law 103–66, extends the demonstration period through December 31, 1997.

Elderplan, Inc.

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

Medicare Plus II

Grantee: Kaiser Permanente Center for Health Research, 3800 North Kaiser Center Drive Portland, OR 97227–1098.

SCAN Health Plan

Grantee: Senior Care Action Network, 3780 Kilroy Airport Way, Suite 600, P.O. Box 22616, Long Beach, CA 90801–5616.

Site development and technical assistance for the Second Generation Social Health Maintenance Organization demonstration

Period: September 1993–September 1998.

Funding: $2,251,123.

Contractor: University of Minnesota, School of Public Health, Institute for Health Services Research, D–351 Mayo Memorial Building, 420 Delaware Street, SE., Box 197 Minneapolis, MN 55455–0392.

Investigator: Robert L. Kane, M.D.

In January 1995, the Health Care Financing Administration selected six organizations to participate in the Second Generation Social Health Maintenance Organization (HMO) Demonstration. The purpose of this project is to study the impact of integrating acute-and-long term-care-services within a capitated managed-care system. It was developed to refine the targeting and financing methodologies and the benefit design of the current social HMO model which was initiated as a demonstration in 1985.

Although the same services are provided under both of these projects the Second Generation Social HMO Demonstration features a greater emphasis on geriatric care and a more inclusive case management system. Another distinguishing characteristic of the project it is risk-adjusted payment methodology that is based on an individual's health status and functioning level. The primary focus of the project's evaluation will be to compare beneficiaries enrolled in the demonstration with beneficiaries in a section 1876 HMO program.

The University of Minnesota and its subcontractor, the University of California, San Francisco are providing technical assistance and support in the development, implementation, and operation of the Second Generation Social HMO Demonstration.

The developmental phase of the Second Generation Social HMO Demonstration began in January 1995. Since that time the University of Minnesota and the University of California, San Francisco

have been providing technical assistance to the organizations participating in the project. They have also developed a questionnaire that will be used to determine a beneficiary's capitated payment rate, a series of geriatric protocols to help physicians identify and treat certain health conditions, and a care coordination assessment instrument to assist case managers with care planning. The Health Plan of Nevada began enrolling beneficiaries into the demonstration in November 1996. Enrollment at the other five organizations is scheduled to begin in May 1997.

Second generation of Social Health Maintenance Organization demonstration

Period: November 1996–November 1997.

Funding: Waiver only.

Grantees: See below.

In accordance with section 2355 of Public Law 98–369, the concept of a social health maintenance organization (S/HMO) was developed and implemented. The S/HMO integrates health and social services under the direct financial management of the provider of services. All acute and long-term-care services are provided by or through the S/HMO at a fixed, annual, prepaid capitation sum. The Omnibus Budget Reconciliation Act of 1990 authorized the expansion of the Social Health Maintenance Organization demonstration. The purpose of this second generation S/HMO (S/HMO–II) demonstration is to refine the targeting and financing methodologies and the benefit design of the current S/HMO model. The S/HMO–II model will also provide an opportunity to test more geriatrically oriented models of care. Six organizations have been awarded waivers to implement the project.

Grantee: CAC Ramsey Health Plan, 75 Valencia Avenue, Coral Gables, FL 33134.

Grantee: Contra Costa County Health Plan, 595 Center Avenue, Suite 100, Martinez, CA 94553.

Grantee: Fallon Community Health Plan, Chestnut Place, 10 Chestnut Street, Worcester, MA 01608.

Grantee: Health Plan of Nevada, Inc., P.O. Box 15645, Las Vegas, NV 89114.

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

Grantee: Rocky Mountain Health Maintenance Organization, 2775 Crossroads Boulevard, Grand Junction, CO 81505.

State of Minnesota "Senior Health Options (SHO) Project"

Period: April 1995–December 2000 (yearly continuation).

Funding: Waiver only.

Grantees: Minnesota Department of Human Services, Human Services Building, 444 Lafayette Road, St. Paul, MN 55155.

In April 1995, the State of Minnesota was awarded Medicare and Medicaid waivers for a 5-year demonstration designed to test delivery systems that integrate long-term care and acute-care services for elderly dual eligibles. The State is targeting the elderly dually entitled population that resides in the 7-county metro area and St. Louis county. Elderly Medicaid eligibles now required to enroll in the State's current section 1115 Prepaid Medical Assistance Pro-

gram (PMAP) demonstration will be given the option to enroll in the Senior Health Options (SHO) Project, which in essence adds long-term care and Medicare benefits to basic PMAP benefits. Under this demonstration, the State will be treated as a health plan that contracts with Health Care Financing Administration to provide services, and provides those services through subcontracts with various appropriate providers. The State will continue its current administration of the Medicaid-managed care program while incorporating some Medicare requirements that apply directly to the health plans with which the State would subcontract for SHO. HCFA's direct oversight functions would continue to apply to the overall demonstration and managing entity, which would be the State.

MAINE-NET: Medicaid- and Medicare-managed care for the elderly and physically disabled in Maine

Period: September 1994–September 1997.

Funding: $944,940.

Grantees: Maine Department of Human Services, Bureau of Medical Services, State House Station No. 11, Augusta, ME 04333.

Investigator: Carreen Wright.

This project is designed to demonstrate integrated models for the financing and delivery of managed health care and social services for Medicare and Medicaid elderly and physically disabled persons in Maine. The project seeks to promote the development of regional service delivery networks or health plans, particularly in rural areas of the State that would be responsible for the management, coordination, and integration of services, including multidisciplinary approaches to care planning and service delivery. The demonstration will provide a comprehensive package of primary, acute, and long-term-care institutional and noninstitutional services as part of a prepaid-capitated health plan for the target populations. The demonstration seeks to expand upon nursing home quality indicators developed in the Health Care Financing Administration sponsored multistate Case-Mix Demonstration Project and incorporate HCFA's quality assurance guidelines for managed care plans. In addition, the project will develop and use an activity of daily living-based case-mix adjustment for long-term-care services in the construction of capitation payment rates, using the Resource Utilization Group III, Version classification system also developed in the multistate demonstration project. For services provided in boarding homes and in the community, two new case-mix methodologies will be developed for use by the demonstration.

This project is now in its second year. During this period, a concept paper describing the State's health care environment and the challenges facing the proposed demonstration program was drafted. In addition, an analysis of the cost and use patterns of State elderly and disabled Medicare and Medicaid beneficiaries has been undertaken, and is expected to be complete by November 0f 1996. During year two, a request for information was created and issued, and the responses were reviewed by the State. The data from these responses, along with a detailed county-by-county environmental analysis informed the criteria used for the selection of the two sites

for the proposed demonstration. The State currently anticipates submitting the waiver application in February 1997.

Managing medical care for nursing home residents

Period: December 1992–December 1998.

Funding: Waiver only.

Grantee: United HealthCare Corporation, Inc., P.O. Box 1459, Minneapolis, MN 55440–8001.

Investigator: Jeannine Bayard.

The objective of this demonstration is to study the effectiveness of managing acute care needs of nursing home residents by pairing physicians and geruiatric nurse practitioners (GNPs) who will function as primary medical caregivers and case managers. The major goals of the demonstration are to reduce medical complications and dislocation trauma resulting from hospitalization and to save the expense of hospital care when patients could be managed safety in the nursing home with expanded services. The operating principal of this demonstration is EverCare, a subsidiary of United Health Care Corporation, Inc. EverCare will receive a fixed capitated payment (based on a percentage of the adjusted average per capita cost) for all nursing home residents enrolled and will be at full financial risk for the cost of acute care services for enrollees. GNPs will provide initial assessments of enrollees; make monthly visits; authorize clinic, outpatient and hospital visits; and communicate with the patients' physicians, nursing facility staffs, and families. Physician incentive plans will be structured to offer a higher reimbursement rate for nursing home visits and lower reimbursement rates for services furnished in physicians' offices or in other settings. By increasing the intensity and availability of medical services, EverCare believes that the model will reduce total care costs; improve quality of care received by participants through better coordination of appropriate acute care services; and improve the quality of life for and level of satisfaction of enrollees and their families.

Waivers were awarded in the summer of 1994 and currently sites are operational in Atlanta, Baltimore, Boston, and Phoenix; sites in Denver and Tampa are expected to initiate services in 1997.

Randomized controlled trial of expanded medical care in nursing homes for acute care episodes: Monroe County Longterm Care Program, Inc.

Period: March 1992–December 1996.

Funding: $1,054,007.

Grantee: Monroe County Longterm Care Program, Inc., 349 West Commercial Street, Suite 2250, Piano Works East Rochester, NY 14445.

Investigator: Gerald Eggert, Ph.D.

The objective of this demonstration is to develop, implement, and evaluate the effectiveness of expanded medical services to nursing home residents who are undergoing acute illnesses that would ordinarily require hospitalization. The intervention will include many services that are available in acute hospitals and are feasible and safe in nursing homes. These include an initial physician visit, all necessary followup visits, diagnostic and therapeutic services, and additional nursing care (including private duty), if necessary. The

major goals are to reduce medical complications and dislocation trauma resulting from hospitalization and to save the expense of hospital care when patient could be managed safely in nursing homes with expanded services. The design phase of the demonstration has been completed. The design is currently being evaluated to determine the impact of the implementation of the Multistate Nursing Home Case-Mix and Quality Demonstration on the implementation of this demonstration.

Community Nursing Organization Demonstration

Period: September 1992–December 1996.

Contractors: See below.

Section 4079 of Public Law 100–203 directs the Secretary of the Department of health and Human Services to conduct demonstration projects at four or more sites to test a capitated, nurse-managed system of care. The two fundamental elements of the Community Nursing Organization (CNO) demonstration are capitated payment and nurse case management. These two elements are designed to promote timely and appropriate use of community health services and to reduce the use of costly acute care services. The legislation mandates a CNO service package that includes home health care, durable medical equipment, and certain ambulatory care services. Four applicants were awarded site demonstration contracts on September 30, 1992. The selected sites represent a mix of urban and rural sites and different types of health providers, including a home health agency, a hospital based system, and a large multispeciality clinic. All CNO sites have undergone a 1-year development period and began a 3-year operational period in January 1994, which continued in 1996. Abt Associates Inc. Was selected to evaluate the project and to provide technical assistance to the sites. Abt Associates Inc. Also was awarded the external quality assurance contract.

Contractor: Carle Clinic Association, 307 East Oak, Suite 3, P.O. Box 718, Mahomet, IL 61853.

Contractor: Carondelet Health Services, Inc., Carondelet St. Mary's Hospital, 1601 West St. Mary's Road, Tucson, AZ 85745.

Contractor: Living at Home/Block Nurse Program, Ivy League Place, Suite 225, 475 Cleveland Avenue North, St. Paul, MN 55104.

Contractor: Visiting Nurse Service of New York, 107 East 70th Street, New York, NY 10021.

Evaluation of the Community Nursing Organization Demonstration

Period: September 1992–June 1998.

Funding: $3,014,634.

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

Investigator: Robert J. Schmitz, Ph.D.

The Community Nursing Organization (CNO) Demonstration was mandated by section 4079 of the Omnibus Budget Reconciliation Act of 1987. The legislation directs the Secretary of the Department of Health and Human Services to conduct a demonstration project at four or more sites to test a capitated, nurse-managed system of care. The two fundamental elements of the CNO are

capitated payment and nurse case management. These two elements are designed to promote timely and appropriate use of community health services and to reduce the use of costly acute care services. The legislation mandates a CNO service package that includes home health care, durable medical equipment, and certain ambulatory care services. The CNO sites receive a monthly capitation payment for each enrollee. The capitation rate is modeled on the average adjusted per-capita cost-payment used for Medicare health maintenance organizations. The CNO per-capita payment rate will be set at a level that is equal to 95 percent of the adjusted average per-capita Medicare payment for community and ambulatory services in the CNO's geographic area. The legislation mandates the use of two types of CNO per-capita payment methods. Payment Method A adjusts the per capita payment according to an individual's age, gender, and prior home health use. Payment Method B adjusts the per capita payment according to an individual's functional status in addition to age, gender, and prior home health use. The evaluation of the CNO demonstration will test the feasibility and effect on patient care of a capitated, nurse case-managed service-delivery model. Both qualitative and quantitative components are included in the evaluation design. The qualitative component will use a case study approach to examine the operational and financial viability of the CNO model. The quantitative component will use a randomized design to measure the impact of the CNO intervention on mortality, hospitalization, physician visits, nursing home admissions, and Medicare expenditures, as well as on such nurse-sensitive outcomes as knowledge of health problems and management of care.

The four CNO demonstration sites completed a 1-year developmental period and began a 3-year operational period in January 1994. A 1-year extension of the demonstration and evaluation has been granted. Collection of baseline data for CNO enrollees began in January 1994. Site visit reports summarizing site activities for the first and second operational years have been completed. An interim report was prepared by the evaluation contractor. A second interim report is expected in Spring 1997.

Community Nursing Organization Demonstration External Quality Assurance

Period: July 1994–July 1997.
Funding: $535,304.
Contractor: Abt Associates Inc.
Investigator: David Kidder, Ph.D.

The purpose of the Community Nursing Organization (CNO) Demonstration External Quality Assurance project is to conduct an external review of the quality of health care delivered to Medicare beneficiaries participating in the CNO demonstration (a risk-reimbursed coordinated care program for home health and selected ambulatory services). The CNO Demonstration External Quality Assurance project includes a quarterly review of client medical records for a sample of clients receiving Medicare-covered mandatory CNO services, and a quarterly review of CNO assessments and provision of CNO interventions on a sample of all enrollees. Under this project, the awardee will be responsible for monitoring the

quality of care management and health education services provided through the CNO and implementing corrective actions, when necessary. The quality of traditional Medicare home health services will be monitored. The awardee also will conduct a use review of the home health services provided to enrollees to validate or support changes in capitation payment rates. The evaluation contractor will be provided with accurate and complete documentation of the findings and interventions of the quality assurance process.

Rehabilitating Medicare beneficiaries at home

Period: April 1993–April 1994.

Funding: $80,000.

Grantee: Wellmark Healthcare Services, Inc., 60 William Street, Wellesley, MA 02181.

Investigator: Samuel Scialabba.

Wellmark intends to conduct a 2-year Medicare demonstration that will provide beneficiaries will acute rehabilitation services at home as an alternative to more expensive inpatient rehabilitation hospital services. The Health Care Financing Administration has awarded a cooperative agreement to Wellmark to further refine its project design to develop information on specific eligibility and screening criteria for patient enrollment, detailed cost data on the proposed service package, and informed consent policies to adequately inform patients and caregivers of the risks and responsibilities of rehabilitative home care. Medicare waivers will be required to allow Wellmark reimbursement as a prospective payment, system-exempt rehabilitation hospital. Funding for the evaluation will be provided by the Robert Wood Johnson Foundation as part of a national study entitled "Evaluation of Innovative Rehabilitation Alternatives and Critical Dimensions of Rehabilitative Care." The final report has been submitted. A request for Medicare waivers to implement the project was withdrawn by the agency in May 1995.

Randomized controlled trial of primary and consumer-directed care for persons with chronic illnesses

Period: September 1994–September 1997.

Funding: $345,243.

Grantee: Monroe County Longterm Care Program, Inc., 349 West Commercial Street, Suite 2250, Piano Works, East Rochester, NY 14445.

Investigator: Gerald Eggert, Ph.D.

This demonstration will assess differences in outcome for three treatment groups: a consumer-directed group, a case-managed service group, and a model that combines both treatment patterns. Findings will be compared with a control group that receives no additional services or benefits. Eligibility for participation is determined by residence in the community (at home or in an assisted living setting) and by Medicare coverage with a diagnosis of irreversible dementia or three or more limitations in activities of daily living. In addition, participants must be at risk for hospitalization (i.e., their participation is based on prior use of hospitals or emergency rooms). This project has completed the developmental phase. A waiver package has been prepared and this is under review. Implementation is anticipated in December 1996.

Managed care system for disabled and special needs children: District of Columbia

Period: December 1995–November 1998.

Funding: Waiver only.

Grantee: The District of Columbia, Department of Human Services, Commission on Health Care Finance, 2100 Martin Luther King Jr. Avenue., S.W., Suite 302, Washington, D.C. 20020.

In December 1995 the District of Columbia was awarded a section 1115 Medicaid waiver to test the efficacy of a managed-care service delivery system designed for disabled and special needs children. Participants in the demonstration are children and adolescents who are under the age of 22, are eligible for Supplemental Security Income (SSI) payments (i.e., considered disabled according to SSI guidelines), and are subsequently eligible for Medicaid as well. The District of Columbia hopes to use the program to eliminate both barriers to access and other health care delivery problems that children who are disabled and their families encounter in the current Medicaid fee-for-service program. This managed-care program seeks to improve the health status and quality of life for these children, while reducing the overall health care costs associated with their care. Enrollment in the demonstration is voluntary; however, eligible children who do not explicitly choose to remain in the current fee-for-service system after being informed of the new program are assigned to HSCSN after a specified notice period. Enrollment cannot be finalized, however, until a health needs assessment is completed for each new member. Health services under this demonstration are being coordinated by Health Services for Children with Special Needs, Inc. (HSCSN), a non-profit corporation established specifically for the purpose of providing managed care for children enrolling in the demonstration.

The project was implemented in December 1995. As of October 1996, approximately 1,500 of the 3,000 eligible children have chosen to enroll in HSCSN, while approximately 500 children/families have chose to remain in the fee-for-service system.

Evaluation of the District of Columbia's demonstration project, "Managed Care System for Disabled and Special Needs Children"

Period: September 1996–March 2000.

Funding: $1,203,963.

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

Investigator: Carol Irvin, Ph.D.

The District of Columbia submitted a waiver-only request for Medicaid waivers under section 1115(a)(1) for a 3-year demonstration project to test the efficacy of a managed care service delivery system designed for children and adolescents under the age of 22 who are eligible for Medicare and are considered disabled according to Supplementary Security Income (SSI) Program guidelines. This study represents a unique opportunity to examine the experiences of a managed-care system with voluntary enrollment of children with disabilities. The project, which seeks to integrate acute and long-term-care services for children with disabilities into a single capitated payment methodology, is the first approved demonstra-

tion of its kind. The information gathered will be used to inform both State and Federal policymakers who have increasingly come to regard managed care as a mechanism to contain growing health care expenditures.

This study will provide for a special analysis of the enrollment and disenrollment processes, as well as of the project's implementation process (including enrollment and participation, services/benefits, provider participation and training, organizational and administrative issues, contracting and risk-sharing arrangements, provider fee schedules, community involvement, and quality assurance, administrative and data management systems). Outcome analyses will focus on enrollee/family outcomes (including care management, service utilization and costs, enrollee/family satisfaction, quality of care and health status indicators, access to care, and family/informal care giving), organizational outcomes (including an analysis of HSCSN's financial performance, and the risk sharing arrangement between HSCSN and the District of Columbia), and the impact upon the provider community. Data for the evaluation will come from surveys (primary data collection), case study interviews, focus groups, Medicaid Management Information System and encounter data, and SSI data. The project was awarded in September 1996, and is in the early stages of development and implementation.

Special Care managed care initiative

Period: February 1992–December 1996.

Funding: $656,270.

Grantee: Wisconsin State Department of Health and Social Services, 1 West Wilson Street, P.O. Box 309, Madison, WI 53701–0309.

Investigator: Howard Garber, Ph.D.

The purpose of the special care initiative project is to gain improved understanding of the need, use, and cost of delivery of health services to high-risk, severely disabled persons. The severely disabled population is a significant user of medical services. Moreover, cost between 1988 and 1991 increased at a rate double that of population increase. Therefore, an important objective is to contain the cost and use of Medicaid services by severely disabled persons, while maintaining or improving the level of client satisfaction.

Special Care, Inc. (SCI) is an independent, nonprofit organization that represents a joint venture between the Milwaukee Center for Independence, a Milwaukee rehabilitation facility, and the Wisconsin Health Organization, an established health maintenance organization. SCI will create specialized services, including a dedicated physician panel, case-management services, and clinical services as strategies to assess medical need and to better coordinate service resources available in the community. The State of Wisconsin will use a capitation methodology for reimbursement to SCI. Enrollment of SCI members will be voluntary.

As a research and demonstration program, it aims to improve the understanding of the need, use, costs, and cost-management opportunities associated with the delivery of health services to high-risk, severely disabled persons. These individuals are disabled, categorically needy, noninstitutionalized, exempt from the spenddown pro-

visions, eligible for Medicaid, and eligible for Supplemental Security Income disability benefits. The diagnostic distribution of cases in this population is 41 percent mental retardation, 17.4 percent chronic mental illness, 13.5 percent skeletal/muscular, 11.2 percent epilepsy, 9.3 percent cerebral palsy, 1.6 percent cardiac/circulatory, 1.2 percent autism, and 4.9 percent other. This is a severely disabled and generally unemployable population whose medical care use and cost experience show a non-normalized pattern. The average hospital length of stay for members of this group is 7 times longer than that for the general population. Their hospital costs are 4 times higher without clear explanation.

To measure the performance of the SCI program, a management information system (MIS) file will be created to match the demographic characteristics of program participants with the cost and use data obtained from the history files maintained by the Wisconsin Medicaid program. Medicaid data will include service and procedure frequencies, service mix, billings and reimbursements, provider practices, and certain medical status indicators. MIS files will contribute additional information on disability condition, enrollment information, benefit coordination, and case management. In addition, data on client satisfaction, quality of care, and enrollment/disenrollment decisions will be collected.

The State is operating this project under a section 1915(a) State Plan exception. The program officially began in June 1994. As a point of clarification, Special Care signifies the initiative proposed to the Health Care Financing Administration (HCFA) for the managed care program, while Independent Care (I Care) is the formal community name of the managed care company. In July 1996, a no-cost extension was granted to the State to allow for a full 3-year operational period.

The evaluation contract with the Human Services Research Institute (HSRI) was signed in May 1994, after it was reviewed and approved by HCFA. This evaluation contractor submitted its final working plan at the beginning of grant year 03. HSRI proposes a 3-year evaluation, which will combine survey data with HCFA's Medicaid Statistical Information System Administrative files. The evaluator developed and piloted an interview protocol, the Cross-Disability Integrated Health Outcomes Survey for use with the I Care recipients and control group members. Evaluation activities will include the selection of comparison groups, using cost cluster information from a State-developed profile of a sample of I Care patients. This sample was drawn from an aggregate of all 1994 paid claims for every Milwaukee and Racine county Supplemental Security Income beneficiary who is disabled and was then assigned to one of three cost categories—low, medium, or high. Interim evaluation findings are expected in December 1996.

Rhode Island Long-Term Care Waiver: CHOICES

Period: May 1995–July 1996.

Funding: $150,000.

Grantee: Rhode Island Department of Human Services, 600 New London Avenue, Cranston, RI 02902.

Investigator: Christine C. Ferguson.

In 1994, the State of Rhode Island Department of Human Services (DHS) and Department of Mental Health, Retardation and Hospitals (MHRH) submitted a waiver-only proposal which intends to consolidate all current State and Federal funding streams for approximately 4,000 adults with developmental disabilities under one managed care Title XIX waiver program. The State proposed a 5-year demonstration with a two-phase transition process. The State wants to consolidate into a single program with a single set of rules the following separate Title XIX programs:

Intermediate Care Facilities for the Mentally Retarded (ICF–MR);
Home and Community Based Waiver;
State Plan Rehabilitation Services;
Acute/Medical Care.

Rhode Island envisions a publicly administered managed-care system with a single-payer model. Each eligible person will be enrolled in a private health maintenance organization or approved health plan for acute health care. Managed care plans participating in Rhode Island's RIte Care program may be asked to participate in the CHOICES program and provide managed health care for people with developmental disabilities, thus bringing together Rhode Island's two managed care initiatives. Alternatively, a statewide health care plan will be established for adults with developmental disabilities and the employees of the service agencies.

Under CHOICES, a case-management system will also be available to assist each eligible individual to obtain required long-term supports. The State intends to ascribe to all eligible persons a dollar amount with which they, with technical assistance from a broker or other source, will choose to manage the long-term care services directly themselves via a voucher, or choose an agency that can support their needs within the identified resources available. This dollar amount will be based on a methodology prepared by the assessment/authorization work group.

Services covered by CHOICES can be divided into several categories:

Supported living services;
Alternative living arrangements;
Day supports;
Acute care/medical services.

The covered target population under CHOICES consists principally of persons with MR or related conditions, and the developmentally disabled, who are already eligible for and receiving services under various currently operating Title XIX programs.

In addition to its current population, CHOICES will serve up to 25 individuals with traumatic brain injury who are in need of long-term community living supports and who may be inappropriately institutionalized or living in the community with inadequate support; approximately 500 individuals now receiving supported employment services funded with State monies; about 40 people currently in the State-funded developmental disabilities program for whom there is no Federal financial participation; and approximately 125 people turning 21 and graduating from special education, applying for services from the Division of Developmental Disabilities under the Department of Human Services for Rhode Is-

land. The State was awarded a grant in June 1995 to further develop the project design. Waivers have not yet been awarded.

Demonstration of Integrated Care Management Systems for high-cost/high-risk Medicaid beneficiaries

Period: October 1995–October 2000.

Funding: Waiver only.

Grantee: Department of Health and Mental Hygiene, State of Maryland, 201 West Preston Street, Baltimore, MD 21201.

Investigator: Martin P. Wasserman, M.D., J.D.

Maryland is testing a new case-management system for high-cost/high-risk Medicaid beneficiaries and those at risk to become high cost. The program seeks to maintain or improve access to providers and the quality of the care provided. The demonstration also should lower health care costs by reducing hospital readmission rates and by maintaining patients in the lowest cost medically appropriate setting. The University of Maryland at Baltimore County, Center for Health Program Development and Management, under contract to the State, is responsible for the demonstration's operations. This project was approved in October 1995. In October 1996, the State requested to withdraw the waivers, as the project was incorporated in Maryland's statewide waiver, approved in October 1996.

Community-Supported Living Arrangements Program: Process evaluation

Period: September 1993–March 1997.

Funding: $411,941.

Awardee: SysteMetrics/MedStat, 104 West Anapamu Street, Santa Barbara, CA 93101.

Investigator: Marilyn Ellwood.

The Community-Supported Living Arrangements (CSLA) Program is designed to test the effectiveness of developing, under section 1930 of the Social Security Act, a continuum of care concept as an alternative to the Medicaid-funded residential services provided to individuals with mental retardation and related conditions (MR/RC) as an optional State plan service. The CSLA program serves individuals with MR/RCs who are living in the community either independently, with their families, or in homes with three or fewer other individuals receiving CSLA services. This model of care includes personal assistance; training and habilitation services necessary to assist individuals in achieving increased integration, independence, and productivity; 24-hour emergency assistance; assistive technology; adaptive technology; support services necessary to aid these individuals in participating in community activities; and other services, as approved by the Secretary of the Department of Health and Human Services. Costs related to room and board and to prevocational, vocational, and supported employment services are excluded from coverage. In accordance with the legislatively set maximum, California, Colorado, Florida, Illinois, Maryland, Michigan, Rhode Island, and Wisconsin have implemented CSLA programs. The purpose of this contract is to provide an evaluation of the CSLA program to the Health Care Financing Administration's Medicaid Bureau and Congress for their consideration of

policy options regarding the continuation and/or expansion of the Medicaid State Plan optional service. The evaluation will address five areas:

Philosophy or goals guiding States' CSLA program;

Description of CSLA programs with respect to recipients, types of services received, and the cost of such services;

Description and discussion of quality assurance mechanisms being implemented;

Exploration of the question of compatibility of the supported living concept with current goals and the structure of the Medicaid program;

Exploration of the relationship between the supported living concept and the Americans with Disabilities Act.

The contract was awarded on September 30, 1993. As of September 1996, the eight site visits to the participating States have been conducted. Six of the eight State case studies have been reviewed and are approved for distribution. Secondary data analysis will be conducted using data available from the participating CSLA States. A final evaluation report is expected in March 1997.

Texas Nursing Home Case-Mix and Quality Demonstration

Period: February 1992–December 1998.

Funding: $532,830.

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

Investigator: Ken. C. Stedman.

Texas will participate in the Multistate Nursing Home Case-Mix and Quality (NHCMQ) Demonstration. The objective of the demonstration is to test the feasibility and cost effectiveness of a case-mix payment system for nursing facility services under the Medicare and Medicaid programs that are based on a common patient classification system. The addition of Texas enhances the Health Care Financing Administration's ability to project the results of the demonstration on a national basis. Texas represents a western pattern of service using more proprietary multistate chain providers than is the pattern used in the East. Twenty Texas Medicare facilities were part of the original data collection for the development of the resource utilization group (RUG) III system. Texas has the second largest number of hospital-based facilities in the country. There are more than 20 metropolitan statistical areas of varying size. In addition, the State has a large number of rural areas. The State was traditionally a flat-rate intermediate care facility Medicaid system until 1989, when it implemented a RUG-type Medicaid payment system. This RUG-type payment system makes Texas well-suited for inclusion in the Medicare portion of the demonstration.

During the first year of participation, the Texas Department of Human Services worked with the Texas Department of Health to change the resident assessment being used in the State. In April 1993, Texas implemented the minimum data set plus statewide as its resident assessment instrument. Analyses of 1990 Medicare Cost Report data, Medicare provider analysis and review Part A skilled nursing facility stay data, and the Texas Client Assessment an Review Evaluation (CARE) data have been conducted for use in

developing the demonstration's Medicare case-mix payment system. Under the Medicaid demonstration, Texas began development of the Quality Evaluation System of Texas, a resident characteristic information and reporting system using the CARE instrument. During the first year, the staff continued the development and enhancement of the system, which was codified into Law by the Texas Legislature in Summer 1993. They now are producing facility-level reports with statewide comparisons for Texas providers on a twice-a-year basis. The Medicare portion of the NHCMQ demonstration was implemented July 1, 1995, in Texas.

Multistate Nursing Home Case-Mix and Quality Demonstration

Period: June 1989–December 1998.
Funding: $5,322,941.
Project Nos.:
Kansas, 11–C–99366/7
Maine, 11–C–99363/1
Mississippi, 11–C–99362/8
South Dakota, 11–C–99367/8
Grantees: State Medicaid Agencies.

This project builds on past and current initiatives with nursing home case-mix payment and quality assurance. The 6-year demonstration will design, implement, and evaluate a combined Medicare and Medicaid nursing home resident classification and payment system in Kansas, Maine, Mississippi, and South Dakota. The purpose of the demonstration is to test a resident information system with variables for classifying residents into homogeneous resource use groups for equitable payment and for quality monitoring of outcomes adjusted for case mix. The new minimum data set plus (MDS+) for resident assessment will be used for resident-careplanning, payment classification, and quality-monitoring systems. The project consists of three phases: systems development and design, systems implementation and monitoring, and evaluation.

The project has conducted a field test of the minimum data set on 6,660 nursing home residents. The average direct-care staff time across the States is 115 minutes per day per resident. A new patient classification system and a Multistate Medicare/Medicaid Payment Index containing 44 groups has been created. The States have collected and reviewed over 3 million MDA+ documents on over 500,000 different residents assessed between September 1990 and July 1996. In developing the payment systems, facility cost reports and resident characteristic data were analyzed to determine the case mix of residents and patterns of service use. The Medicare case-mix-adjusted payment system was implemented in August 1995. The quality-monitoring information system has been tested, and 30 quality indicators are being used for monitoring facility-level and resident-level quality.

New York Case-Mix Payment and Quality Demonstration

Period: May 1990–December 1998.
Funding: $981,718.
Grantee: New York State Department of Health, Empire State Plaza, Room 1683, Corning Tower, Albany, NY 12237.

Investigator: Robert W. Barnett.

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

In early 1991, the project staff completed the minimum data set field test in 25 facilities on 993 residents. These data have been added to the database and analyzed to develop the new NHCMQ Medicare/Medicaid classification system. The inclusion of the New York State data has resulted in the addition of a very high rehabilitation group to the upper end of the classification. The State has implemented the minimum data set plus (MDS+) statewide as its resident assessment instrument. In November 1992, New York State began receiving the information monthly from all facilities; by July 1, 1996, it had received a total of 2,000,000 assessments. In developing the Medicare payment system, the 1990 Medicare cost reports were used, as well as the MDS+ data and the Medicare provider analysis and review file. The Medicare case-mix-adjusted payment system was implemented July 1, 1995, in New York. By Summer 1996, there were over 350 SNFs participating in the SNF demonstration, 7 of which are hospital based.

Implementation of the Multistate Nursing Home Case-Mix and Quality Demonstration

Period: February 1994–December 1998.

Funding: $3,209,538.

Contractor: Allied Technology Group, Inc., 1803 Research Boulevard, Suite 601, Rockville, MD 20850.

Investigator: Robert E. Burke, Ph.D.

This contract will support the implementation phase of the Multistate Nursing Home Case-Mix and Quality Demonstration. The demonstration combines the Medicare and Medicaid nursing home payments and quality monitoring system across several States: Kansas, Maine, Mississippi, New York, South Dakota, and Texas. This project builds on past and current initiatives with case-mix payment and quality assurance in nursing homes. The purpose of the demonstration is to test a resident information system with variables for classifying residents into homogeneous resource utilization groups for equitable payment and for quality monitoring of process and outcomes adjusted for case mix. The project will have three phases: systems design and development, systems implementation and monitoring, and evaluation.

The objectives of the implementation phase are as follows:

Recruit facilities in the six demonstration States to participate in the Medicare portion.

Develop and operate the Medicare case-mix system of the demonstration for the Health Care Financing Administration that involves the fiscal intermediaries and the Medicare skilled nursing facility (SNF) provider;

Conduct a staff-time measurement study to validate the Resource Utilization Group, Version III (RUG III) classification system and add a valid therapy payment component;

Validate the quality indicators (QIs) and implement the quality monitoring system in the demonstration States through the States' nursing home survey process;

Implement an administrative management and operational system that links distinct components of the demonstration (e.g., classification of residents, Medicare coverage determination, payment systems, outcome monitoring for quality assessment reliability); and

Implement a field auditing system that monitors States and nursing homes participating in the Medicare portion.

In July 1993, implementation of the Medicaid prospective payment systems was begun, with full participation in 1994. Maine, Mississippi, Kansas, and South Dakota are beginning to routinely use the QI reports in the survey and certification process as of October 1995, based on the pilot test report and the first nine validation visits.

In Fall 1996, there are over 2,100 Medicare SNFs in the 6 demonstration States, in contrast to 1,120 in 1990. There were over 1,500 invitations sent to providers in October 1996, for Phase III (routine and rehabilitation) of the demonstration expressing interest in further information by summer 1995. Phase I operation of the Medicare prospective payment system began in July 1995. By Fall 1995, there were 300 facilities being paid for routine services using the 3 regional Multistate Medicare Payment Indices.

The RUG III validation staff-time measurement data collection was completed in 7 States by July 1, 1995, including the minimum data set 2.0 (MDS2.0) on 2,056 residents across approximately 80 study units in 7 States, not counting New York. Data collection in New York will be completed in early 1996 and added to the validation database. The resident level validation data file is currently being compiled. The multiple analyses will be carried out during winter 1995, with the rehabilitation (occupational, physical, and speech therapy) index added to the Medicare payment system in spring 1996.

Phase II of the Medicare portion of the demonstration will begin at the start of providers' fiscal years beginning January 1, 1996. In January 1996 and each calendar year thereafter to the end of the demonstration, the prospective rates will be inflated on January 1st. Phase III of the demonstration, when the rehabilitation therapies will be added to the prospective payment, will begin April 1996 in the fiscal year of the provider. Recruitment of SNF participation will end in 1997.

Evaluation of the Nursing Home Case-Mix and Quality Demonstration

Period: September 1994–September 1999.
Funding: $2,980,219.
Contractor: Abt Associates Inc., 55 Wheeler Street, Cambridge, MA 02138.
Investigator: Robert J. Schmitz, Ph.D.

Under the Nursing Home Case-Mix and Quality (NHCMQ) Demonstration, the Health Care Financing Administration is testing the feasibility of paying skilled nursing facilities (SNFs) for Medicare skilled nursing services on a prospective basis. Currently, SNFs are reimbursed on a retrospective basis for their reasonable costs. A case-mix classification, called resource utilization groups, is being used to classify patients, permitting HCFA to pay facilities for each covered day of care, according to the case mix of patients residing in the facility on any given day. Though some costs will continue to be paid on a retrospective cost basis under the demonstration, the prospective rate will eventually include inpatient routine nursing costs and therapy costs. To guard against the possibility that inadequate care would be provided to patients with heavy care needs, a system of quality indicators has been developed that will be used to monitor the quality of care.

The demonstration project was implemented in six States (Kansas, Maine, Mississippi, New York, South Dakota, and Texas) in Summer 1995, with Medicare-certified facilities in these States being offered the opportunity to participate on a voluntary basis.

The evaluation of this demonstration project will seek to estimate specific behavioral responses to the introduction of prospective payment and to test hypotheses about certain aspects of these responses. The principal goal of the evaluation of the NHCMQ Demonstration is the estimation of the effects of case-mix-adjusted prospective payment on the health and functioning of nursing home residents, their length of stay, and use of health care services; on the behavior of nursing facilities; and on the level and composition of Medicare expenditures.

The evaluation design has been finalized and visits to a sample of demonstration facilities began. Current analytic activities center around sampling and data collection. Of special interest is collection of data on the provision of therapy services from both demonstration sites and comparison sites which will entail some primary data collection because the quantity and duration of therapies may not be reliably ascertained from Medicare claims data. The data collection plan is being developed pursuant to an assessment of the form in which most facilities maintain their records, and nurses are being recruited to abstract medical records. A key issue that will be analyzed is whether the probability of discharge or transfer changes under case-mix-adjusted prospective payment and what circumstances surround discharges or transfer from nursing facilities.

Implementation of the Home Health Agency Prospective Payment Demonstration

Period: June 1990–November 1995.
Funding: $1,629,606.

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

Investigator: Henry Goldberg.

This contract implements and monitors the demonstration design for the Home Health Agency Prospective Payment Demonstration, which was developed under an earlier contract with Abt Associates, Inc. Under this project, two methods of paying home health agencies (HHAs) on a prospective basis for services furnished under the Medicare program will be tested. The prospective payment approaches to be tested include payments per visit by type of discipline (Phase I), and payments per episode of Medicare-covered home health care (Phase II). HHA participation is voluntary. In each phase, HHAs that agree to participate are randomly assigned to either the prospective payment method or to a control group that continues to be reimbursed in accordance with the current Medicare retrospective cost system. HHAs participated in the demonstration for 3 years.

Following an initial recruitment of HHAs, operations under Phase I were implemented on October 1, 1990. Forty-nine HHAs were recruited. All agencies under Phase I completed their 3-year participation by October 1994. An evaluation of Phase I was conducted by Mathematica Policy Research, Inc., through a separate contract (see 500–90–0047 in this edition of Active Projects Report. Recruitment for Phase II agencies began in Fall 1994. The implementation of Phase II, the per-episode payment phase, will be conducted by Abt Associates under a separate contract.

Evaluation of the Home Health Prospective Payment Demonstration

Period: September 1990–November 1995.

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

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

Investigator: Randall S. Brown, Ph.D.

The purpose of this contract is to evaluate Phase I of the demonstration designed to test the effectiveness of using prospective payment methods to reimburse Medicare-certified home health agencies (HHA) for services provided under the Medicare program. In Phase I, a per visit payment method that sets a separate payment rate for each of six types of home health visits (skilled nursing, home health aide, physical therapy, occupational therapy, speech therapy, and medical social services) is being tested. Mathematica Policy Research is evaluating the effects of this payment method of HHAs' operations, service quality, and expenditures. The awardee is also analyzing the relationship between patient characteristics and the cost and utilization of home health services.

By October 1994, all demonstration agencies exited the demonstration. Mathematica has completed their evaluation. The article "Do Preset Per Visit Payment Rates Affect Home Health Agency Behavior?" by Phillips, B.R., Brown, R.S., Bishop, C.E., and Klein, A.C. discusses preliminary results from Phase I of the demonstration and appears in the health Care Financing Administration, Volume 16, Number 1, pages 91–107, Fall 1994. Findings from the full demonstration suggest that per visit prospective payment had no

significant effect on quality of care, selection and retention of patients, cost per visit, visit volume, use of non-Medicare services, and use and reimbursement of Medicare-covered services. But it appears that treatment agencies may have responded to the opportunities to earn profits under the demonstration by increasing their volume of visits faster than they would have in the absence of prospective ratesetting.

Phase II implementation of the Home Health Agency (HHA) Prospective Payment Demonstration

Period: September 1995–September 1999.

Funding: $1,811,184.

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

Investigator: Henry Goldberg.

This contract implements and monitors Phase II of the Home Health Agency (HHA) Prospective Payment Demonstration. Under phase II, a single payment per episode approach will be tested for Medicare-covered home health care. HHA participation is voluntary. It is expected that approximately 100 agencies in California, Florida, Illinois, Massachusetts, and Texas will participate in the demonstration. HHAs that agree to participate will be randomly assigned to either the prospective payment method or a control group that continues to be reimbursed in accordance with the current Medicare retrospective cost system. HHAs will participate in the demonstration for 3 years.

Phase II recruitment began in Fall 1994 under a previous contract with Abt Associates, Inc. The HHA entered into the demonstration at the beginning of their fiscal years. Several HHAs began receiving per-episode payments in June 1994, with the majority entering the demonstration in January 1996. The episodic payment rates are prospectively set for each HHA, reflecting their previous practice and cost experience. Rates are to be adjusted annually. As a protection to both the HHAs and the Medicare program, there will be retrospective adjustments for sharing of gains or losses and for changes in an HHA's projected case mix.

Evaluation of Phase II of the Home Health Agency Prospective Payment Demonstration

Period: September 1994–September 1999.

Funding: $3,528,408.

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

Investigator: Barbara Phillips, Ph.D.

This contract will evaluate Phase II of the Home Health Agency Prospective Payment Demonstration. This demonstration is testing two alternative methods of paying home health agencies (HHA) on a prospective basis for services furnished under the Medicare program. The prospective payment approaches being tested include payments per visit by type of HHA visit discipline (Phase I) and payment per episode of Medicare-covered home health care (Phase II). Implementation of Phase II, which will test the per episode payment approach, is scheduled to begin in Spring 1995. HHAs that agree to participate are randomly assigned to either the pro-

spective payment method or to a control group that continues to be reimbursed in accordance with the current Medicare retrospective cost system. HHAs will participate for 3 years. The evaluation will combine estimates of program impacts on cost, service use, access, and quality, with detailed information on how agencies actually change their behavior to produce a full understanding of what would happen if prospective payment replaced the current cost-based reimbursement system nationally. The findings will indicate not only the overall effects of the change in payment methodology, but also how the effects are likely to vary with the characteristics of agencies and patients. This information will be of great value for estimating the potential savings from a shift to prospective payment for home health care, for indicating where potential savings from a shift to prospective payment for home health care, for indicating where potential problems with quality of care might exist, and for identifying types of patients who might be at risk of restricted access to care as a result of their need for an unusually large amount of care. Because of the relatively small number of agencies participating, the use of qualitative information obtained in discussions with agencies concerning their characteristics and behavior will be essential for avoiding erroneous inferences. The first round of site visits to participating agencies has been completed.

Quality assurance for Phase II of the Home Health Agency Prospective Payment Demonstration

Period: September 1995–September 2000.

Funding: $2,799,265.

Contractor: Center for Health Policy Research, 1355 South Colorado Boulevard, Suite 306, Denver, CO 80222.

Investigator: Peter W. Shaughnessy, Ph.D.

This contract provides for developing and implementing a quality review mechanism for use by home health agencies (HHAs) participating in Phase II of the Home Health Agency Prospective Payment Demonstration. This demonstration is testing two alternative methods of paying HHAs on a prospective basis for services furnished under the Medicare program. The prospective payment approaches being tested include payments per visit by type of discipline (Phase I), and payments per episode of Medicare-covered home health care (Phase II). To ensure that incentives created under Phase I did not result in the provision of inadequate care to Medicare beneficiaries, the New England Research Institute, Inc. (NERI) implemented a quality assurance (QA) approach that utilized patient record reviews for a sample of Medicare beneficiaries. However, since one of the goals of Heath Care Financing Administration's Medicare Home Health Initiative is to move toward the implementation of an outcome-based, patient-centered (QA) system for Medicare home health, it was felt that the second phase of this demonstration provided an opportunity to incorporate a scaled-down version of the outcome-based program developed by the Center for Health Services Research at the University of Colorado.

During the first project year, the contractor developed software for electronic submission of (QA) data from participating home health agencies, completed preliminary agency training, initiated

the collection of (QA) data, developed and implemented a data receipt tracking and control system, and has continued to provide additional technical assistance and retraining for agencies as necessary.

Design and Implementation of Medicare Home Health Quality Assurance Demonstration

Period: September 1994–May 1999.

Funding: $3,234,881.

Contractor: Center for Health Policy Research, 1355 South Colorado Boulevard, Suite 706, Denver, CO 80222.

Investigator: Peter W. Shaughnessy, Ph.D.

Currently, Medicare's home health survey and certification process is primarily focused on structural measures of quality. Although this process provides important information about home health care, an approach based on patient outcome measures would substantially increase the Medicare program's capacity to assess and improve patient well-being. To address this need, the Medicare home health quality demonstration will test an approach to developing outcome-oriented quality assurance and promoting continuous quality improvement in home health agencies. The demonstration is designed to serve two purposes: increase Health Care Financing Administration's capacity to assess the quality of Medicare home health care services and increase home health care agencies' ability to systematically evaluate and improve patient outcomes. The proposed quality assurance approach would complement existing home health certification and review programs and could be used with current survey and certification and peer review organization intervening care screen approaches. The study's conceptual framework for home health quality assessment is based on home health outcomes measures developed under a HCEA-funded study by the University of Colorado, entitled "Development of Outcome-Based Quality Measures in Home Health Services" (Contract No. 500–88–0054). Fifty agencies have been recruited for this demonstration and began demonstration operations in January 1996. In early 1997, agencies will receive their first outcome reports.

Project demonstration and evaluating alternative methods to assure and enhance the quality of long-term care services for persons with developmental disabilities through performance-based contracts with service providers

Period: September 1994–September 1997.

Funding: $800,000.

Grantee: Minnesota Department of Human Service, Health Care Administration, 44 Lafayette Road, St. Paul, MN 55155–3853.

Investigator: Elaine J. Timmer.

The purpose of this project is to determine whether and how well the implementation of new approaches to quality assurance, with outcome-based definitions and measures of quality, will replace the input and process measures of quality and, in the process, contribute to improving the quality of life of persons with developmental disabilities. The Minnesota Department of Human Services will seek Federal authority to waive necessary provisions of the intermediate care facilities for the mentally retarded (ICF–MR) regula-

tions to permit alternative quality assurance mechanisms in selected demonstration, residential, and support service programs. The department will enter into performance-based contracts with counties and participating ICF–MR providers. These contracts will specify the amount and conditions of reimbursement, requirements for monitoring and evaluation, and expected client-based outcomes. These client-based outcomes will be determined by the client and by the legal representative, if any, and with the assistance of the county case manager and provider. Some desirable outcomes include enhancement of consumer choice and autonomy, employment, and integration into the community. Criteria for measuring participating agency achievement will be drawn from, but not limited to, the outcome standards developed by the National Accreditation Council on Services for Persons with Developmental Disabilities; the "values experiences" of Frameworks for Accomplishment; and the goals established in Personal Futures Plans, Essential Lifestyle, and Person-Centered planning. According to the proposed quality assurance framework, monitoring of individual outcomes will be done jointly among family members, case managers, and other members of the local review team on a quarterly basis.

The award was made to Minnesota Department of Human Services on September 30, 1994. The first year of the cooperative agreement was used to further develop the demonstration. In December of 1995, the State was granted a section 1115 waiver to implement the demonstration.

Significant progress has been made toward meeting the program objectives. During the first operational year the following goals were achieved: (1) the establishment of baseline data on outcome indicators to be used for the purpose of establishing performance target for the second operational year; (2) The development of Quality Enhancement Teams to conduct the annual performance reviews. These teams are comprised of consumers, advocates, volunteers, and state staff; (3) Training and technical assistance was provided to all parties involved in the project's implementation to ensure that they could successfully fulfill their roles in the new outcome-based ICF/MR service delivery system; and (4) the first phase of the qualitative/case study review of the project's implementation was completed.

Several approaches have been taken to develop alternative means of ensuring that quality services are provided. Providers were granted variances to existing State licensing rules governing ICFs–MR, waived services, semi-independent living services and day training and habilitation services; waiver to parts of the rule licensing supervised living facilities; and changes to the statute governing case management through an established reform process.

The University of Minnesota is under contract with the State to provide project participants with technical assistance and training in the following areas: (1) personal futures planning; (2) self determination; and (3) organizational management and change.

Minnesota's Department of Human Services entered into a 3-year contract with the University of Minnesota Institute on Community Integration for the evaluation of the performance-based contracting demonstration project It is central to this demonstration and its evaluation to be able to establish that the alternative

quality assurance approaches improve or at least do not decrease the quality of life and services for the persons involved. This evaluation will include both process and outcome components. The process evaluation will describe and evaluate the procedures and activities undertaken to develop alternative outcome-based quality assurance programs. The process evaluation is by its nature qualitative, relying heavily on interviews with key people in the process of developing, implementing and otherwise being affected by the approaches being developed. Other qualitative data collection will include on-site direct observation and document review.

The outcome evaluation component of the demonstration is primarily a quantitative data collection activity seeking to obtain objective quantifiable measures of the products of the programs and services under the alternative assurance programs. Quantitative measures will include frequencies of different types of activities, access to, utilization and satisfaction with the services provided, ratings of changes in the content, quality and person-centeredness of service plans, nature and frequency of social relationships and so forth. Process and outcome evaluation components will be examined independently in descriptive analyses, but also inferentially to determine if any process variables (independent) may be associated with outcomes (dependent variables). A control condition will also be established. A matched group sample for comparison of demonstration and non-demonstration group outcomes will be drawn from Minnesota samples currently participating in the Minnesota Longitudinal Study and the 1992 participants in the independent assessment of Minnesota's Medicaid Home and Community Based Services waiver program.

Synthesis of unmet need for log-term care services

Period: June 1991–August 1995.

Funding: $27,400.

Contractor: Lewin/VHI, Inc., 9302 Lee Highway, Suite 500, Fairfax, VA 22031.

Investigator: David Kennell.

The purpose of this study is to conduct a literature review and prepare a synthesis of previous work in the area of unmet need for long-term-care services. This project concentrated on identifying unmet need using secondary analysis of survey data. Included is an analysis of data from the National Long-Term Care Surveys, the 1984 Supplement on Aging, the Longitudinal Study of Aging, and the Channeling demonstration projects. This study explores possible measures that can be constructed from national databases to assess unmet need for long-term-care services. The study evaluates the merits of alternative measures, establishes, definitions of unmet need, using survey data, and then develops a framework for comparing this analytic work with earlier studies. This work was completed by Barbara Lyons of the John Hopkins University School of Hygiene and Public Health under subcontract to Lewin/VHI, Inc. The final report has been received and is under review.

Combining formal and informal care in serving frail elderly people

Period; June 1992–December 1995.

Funding: $93,700.

Contractor: Lewin/VHI, Inc., 9302 Lee Highway, Suite 500, Fairfax, VA 22031.

Investigator: David Kennell.

The purpose of this study is to determine whether formal care substitutes for or complements informal care. To determine the relationship between formal care and informal care, a data set generated by the management agency Connecticut Community Care, Inc. (CCCI) is analyzed. CCCI conducts patient assessments of all publicly supported long-term-care patients in Connecticut This dataset offers a unique opportunity to conduct an in-depth longitudinal analysis of the effect of providing formal care on the provision of informal care for a large population of elderly persons. Although surveys have repeatedly found that older persons strongly prefer community services to services offered in nursing homes, policymakers have resisted a major expansion of home-care services even though community services are usually less expensive than nursing home services. The most important reasons for this resistance is the fear that a publicly funded home-care program will encourage family caregivers of the elderly to substitute formal care for informal care. This project is complete and is included in the proceedings from the Brooking's Conference, *Persons with Disabilities.* This publication is available from the Brooking's Institute.

Characteristics and outcomes of persons screened into Connecticut's 2176 Program

Period: June 1992–November 1994.

Funding: $132,400.

Contractor: Lewin/VHI, Inc., 9302 Lee Highway, Suite 500, Fairfax, VA 22031.

Investigator: David Kennell.

In recent years, a major focus of research on home and community based care (HCBC) has been on the number of persons who would be eligible for services based on dependencies in activities of daily living (ADLs). While previous researchers have estimated the size of beneficiary populations under different eligibility standards, little is known about the number of eligibles who would actually participate in HCBC programs. This project examines why 20 percent of persons meeting ADL requirements for eligibility did not participate in the Medicaid 2176 program in Connecticut. The subsequent use of long-term-care services by these nonparticipants is compared to the use of services by participants in the Connecticut Medicaid 2176 program. This project has been completed. Findings from the study have been published as part of the conference proceedings from the Brooking's Institute. The publication, *Persons with Disabilities,* is available for the Brooking's Institute.

Issues in long-term care policy for the disabled elderly with cognitive impairment

Period January 1992-March 1995.

Funding: $180,000.

Contractor Lewin/VHI, Inc., 9302 Lee Highway, Suite 500, Fairfax, VA 22031.

Investigator: David Kennell.

This study utilizes the National Long-Term Care (NLTC) surveys to analyze issues related to informal caregiving to cognitively impaired elderly people, the mix of formal and informal services they use, and the risk of institutionalization. The main question addressed is whether the presence of such factors as behavioral problems or conditions (e.g. incontinence) that imply special service needs affect the mix of services used or the risk of institutionalization. This work will be completed by Judith Kasper of the Johns Hopkins University School of Hygiene and Public Health under subcontract to Lewin/VHI.

The article, "Cognitive Impairment and Problem Behaviors as Risk Factors for Institutionalization," by Judith Kasper and Andrew D. Shore, describes the first part of this study and appears in the Journal of Applied Gerontology, 13(4):371–385, December 1994. The NLTC survey data were used to develop a predictive model for nursing home institutionalization that includes cognitive functioning and problem behaviors in addition to more commonly studied indicators, such as disability. As expected, cognitive impairment is a risk factor for institutionalization, controlling for other characteristics such as age, living arrangement, and use of paid in-home care. Four problem behaviors were investigated, but only one, Wanders/Gets Lost, contributed to the model. Among cognitively impaired persons, those who wander/get lost had a twofold risk institutionalization. The findings suggest the need to differentiate among difficult or problem behaviors and to further investigate those that arouse concerns about safety and require extensive supervision as risk factors for institutionalization The second part of this study examining survey data combined with Medicare claims is final.

Use of Long-Term Care Services by Mentally Ill Persons

Period: September 1994–December 1996.

Funding: $391,331.

Grantee: Center for Health Policy Research, Institute for Policy Research and Evaluation Pennsylvania State University, Office of Sponsored Programs, 110 Technology Center, University Park, PA 16802.

Investigator: Dennis Shea, Ph.D.

There has been a steady increase in the utilization of long-term-care services, particularly nursing homes, by mentally ill persons following the closure of State and county mental hospitals during the 1960s and 1970s. This project examines the determinants of long-term care service use by the mentally ill population. Data from the National Medical Expenditures Survey (NMES) Institutional Component, the Medicare Current Beneficiary Survey (MCBS), and the National Nursing Home Survey (NNHS) are being used to model long-term-care use by this population. Information on patients, providers, and system characteristics, together with a more complete description of current use patters, will help to identify the potential impacts of policy changes on use of services and total program costs.

Descriptive data from the Institutional Population Component of the 1987 National Medical Expenditure Survey (NMES) have been used to examine differences in nursing home expenditures by per-

sons with and without reported or diagnosed mental illness. The results presented in "Mental Illness and Nursing Home Use," presented at the 1995 Meetings of the Gerontological Society of America indicate the following:

Mental illnesses explain variations in service use, with the effects depending on how mental illness is defined and whether a resident or admission cohort is examined;

Newly admitted during home residents with a mental illness have higher charges due to lengths of stay that are 35 percent longer than non-mentally ill admissions.

Charges vary little between persons with or without a mental illness.

These results suggest that if future reimbursement policy in long-term care-settings is moving toward capitation, as has occurred in other settings, rates should take into account the longer stay associated with persons with mental illness.

Results from the initial descriptive analyses of the MCBS indicate that 5 years after the passage of the 1987 Nursing Home Reform Act, which mandated treatment of mental illnesses, there is a persistent level of untreated mental illness in nursing homes. Only 29 percent of nursing home residents with a mental illness were treated by mental health specialists during the year. Regarding the use of other long-term-care services, a significant relation has also been detected between diagnosis of a mental illness and home health use.

Synthesis of literature on effectiveness of special assistive devices in managing functional impairment

Period: August 1991–January 1996.

Funding: $32,600.

Contractor: Lewin/VHI, Inc., 9302 Lee Highway, Suite 500, Fairfax, VA 22031.

Investigator: David Kennell.

This synthesis has two components. The first is a description of the special assistive devices and a summary of how these devices are paid for under the current system. The second is a summary of the effectiveness of special assistive devices in managing functional impairments. This synthesis also discusses various policy options, which relate to alternative financing arrangements for special assistive devices. The analysis of assistive device usage is obtained using the 1984 Supplement on Aging and the 1990 National Health Interview Survey Supplement on Assistive Devices. This first draft has been received and is expected to be completed in January 1997.

Synthesis of literature on targeting to reduce hospital use

Period: September 1991–August 1995.

Funding: $30,000.

Contractor: Lewin/VHI, Inc., 9302 Lee Highway, Suite 500, Fairfax, VA 22031.

Investigator: David Kennell.

This study synthesizes the literature on targeting across a variety of types of programs, all of which have the goal of reducing hospital use. These programs include geriatric evaluation units, nurs-

ing home staffing enhancement programs, and hospital-based programs for discharge planning and transitional case management. Although targeting is an issue for all of these types of programs, little attention has been given to evaluating targeting criteria. This project has been subcontracted to Mathematica Policy Research, Inc. This review of the literature points to familiar gaps in the current health care system. The review discusses the lack of overall coordination and monitoring of care for the elderly, an insufficient level for primary and acute care for nursing home patients, poor access to a range of subacute services, a shortage of physicians with geriatric training for community-dwelling elderly persons, and insufficient efforts to reduce the highest cost diseases and complications that arise during hospitalization. The literature also suggests that several groups of elderly might benefit from such interventions as comprehensive geriatric assessment, enhanced hospital discharge planning, and the social health maintenance organization. These groups include individuals whose conditions are difficult to stabilize or who require regimens of medications or diet that must be monitored for compliance or change, individuals for whom medications are likely to lead to adverse events, and individuals facing nursing home placement without first being evaluated for rehabilitative potential.

Interrelationship of medical conditions in the nursing home population

Period: January 1994–December 1995.

Funding: $67,600.

Contractor: Lewin/VHI, Inc., 9302 Lee Highway, Suite 500, Fairfax, VA 22031.

Investigator: David Kennell.

This project, conducted in collaboration with the Health Care Financing Administration, uses concatenated Medicare provider analysis and review, skilled nursing facility (SNF), and minimum data set plus (MDS+) data to develop a richer profile of Medicare SNF patients. Data for all patients include their clinical conditions, their subsequent use of Medicare hospital and SNF services, and use of their non-Medicare-covered nursing home services. This is a pilot study that focuses on three States (Maine, Mississippi, and South Dakota) and on patients with selected conditions (congestive heart failure, hip fracture/replacement, chronic obstructive pulmonary disease, pneumonia, and cardiovascular attack). This study also examines the characteristics of nursing home patients who are under 65 years of age. This work has been subcontracted to The Urban Institute. A draft paper has been received and reviewed. The project is expected to be completed in December 1996.

Medicare Catastrophic Coverage Act evaluation: Impact on industry

Period: September 1989–September 1994.

Funding: $993,199.

Contractor: Urban Institute, 2100 M Street, NW., Washington, DC 20037.

Investigator: Marilyn Moon, PhD.

A series of analyses of the effects of the Medicare Catastrophic Coverage Act (MCCA) of 1998 on hospitals, nursing homes, and

home health agencies. Two final reports summarize the work of the contract:

Moon, M., Dubay, L. Kenney, G., Liu, K., Marsteller, J., and Norton, S.: "Medicare Catastrophic Coverage Act Evaluation: Preliminary Analysis of Impact on Industry: Final Report." September 1995; and

Liu, K., Kenney, G., Wissoker, D., and Marsteller, J.: "The Effects of the Medicare Catastrophic Coverage Act and Administrative Changes on Medicare SNF Participation and Utilization: 1987–1991." Washington, D.C., June 1995.

Findings

Nursing facilities.—The Health Care Financing Administration's claims data and nursing facility certification data were used in the study of changes in facility certification from non-Medicare SNF or intermediate care facility (ICF) to Medicare SNFs and changes in Medicare-certified beds, to determine how nursing homes increased or decreased their capacity to provide Medicare SNF services. Analysis findings are consistent with the national program statistics, both indicating large increases in the utilization of Medicare SNF days between 1987 and 1989, and a decline in covered days between 1989 and 1991. The magnitude of the change between 1987 and 1989 strongly suggests that the MCCA, along with the clarification of coverage guidelines, had an impact on the SNF benefit during this period. Multivariate analyses demonstrated differential responses in the provisions of SNF services by provider characteristics, i.e., proprietary and larger nursing homes, rather than government-owned or smaller nursing homes, were the most responsive to the MCCA and coverage guidelines. Freestanding SNFs had greater increases in covered days per bed, admissions per bed and length of stay between 1987 and 1989 than hospital-based SNFs. Some of the differences in growth were probably attributable to the transfer of Medicaid residents of freestanding SNFs to Medicare payment status: hospital-based facilities generally not providing long-term nursing care and, hence, having fewer patients to convert to Medicare SNF. The increase in Medicare patients after the implementation of these policy changes was offset by a disproportionate decrease in private-pay patients, indicating that the policies increased the role of public financing for nursing home care. Nursing homes in states that employ a case-mix adjustment in setting their Medicaid nursing home payment were generally more likely than homes in other States to begin participating in Medicare and to have had greater growth in Medicare utilization. Medicare-certified service provision expanded greatly even with the repeal of the MCCA, and more nursing beds became certified for Medicare over the study period. The expansions in access are likely the consequence of (1) the coverage clarifications that may have served to make nursing homes more willing to serve Medicare patients because of greater certainty regarding Medicare coverage policy; (2) MCCA may have given nursing homes greater familiarity with Medicare; and (3) staffing data suggest that OBRA 1987 led to increases in staff levels, making it easier for more nursing homes to serve Medicare patients. Although Medicaid still dominates the financing in the nursing home industry, the policy and industry

changes have pushed Medicare more to the forefront of financing nursing home care.

Home health.—Analyses of the changing home health market in response to MCCA and other regulatory changes suggest a complicated set of relationships and causal factors. The descriptive analysis suggested an inverse relationship between SNF use and home health use. Similarly, the simultaneous regression results did not show a substantial number of Medicare enrollees shifting away from the Medicare home health benefit in favor of the Medicare SNF benefit as a result of MCCA. Although analyses found no offset between nursing home and home health utilization, they did show that larger increases in home health occurred in areas with higher Medicare discharges in diagnosis-related groups with high use of postacute care. Larger increases in home health use also occurred in areas with higher proportions of dually eligible enrollees. Findings that much of the growth in home health care was associated with less skilled agencies suggest that the service needs of new Medicare beneficiaries are more likely to involve personal care rather than specialized care such as physical therapy or medical services. Users of rehabilitation services seem to be similar to those using home health services across many dimensions; SNF users, in contrast, are older and more likely to be female and/or unmarried. The ratio of home health agencies per enrollee and nursing home bed moratoria had significant effects on use of health services. Home health agencies substantially expanded the scope of services offered between 1983 and 1989, with urban areas offering more comprehensive services than rural settings.

Hospitals.—Analyses concluded that MCCA decreased beneficiary out-of-pocket expenditures. Even though overall bad debt in hospitals increased, the bad debt for hospitals with the largest maternity load decreased, reflecting the impact of MCCA's Medicaid eligibility expansion for poor/pregnant women and their infants.

Medicare Catastrophic Coverage Act evaluation: Beneficiary and program impact

Period: September 1989–September 1995.

Funding: $2,846,906.

COntractor: Abt Associates Inc., 55 Wheeler Street, Cambridge, MA 02138.

Investigator: David Kidder, Ph.D.

MCCA of 1988 expanded and simplified Medicare hospital coverage effective January 1989, only to be repealed, effective January 1990. The legislation reduced Medicare beneficiary liability to one hospital deductible per year, eliminated the concept of "spell of illness," and eliminated the coinsurance calculations necessary under the original Medicare program. The legislation made the Part A Extended Care Benefit more generous by increasing the day limit on skilled nursing facility care from 100 to 150 days per year, and eliminated the prior 3-day hospital stay. The coinsurance requirements were revised, and the rate was lowered to 20 percent of the daily cost of nursing home care instead of being linked to the average cost of a day of hospital care. Also, the coinsurance was to apply only to the first 8 days of the stay, instead of applying to the 21st through 100th day. These changes meant that more bene-

ficiaries would qualify for coverage and that longer stays would be covered. The skilled nursing facility changes went into effect in January 1989 and were rescinded, effective January 1990. Changes to the Medicare hospice benefit, implemented in January 1990 and rescinded in January 1990, eliminated the 210-day lifetime limit on hospice benefits, but retained a cost limit. None of the other Medicare benefits (Part A or Part B or Drug) of MCCA were implemented, having been scheduled for implementation after the date that the provisions were repealed. The Medicaid provisions of the legislation were left intact, including the payment of Part B premiums, deductibles and copayments for qualified (poor) Medicare beneficiaries, and mandatory Medicaid coverage for pregnant women and their infants with income of up to 100 percent of the Federal poverty level. (The coverage was phased in—75 percent by July 1989 and 100 percent by July 1990).

The evaluation contract comprised a series of research projects related to the analysis of Medicare benefit changes and Medicaid beneficiary expansions introduced by the Medicare Catastrophic Coverage Act (MCCA) of 1988. The analyses focused on the Medicare benefit changes in skilled nursing care and hospice care. The analyses also addressed the MCCA-introduced payment of Part A and Part B premiums, and the deductibles and copayments for low-income qualified Medicare beneficiaries by State Medicaid programs. Data on use in a private nursing home chain were studied, and nursing home episodes for Medicare beneficiaries are identified through a linkage of Part A and Part B bills. Post-hospital use was studied through two tracer conditions-stroke and hip fracture. The Medicaid analyses primarily focused on the effects of the expansions for pregnant women and their infants. Analyses of birth and death records were conducted on national vital statistics data; Missouri birth and infant death data were linked with Medicaid eligibility and utilization data and analyzed for changes in Medicaid enrollment of pregnant women and the birth outcomes of their infants. Analysis of a year of infant health care utilization includes data from birth certificates and mothers' Medicaid eligibility. A trend analysis of Massachusetts hospital discharge data focuses on shifts in Medicaid use, lengths of stay, severity of birth outcomes, and neonatal intensive care unit use before and after the MCCA legislation.

Two final reports summarize the findings:

(1) Laliberte, L., Mor, V., Berg, K., Banaszak-Holl, J., Calore, K., Intrator, O., and Hiris, J., "Medicare Catastrophic Coverage Act Evaluation: The Impact of the Medicare Catastrophic Coverage Act on the Long-Term Care System." June 1995. and

(2) Coulam, R.F., Cole, N., Irvin, C., Kidder, D., and Schmitz, R.J.: "Evaluation of the Medicare Catastrophic Care Act: Final Report, "December 19, 1995, which summarizes the MCCA impacts on maternal and child health programs and beneficiaries.

All reports are being prepared for submission to the National Technical Information Service.

Long-Term Care Studies (Section 207)

Period: September 1989–March 1996.
Funding: $3,790,000.

Contractor: Lewin/VHI, Inc., 9302 Lee Highway, Suite 500, Fairfax, VA 22031–1207.

Investigator: David Kennell.

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

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

How the Medicare beneficiaries' characteristics affect their use of institutional and noninstitutional LTC services;

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

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

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

With the repeal of the Medicare Catastrophic Coverage Act of 1988, this project was no longer congressionally mandated. The following updates the status of each of the studies, indicating which reports are final and those that are in draft or pending final review. The final reports are as follows:

"Analysis of Choice Processes in Capitated Plan Enrollment: Statistical Models for Evaluation of Voluntary Enrollment to Long-Term Care Demonstration Projects,"

"Analysis of Transitions in the Characteristics of the Long-Term Care Population"

"Case Studies of Medicaid Estate Planning"

"Consumer Protection and Private Long-Term Care Insurance"

"Elderly Wealth and Savings: Implications for Long-Term Care"

"Health Care Service Use and Expenditures of the Noninstitutionalized Population"

"Consumer Protection and Private Long Term Care Insurance; Key Issues for Private Long-Term Care Insurance"

"Issues in Long Term Care for the Disabled Elderly with Cognitive Impairment"

"Nursing Home Payment by Source: Preliminary Statistics from the Medicare Current Beneficiary Survey"

"Potential of Coordinated Care Targeted to Medicare Beneficiaries with Medicaid Coverage"

"Regional Variation in Home Health Episode Length and Number of Visits Per Episode"

"Simulations of Skilled Nursing Facility Payment Options"

"State Responses to Medicaid Estate Planning"

"Synthesis of Financing and Delivery of Long-Term Care for the Disabled Nonelderly"

"Synthesis of Literate on Targeting to Reduce Hospital Use"

"Synthesis of the Nursing Home Bed Supply"

"Synthesis of Unmet Need for Long-Term-Care Services"

A conference to present selected findings was held in November 1994 and the conference proceedings have been published as Persons with Disabilities: Issues in Health Care Financing and Service Delivery. This is available from the Brookings Instute and HCFA's Office of Research and Deomonstrations. Papers included in this book are:

"Long-Term Care: The View from the Health Care Financing Administration"

"Private Long Term Care Insurance: Barriers to Purchase and Retention"

"Medicaid Estate Planning: Case Studies of Four States"

"Implications of Health Care Financing, Delivery and Benefit Design for Persons with Disabilities"

"Program Payment and Utilization Trends for Medicare Beneficiaries with Disabilities"

"Cognitive Impairment in Older People and Use of Physician Services and Impatient Care"

"Catastrophic Costs of Long Term Care for Elderly Americans"

"Characteristics and Outcomes of Persons Screened in Connecticut's 2176 Program"

"Combining Formal and Informal Care in Serving Frail Elderly Persons"

"Regional Variation in the Use of Medicare Home Health Services"

"Long Term Care for the Younger Population: A Policy Synthesis"

Studies currently in progress are:

"Catastrophic Health Care Expenditures and Medicaid Coverage Among Community Residents"

"Synthesis of Nursing Home Reimbursement Options"

"The Effect of Geographic Variation on Medicare Capitation for the Social HOM, PACE, CNO"

"Synthesis of Literature on Effectiveness of Special Assistive Devices in Managing Functional Impairments"

"Catastrophic Costs and Medicaid Spenddown"

"Costs of Medicare SNF Therapy Services"

"Longitudinal Health Care Use and Expenditures of Disabled"

"Interrelationship of Medical Conditions in the Nursing Home Population"

"An Analysis of Post-Acute Care and Therapy Services Using the HCFA Episode Database, Post-Acute Portion"

Final reports on these projects are expected to be completed in Winter 1996.

Analysis of post-acute care and therapy services using the Health Care Financing Administration Episode Database

Period: August 1994–April 1995.

Funding: $138.300.

Contractor: Lewin/VHI, Inc., 9302 Lee Highway, Suite 500, Fairfax, VA 22031.

Investigator: David Kennell.

This two-part study uses the Health Care Financing Administration Episode Database to do the following:

Update earlier research on post-hospital care and rehabilitation following hospital admissions with more recent data;

Examine trends in use over time by comparing the 1992 findings to several RAND analyses and a Lewin/VHI analysis on therapy services conducted for the American Association for Retired Persons;

Analyze the use of rehabilitation/therapy services across settings; and

Contribute to the discussion of policy and payment implications of increased use of post-acute services.

Tabulations on rehabilitation are under way. The post-acute analysis is expected in January 1997.

Synthesis of the nursing home bed supply

Period: May 1991–September 1994.

Funding: $49,000.

Contractor: Lewin/VHI, Inc., 9302 Lee Highway, Suite 500, Fairfax, VA 22031.

Investigator: David Kennell.

Analyses have shown that there is excess demand for using home care. Part of this excess demand is attributed to State-imposed constraints on the supply of nursing home beds. States have imposed these supply constraints in an attempt to control their Medicaid budgets and to redirect resources from institutional to noninstitutional care. This synthesis addresses:

How much variation is there in the supply of nursing home beds?

Why do variations in the supply of beds exist across States?

To what extent does a State's capital reimbursement system encourage/discourage sufficient investment of capital to meet its demand for new beds?

What is the relationship between certificate of need and capital replacement?

What is "excess demand" and how is it measured?

This report found that much of the attention paid to the adequacy of a State's supply of nursing home beds focuses on the effect that supply has on access to care and often ignores important demand-side issues. One of these issues, the subsidization of health care expenses for Medicaid beneficiaries, results in excess demand for nursing home services by Medicaid beneficiaries, who are encouraged to demand more services than they otherwise would. This study found that, in general, access problems do not exist for private patients. However, access problems do exist for some Medicaid beneficiaries, especially for heavy-care persons with head injuries, with behavioral problems, or who need ventilators. Since each State has a unique long-term-care system, measures of the adequacy of the supply of nursing home beds in one State may not accurately measure the adequacy of supply in another State. Further-

more, given the differences in programs, laws, and market conditions across States, policies that help control long-term-care expenses in one State may not necessarily be appropriate for other States.

Program payments and utilization trends for Medicare beneficiaries and disabilities

Period: December 1992–November 1994.

Funding: $175,300.

Contractor: Lewin/VHI, Inc., 9302 Lee Highway, Suite 500, Fairfax, VA 22031.

Investigator: David Kennell.

This study is an extension of the analyses of the acute care costs of chronically disabled persons completed using the 1984–89 National Long-Term Care Survey (NLTCS). This analysis employs recently released 1989 NLTCS data to examine possible cost shifts for groups of persons with very different levels of health and functioning. Analyses were made of seven different categories of Medicare service (short-stay hospital, home health agency, skilled nursing facility, physician, outpatient, durable medical equipment, and renal therapy) for 1982 to 1990 using Medicare records linked to data on community and institutional residents from NLTCS 1982, 1984, and 1989. The purpose of the combined survey and administrative record analyses was to ascertain how the chronic health and functional characteristics of community and institutional residents using Medicare-reimbursed services changed over the period and how those changes related to the use of each of seven categories of Medicare services. Over this period, a number of regulatory and legislative changes had been made in the Medicare system that altered the use of different services by persons with specific health and functional profiles. The final report is included in the proceedings from the Brookings Conference entitled,: "Persons With Disabilities". This is available from The Brookings Institute.

Health Care Service Use and Expenditures of the Noninstitutionalized Population

Period: June 1993–February 1995.

Funding: $148,000.

Contractor: Lewin/VHI, Inc., 9302 Lee Highway, Suite 500, Fairfax, VA 22031.

Investigator: David Kennell.

Using data from the 1987 National Medical Expenditures Survey Household Component, this study addresses the following:

Differences in the utilization of health care services by disabled and nondisabled populations;

Whether community-based long-term-care services and expenditures substitute for acute-care expenditures for the population using community-based long-term-care services and the implications for costs;

Medicaid asset spenddown in the community; and

Trends in out-of-pocket expenditures and total health care expenditures for the elderly population with comparisons to the 1977 National Medical Care Expenditure Survey.

Analysis files have been constructed. A draft report has been completed. The final report is expected in January 1997.

Longitudinal health care use and expenditures of disabled persons

Period: January 1994–June 1995.

Funding: $143,000.

Contractor: Lewin/VHI, Inc., 9302 Lee Highway, Suite 500, Fairfax, VA 22031.

Investigator: David Kennell.

This project, conducted in collaboration with the Health Care Financing Administration, uses data from the Medicare Current Beneficiary Survey to examine health care use by persons with disabilities and the cost of providing these services. In this study, Medicare beneficiaries are categorized by different definitions of disability and by duration of disability. An analysis of the types of health care services and patterns of use for each subgroup is performed to determine the extent to which differences in such constructs are associated with differences in health care use and costs. This study is designed, in part, to provide information parallel with that from Lewin-VHI's analysis of National Medical Care Expenditure Survey data and Duke University's analysis of National Long-Term Care Survey data. This work has been subcontracted to The Urban Institute. A draft report has been received and reviewed. The final report is expected to be completed in December 1996.

Changes in population characteristics and Medicaid utilization/expenditures among children and adolescent Supplemental Security income recipients

Period: September 1994–September 1997.

Funding: $642,035.

Grantee: Massachusetts General Hospital Children's Service, Fruit Street, WACC715 Boston, MA 02114.

Investigator: James Perrin, M.D.

The Supplemental Security Income (SSI) program for children and adolescents has expanded in the past 5 years as a result of new Social Security Administration (SSA) guidelines for determining disability caused by mental impairments, new guidelines for determining childhood disability in general, and major outreach efforts by SSA to identify children with disabilities. The project has four main objectives:

Determine the current clinical characteristics of child and adolescent SSI recipients and the changes in these characteristics during the period of program expansion that began in the late 1980s;

Determine patterns of Medicaid utilization and expenditures among important clinical subgroups and examine changes in these patterns during the period of program expansion;

Examine the utilization trajectories and clinical characteristics of certain SSI recipient groups over time, including recipients with high-cost physical conditions such as cystic fibrosis, congenital heart disease, and spina bifida, and high-prevalence, low-cost conditions such as attention deficit disorder, hyperactivity, and learning disabilities; and

Determine the degree to which new recipients reflect shifting among Medicaid eligibility categories and the coverage and use of other insurance after getting SSI.

Data files construction is almost complete, and analyses on three of the six States are underway and three papers have been prepared:

"Secular Trends in Conditions Among Children Receiving SSI Benefits," which found that the number of SSI children in institutions increased minimally (3 percent), despite an 83 percent increase in SSI enrollment. The number of children with leukemia enrolled in SSI increased 33 percent, while those with other physical conditions increased over 70 percent; the number of children with mental retardation increased 615. In contrast, the number of SSI children with asthma increased dramatically (185 percent), but at a rate similar to the 162 percent increase in asthma among the non-SSI Medicaid population. A four-fold increase in Attention Deficit Hyperactivity Disorder among SSI enrollees is comparable to the four-fold increase in the condition among the non-SSI Medicaid enrolled children.

"The SSI Children's Disability Program: New Entrants of AFDC Upgrades?," found that about half of the children newly receiving SSI benefits had previously received AFDC benefits and thus experienced a major increase in monthly cash benefits. The other half of new SSI recipients were new to public insurance.

"The Supplemental Security Income Children's Disability Program: Impact of Program Growth on Population with High Expenditures." This preliminary analysis on only Georgia data found that the number of children with costs over $25,000 decreased very slightly from 4.3 percent of the SSI population in 1989 to 4.1 percent in 1992.

Changing roles of nursing homes

Period: September, 1994–January, 1998.

Funding: $831,182.

Grantee: Institute of Gerontology, University of Michigan, 300 North Ingalls Building, Room 900, Ann Arbor, MI 48109–2007.

Investigator: Brant Fries, Ph.D.

Although nursing homes have traditionally provided custodial care to the physically and cognitively impaired elderly, nursing homes are increasingly treating a more diverse and more clinically complex patient mix. Since the implementation of Medicare's prospective payment system for hospitals, growing numbers of nursing homes have begun caring for patients requiring "subacute" or post-acute care following a hospital stay. Between 1986 and 1993, the number of Medicare certified hospices in the U.S. grew from 355 to 1,445. From 1992 to 1995, the number of special care hospice units in nursing homes grew 100 percent, to 206.

This study examines two special nursing home populations: hospice patients and the chronically mentally ill (other than dementia). Several hypotheses regarding quality, use, and cost issues will be examined for both groups, such as that residents with chronic mental illness are more likely than are other similarly functionally

impaired residents, to experience increasing functional impairment, to have increased behavior problems and to be chemically restrained. It is hypothesized that mentally ill patients will have greater overall use of Medicare services than will non-mentally impaired nursing home residents with similar levels of functional impairment. The study utilizes 1993 data on the entire nursing home populations of eight states (Kansas, Maine, Mississippi, Nebraska, New York, Ohio, Pennsylvania, South Dakota, and Washington), about 250,000 residents, linked with the HCFA Survey and Certification Reports, the Medicare Part A and Part B claims files and the Area Resource File data. The Minimum Data Set for Nursing Home Resident Assessment and Care Screening is used to collect health status data on all residents in Medicaid-certified, Medicare-certified and dually certified nursing facilities. The hospice substudy will describe how nursing home hospice services are concentrated in particular regions, markets and facilities; compare rates of hospital use and costs of terminal care residents in nursing homes that do and do not use the Medicare hospice benefit; and describe the quality of life, including pain experience and analgesics prescribed among terminal cancer patients in nursing homes who are served by hospice care and those not so served.

A draft report, "Hospice in Nursing Homes," presents initial analyses of longitudinal files of 1991–95 nursing home survey data merged with patient assessment data. Multivariate analyses indicate that hospice special care units are located in relatively small and medium size facilities with low occupancy, high technological capacity and a higher skill level of staffing mix. Also, nursing home characteristics such as being a proprietary facility, not part of a chain and being located in a competitive environment are significantly related to having a hospice special care unit. The authors note that the growth in special care hospice units in nursing homes reflects changes in reimbursement mechanisms, increases in the proportion of all deaths occurring in nursing homes, and by nursing home efforts to specialize. A paper, "Special Populations in Nursing Homes: Residents with Chronic Mental Illness or Developmental Disabilities," is being presented at the November 1996 meeting of the Gerontological Society of America.

Predictors of access and effects of Medicare post-hospital care for beneficiaries 65 years of age or over

Period: September 1994–September 1996.

Funding: $502,614.

Grantee: Georgetown University, Division of Community Health Studies and Family Medicine, 3750 Reservoir Road, NW., Washington, DC 20007–2197.

Investigator: David L. Rabin, Ph.D.

As a consequence of regulatory and legislative changes in the late 1980s, Medicare post-hospital care (PHC) has become the most rapidly growing Medicare expenditure. PHC consists of home health care, inpatient skilled nursing facility care, and rehabilitation hospital care. The growth in use, changes in eligibility requirements, and the increase in Medicare costs have raised questions about equal access and the effects of PHC use. The literature on PHC suggests two important trends. A few Medicare prospective

payment inpatient hospital diagnosis-related-groups (DRG) account for most PHC, but within these DRGs large variations exist in use. Personal health, economic, sociodemographic, and household factors, as well as area and health system characteristics, and predictive of the use of PHC despite equal access under the Medicare program. This study uses the Medicare Current Beneficiary Survey to investigate three major research objectives:

Describe the personal, area, and health system characteristics of users and those of similar persons with unmet needs for PHC in order to access differences by gender, race, and income class and the potential for substitution of care modes;

Study the longitudinal effects of PHC on Medicare program costs and rehospitalization; and

Study the personal health effects associated with PHC.

Because of the delay experienced in releasing the Medicare Beneficiary Cost and Use File and the dependence of this project on the Medicare Current Beneficiary Survey Data, this project is initiating the data analysis phase. The final report is expected to be completed in June 1997.

Acute and long-term care: use, costs, and consequences

Period: September 1994–August 1997.

Funding: $595,787.

Grantee: The Urban Institute, 2100 M Street, NW., Washington, DC 20037.

Investigator: Korbin Liu, Ph.D.

This study will provide current information that will aid policymakers in developing options to better integrate acute, subacute, and long-term-care services. Data from the Medicare Current Beneficiary Survey will be used to address three issues: transitions among acute, subacute, and long-term care; catastrophic costs resulting from the use of those services; and interactions between Medicare and Medicaid home health care. The transitions analysis is designed to measure differences in the patterns of acute, subacute, and long-term-care use by the characteristics of Medicare beneficiaries, and to determine potential areas of access or quality of care problems. The cost analysis is designed to access the cumulative risks over 3 years of incurring catastrophic health care costs or experiencing Medicaid spenddown. The effect of the Qualified Medicare Beneficiaries program will be evaluated. The home health care analysis is designed to estimate the interactions and possible overlaps between two rapidly expanding public programs that finance similar services. The relationship between home health care use and costs and the personal characteristics of Medicare beneficiaries and the characteristics of geographic areas, including Medicaid policies, will be examined.

The first part of this project is complete. A final report, "Interactions between the Medicare and Medicaid Home Care Programs: Insights from States," has been produced and is available from Genevieve Kenny at the Urban Institute (202–857–8568). For the second phase, this project was dependent on the Medicare Current Beneficiary Survey's Cost and Use File. The file has been released, and the agency is in the data cleaning and analysis phase.

Regional variation in home health episode length and number of visits per episode

Period: July 1993–November 1994.
Funding: $168,600.
Contractor: Lewin/VHI, Inc., 9302 Lee Highway, Suite 500, Fairfax, VA 22031.
Investigator: David Kennell.
This study focused on two questions: (1) Why does the use of home health care vary across the regions? (2) Is there a corresponding variation across the regions in patient outcomes suggesting that lower levels of care lead to poorer outcomes for patients, or that higher levels lead to improved outcomes? This study used the Medicare claims files, the provider of services file, the area resource file, and the Regional Home Health Intermediary database to determine the contribution of three sets of factors to regional variation. These sets of factors are patient characteristics, supply of home health agencies and staff, and availability of alternatives to home health care. The final report has been received and is under review.

Sources of Medicare home health expenditure growth: Implications for control options

Period: February 1992–December 1995.
Funding: $210,706.
Grantee: Brandeis University, Heller Graduate School, Institute for Health Policy, 415 South Street, P.O. Box 9110, Waltham, MA 02254–9110.
Investigator: Christine Bishop, Ph.D.
The overall objective of the project is to develop and consider options for restraining home health expenditure growth. The project has two phases. First is to use secondary data to examine the composition of Medicare home health expenditure growth between 1985 and 1989 and 1989 to 1991 to attribute total growth to growth in persons served, visits per person, mix of visits, and visit charges; and to attribute growth to types of agencies by auspice and scale. Second is to examine data from the Regional Home Health Intermediary database to measure variation in types of patients served at intake, and the characteristics of high-use patients, by auspice and region, and to consider differences in mix and intensity of services provided.
The first phase has been completed, resulting in an overview, "Recent Growth in Medicare Home Health: Sources and Implications." An edited version of this analysis, "Recent Growth of Medicare Home Health," by Christine Bishop, Ph.D., and Kathleen Carley Skwara, was published in Health Affairs, 12(3):95–110, Fall 1993. The second phase, which has been delayed, will analyze the length of Medicare home health episodes using survival analysis techniques. A report for this phase is expected in 1997.

Maximizing the cost effectiveness of home health care: The influence of service volume and integration with other care settings on patient outcomes

Period: September 1994–December 1998.
Funding: $1,231,466.

Grantee: Center for Health Policy Research, 1355 South Colorado Boulevard, Suite 706 Denver, CO 80222.

Investigator: Peter W. Shaughnessy, Ph.D.

Home health care (HHC) is the most rapidly growing component of the Medicare budget in recent years. The rapid growth in home health use has occurred despite limited evidence about the necessary volume of HHC to achieve optimal patient outcomes and whether in substitutes for more costly institutional care. Little is known about integrating HHC with care in other settings to reduce overall health care costs. The central hypotheses of this study are that volume-outcome relationships are present in HHC for common patient conditions, that upper and lower volume thresholds exist that define the range of services most beneficial to patients, that and a strengthened physician role and better integration of HHC with other services during an episode of care can optimize patient outcomes while controlling costs. To test those hypotheses, a total of 3,600 patient records will be selected from agencies in 20 States. Trained data collectors at each agency will record patient outcomes and costs within the HHC episode. Long-term, self-reported outcomes will be assessed from telephone interview data at HHC admission and from 6-month followups. These primary data concerning patient status and outcomes will be combined with Medicare claims data over the episode of care to access the relationship between service volume in HHC and in both patient outcomes and costs. Analysis of data relating to physician involvement and the sequence of use of other providers will address issues of integration with other services. Eighty-nine agencies have been recruited for this project and are beginning to collect the necessary data.

Home care quality studies

Period: October 1989–September 1995.

Funding: $2,848,782.

Contractor: The University of Minnesota, School of Public Health, D–351 Mayo Memorial Building, 420 DeLaware Street, SE., Box 197, Minneapolis, MN 55455–0392.

Investigator: Robert L. Kane, M.D.

This study examines quality of long-term care-services in community-based and custodial settings, and the effectiveness of (and need for) State and Federal protections for Medicare beneficiaries that ensure adequate access to nonresidential long-term-care-services and protection of consumer rights. The research design focuses on in-home care, examining traditional home health services that are reimbursed by Medicare and Medicaid, as well as personal care and supportive services that more recently have been covered by Federal and State sources of funding. Primary project tasks include the following:

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

Development and feasibility testing of a survey design measuring the extent of, need for, and adequacy of home care services for the elderly;

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

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

The first project task—development of a taxonomy of objectives—has been completed, and a report on this component has been received. Findings from this task are presented in the article, "Perspectives on Quality of Home Care" by Kane, R.A., Kane, R.L., Illston, L.H., and Eustis, N.N. in the Health Care Financing Review, 16(1):69–89, Fall 1994. Final reports have also been submitted on the remaining three project tasks (i.e., developing a survey to measure the adequacy of home care for the elderly, a study of variations in labor supply and related effects on home care quality, and an identification of best home care practices and promising quality assurance approaches). The final report for the project is currently under review.

Validation of nursing home quality indicators

Period: July 1992–September 1996.

Funding: $990,094.

Grantee: The MEDSTAT Group, 104 West Anapamu Street, Santa Barbara, CA 93101.

Investigator: Susan A. Flanagan, M.P.H.

This project is a continuation of a cooperative agreement to investigate the usefulness of claims data from Medicaid and Medicare administration record systems as sources of nursing home quality-of-care measures. The previous study involved retrospective analysis of 1987 Medicaid and Medicare claims data and facility deficiency data from Michigan and Tennessee. The objective of the current project is to validate these resident-level claims-based quality of care indicators (QCI) by recomputation of the claims-based indicators for California and Georgia using data for 1990. To complete the validation process, a sample of residents in a sample of nursing homes will be drawn for these two States, and the medical records for these patients will be reviewed by a team of physicians and nurses. The results of the record review will then be compared with the findings of the QCI algorithms to test the relationship of the QCIs to cited deficiencies and adverse outcomes.

This project has completed collection of medical record data from California and Georgia, and the data has been reviewed by nurse and physician evaluators. Initial analysis had been completed and a draft report of early study findings has been submitted. The final report is expected in early 1997.

Development of outcome-based quality assurance measures for small, integrated services settings

Period: July 1994–January 1996.

Funding: $22,750.

Contractor: The Accreditation Council, 8100 Professional Place, Suite 204, Landover, MD 20785.

Investigator: James Gardner, Ph.D.

The purpose of this contract is to determine the cost of applying outcome measures in small, integrated service settings. This study will provide a database to maintain information on quality reviews of organizations that serve people with disabilities, an analysis of individual and organizational variables that relate to desirable outcomes, and a final report that analyzes quality reviews conducted in accordance with the outcome-based performance measures developed by the Accreditation Council on Services for People with Disabilities. The results will be used to assess the quality of services in facilities serving people with chronic mental illness, physical challenges, and mental retardation in diverse settings such as supported independent living or intermediate care facilities for the mentally retarded. Of particular importance is the assessment of the extent to which the outcome-based performance measures can coexist with the traditional quality assurance variables, such as abuse, neglect, safety, health, and physical and psychological welfare.

During the period September through December 1994, seven organizations participated in the Accreditation Council's review process. During these reviews, staff from the Accreditation Council interviewed 54 people served by the seven organizations. A total of 28 organization variables (e.g., types of services provided, license type, disabilities of people served, prior accreditation status) were analyzed with regard to outcome scores. Analysis of outcome data was also performed on the characteristics of the individual people who were interviewed. These characteristics include age, sex, disability, living arrangement, communication method, services obtained, and source of person's funding. A final report is under review.

Elderly wealth and savings: Implications for long-term care

Period: June 1991–August 1995.

Funding: $126,000.

Contractor: Lewin/VHI, Inc., 9302 Lee Highway, Suite 500, Fairfax, VA 22031.

Investigator: David Kennell.

This study synthesizes what is known about the wealth of the elderly and includes recent empirical research conducted using the 1984 and 1989 Panel Study of Income Dynamics and the 1983, 1986, and 1989 Survey of Consumer Finances. The information in this study is pertinent to the issue of long-term care (LTC) for the elderly because much of the debate concerning expansion of the Federal role in LTC financing centers on the economic status of the elderly. A key issue in the debate is whether or not the elderly have the financial resources to pay for their own LTC cost directly or through the purchase of private LTC insurance.

The main finding of the synthesis report is that the elderly, as a group, are doing well economically. Incomes of the elderly are lower than incomes of the nonelderly, but this gap narrows when taxes and other benefits (i.e., Medicare) are considered. Furthermore, the elderly have among the highest wealth holdings of any age group. However, the elderly face substantial economic risks, such as incurring unfunded catastrophic medical expenses, and leaving poverty is harder for the elderly than for the nonelderly.

This study also funds that existing theories on both whether and why the elderly save sharply disagree with one another. Testing these theories is challenging because data sources are usually poor or out of date, and many of the theories do not yield refutable hypotheses.

Catastrophic costs and Medicaid spenddown

Period: January 1993–May 1995.
Funding: $180,300.
Contractor: Lewin/VHI, Inc., 9302 Lee Highway, Suite 500, Fairfax, VA 22031.
Investigator: David Kennell.
This study uses data from the Medicare Current Beneficiary Survey (MCBS) to analyze the occurrence of catastrophic costs among the elderly resulting from Medicaid spenddown. The purpose of this study is to support the formulation of policy for health care reform for the elderly. Consequently, this study categorizes the causes of out-of-pocket costs for different types of acute and long-term-care services that may create financial hardships and identifies which subgroups of the elderly are likely to incur catastrophic costs. This work will be completed by the Urban Institute under subcontract to Lewin/VHI, Inc. Preliminary analyses have been completed. The final report is expected in January 1997.

Catastrophic costs of long-term care for elderly Americans

Period: December 1991–November 1995.
Funding: $50,000.
Contractor: Lewin/VHI, Inc., 9302 Lee Highway, Suite 500, Fairfax, VA 22031.
Investigator: David Kennell.
This study employs the Brookings/Intermediate Care Facility Long-Term Care Financing Model to examine both current and future financial burdens associated with long-term-care costs. This chapter focuses on the financial burden that out of pocket expenditures will have in the next 25 years, assuming that there are no changes in public or private financing. The results of these long term care spending projections included both nursing home and home health care. Catastrophic nursing home spending patterns of selected elderly groups, by age, gender, income financial status, length of stay and discharge status are also described. Findings from this study have been published in conference proceedings from the Brooking's Institute. These proceedings, *Persons with Disabilities*, is available from the Brooking's Institute.

Consumer protection and private long-term care insurance; Key issues for private long term care insurance

Period: December 1992–December 1994.
Funding: $130,000.
Contractor: Lewin/VHI, Inc., 9302 Lee Highway, Suite 500, Fairfax, VA 22031.
Investigator: David Kennell.
This study consists of a two-part analysis. The first is a policy-oriented synthesis of research conducted to date on long-term-care (LTC) insurance. The purpose of this synthesis is to serve as a

baseline of understanding for policymakers and to identify relevant issues at which future research should be directed. The second part focuses on regulatory issues. This part contains case studies of Arizona, California, Florida, Indiana, North Dakota, New York, Oregon, South Carolina, Texas, and Wisconsin, which have passed legislation to regular private LTC insurance, and summarizes how insurance companies have responded to this regulation. This project was carried out jointly by Lewin/VHI and the Brookings Institution.

The policy-oriented synthesis has been completed. This synthesis discusses the growth of the LTC insurance market from fewer than 50,000 policies in 1984 to nearly 3 million sold in 1992. Although this growth is significant, the market penetration is less than expected; approximately 5 percent of the elderly have LTC insurance, while 70 percent purchase Medigap policies. The study reviews potential reasons for limited market penetration, including consumer confusion, barriers to coverage, marketing and sales abuses, concern over product value, and regulation.

Synthesis of financing and delivery of long-term care for the disabled nonelderly

Period: June 1991–December 1995.

Funding: $30,000.

Contractor: Lewin/VHI, Inc., 9302 Lee Highway, Suite 500, Fairfax, VA 22031–1207.

Investigator: David Kennell.

This study synthesizes the current literature and information from various data sources on the financing and delivery of long-term care for the disabled nonelderly. This study also summarizes the current knowledge of demographic and economic characteristics of the disabled nonelderly, types of services and patterns of service used by the disabled nonelderly, how these services for the disabled nonelderly are paid, and other unique issues related to the disabled nonelderly. This work was completed by Joshua Wiener of The Brookings Institution under subcontract to Lewin/VHI, Inc. Findings from this project are present in the conference proceedings from the Brookings Institute, *Persons with Disabilities*. The proceedings is available from the Brookings Institute.

State response to Medicaid estate planning

Period: May 1992–May 1993.

Funding: $41,000.

Contractor: Lewin/VHI, Inc., 9302 Lee Highway, Suite 500, Fairfax, VA 22031.

Investigator: David Kennell.

The purpose of this report is to provide readers with an overview of recent State initiatives regarding Medicaid estate planning. Data for the report were collected primarily through telephone interviews with key personnel at Medicaid eligibility offices in 26 States. In those States where initiatives were under way, copies of recent legislation, regulations, task force reports, internal memoranda, and other documents were obtained and reviewed. This project was completed by SysteMetrics/MedStat under subcontract to Lewin/VHI, Inc.

The study found that many States are attempting to place limitations on asset transfers in an effort to restrict Medicaid estate-planning practices. Furthermore, States have expressed a strong desire for Federal clarification on Medicaid transfer-of-asset provisions and want additional Federal legislation that further restricts the transfer of assets.

Case studies of Medicaid estate planning

Period: April 1993–December 1994.
Funding: $200,000.
Contractor: Lewin/VHI, Inc., 9302 Lee Highway, Suite 500, Fairfax, VA 22031.
Investigator: David Kennell.
These case studies provide in-depth descriptive analyses of State policy responses to Medicaid estate planning, including the effectiveness of estate recovery programs. In addition, a methodology for conducting quantitative empirical studies that measure the extent of Medicaid estate planning activity and the relative cost-effectiveness of alternative State policy responses is presented. The data used were obtained from Medicaid eligibility offices in Connecticut, Florida, California, and New York. This project was completed by SysteMetrics/MedStat, under subcontract to Lewin/VHI, Inc. The report has been received and is under review.

Synthesis of reimbursement options

Period: September 1991–January 1996.
Funding: $77,600.
Contractor: Lewin/VHI, Inc., 9302 Lee Highway, Suite 500, Fairfax, VA 22031–1207.
Investigator: David Kennell.
The purpose of this synthesis is to assist the Health Care Financing Administration and other relevant policymakers in answering specific questions concerning nursing home reimbursement. The first part of the synthesis is organized into four sections: summary, overview of the Medicaid reimbursement system and State policy goals, design of the details of a reimbursement system, and analysis of options for capital reimbursement. The second part is organized into two sections:

Synthesis of research studies relevant to modifying the current method by which skilled nursing facilities (SNF) receive payments under Part A of the Medicare program;

Synthesis of research studies relevant to replacing the current system with a system under which Medicare SNF payment would be made on the basis of prospectively determined rates.

A draft report has been received. The final report is expected to be completed in January 1997.

Nursing home payments by source: Preliminary statistics from the Medicare current beneficiary survey

Period: May 1992–December 1994.
Funding: $55,500.
Contractor: Lewin/VHI, Inc., 9302 Lee Highway, Suite 500, Fairfax, VA 22031.

Investigator: David Kennell.

Although national estimates of nursing home expenditures have been derived from various databases, direct estimates of the distribution of nursing home patients by the amount of payment and by the source of payment have not been derived. This study is the first attempt to utilize a major source of new information on nursing home payment, the Medicare Current Beneficiary Survey, to estimate these distributions. This study provides an indication of the differences in Medicaid and private nursing home payments for 1992. Variations in payments by nursing home characteristics are also presented and the findings were compared with the National Health Accounts. This work has been subcontracted to Korbin Liu of the Urban Institute. This report has been submitted and is currently under review.

Costs of Medicare skilled nursing facility therapy services

Period: July 1993–December 1994.

Funding: $160,800.

Contractor: Lewin/VHI, Inc., 9302 Lee Highway, Suite 500, Fairfax, VA 22031.

Investigator: David Kennell.

Approximately two-thirds of all Medicare skilled nursing facility (SNF) stays involve physical, occupational, or speech therapy. The importance of therapy services to the Medicare SNF benefit suggests that changes over time in charges for this service, as well as the patterns of charges between Part A and Part B, need to be tracked. This study employs Medicare provider analysis and reviews SNF data to examine the characteristics of patients who receive high and very high-intensity therapy services. It also analyzes episodes of illness of Medicare patients who experience an SNF stay to elucidate the relationship between SNF use and providers of Medicare services. A draft report was submitted to the Office of Research and Demonstrations. The final report is expected to be completed by December 1996.

Case-mix adjustment for a national home health prospective payment system

Period: August 1996–January 1999.

Funding: $1,588,573.

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

Investigator: Henry Goldberg.

The primary focus of this study is to understand the variation that currently exists in terms of home health resource patterns and to use this information for the development of a case-mix adjustment system for a national home health prospective payment system. In this study, the Outcome and Assessment Information Set (OASIS) which has been developed for outcome-based quality assurance and improvement for Medicare home health agencies will be examined to see whether items included in this instrument will be useful for case-mix adjustment. Detailed information, including information on resource utilization and items needed for case-mix adjustment, will be collected from 60 to 90 agencies. This project is currently in its design phase.

Risk adjustment for Medicaid recipients with disabilities

Period: August 1996–July 1998.
Funding: $50,000.
Grantee: University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093.
Investigator: Richard Kronick, Ph.D.
The objective of this project is to develop a diagnostically based, risk-adjusted payment system that may be used by State Medicaid programs when contracting on a capitated basis with health plans for Medicaid recipients with disabilities. The project will use data from three States (California, Georgia, and Tennessee). In addition to developing a risk adjustor payment system, the authors will identify solutions to implementation problems that States are likely to encounter. Tape-to-tape data from California, Georgia, and Tennessee have been ordered. Once these data are received, the analysis phase of the project will begin.

National recurring data set project: Ongoing national state-by-state data collection and policy/impact analysis on residential services for persons with development disabilities

Period: October 1996–September 1997.
Funding: $35,000.
Award: Interagency Agreement.
Grantee: University of Minnesota, Institute of Community Integration, 150 Pillsbury Drive, SE., Minneapolis, MN 55455.
Investigator: Charlie Lakin, Ph.D.
This interagency agreement will support secondary data analyses and the production of a report that describes and updates the status of persons with mental retardation and related conditions (MR/RC) in institutional care facilities for the mentally retarded (ICF–MRs), Medicaid waiver programs, and nursing homes funded under the Medicaid program to assist in the evaluation of Medicaid services for persons with MR/RCs and to point out areas in need of reform. The report will include the following:

Background description of key Medicaid programs of interest;

State-by-state and national statistics on ICF–MRs, Medicaid home and community-based services, and nursing home use;

Description of the characteristics of ICF–MRs and their residents, with comparative statistics for noncertified facilities.

The University of Minnesota continues to collect data to produce its annual report on the status of the Medicaid programs that serve the developmentally disabled.

Long-term care survey

Period: September 1990–February 1993.
Funding: Interagency Agreement.
Awardee: National Institute on Aging, 9000 Rockville Pike, Bethesda, MD 20892.
Investigator: Richard Sussman.
The Office of the Assistant Secretary for Planning and Evaluation and the Health Care Financing Administration agree to transfer funds to the National Institute on Aging (NIA) to support an existing NIA grant to Duke University, Center for Demographic

Studies. This grant is entitled Functional and Health Changes of the Elderly, 1982–89. The National Long-Term Care Survey (NLTCS) is a detailed household survey of persons 65 years of age or over who have some chronic functional impairment (90 days or more). The survey has been administered 3 times. The first, conducted in 1982, was devised as a cross-sectional survey. The second, conducted in 1984, added a longitudinal component to the sample design. The third, administered in 1989, used the cohorts from the previous surveys in addition to persons becoming 65 years of age to form a nationally representative sample of impaired elderly persons. To facilitate the use of the database, these tasks related to the 1982, 1984, and 1989 surveys were performed under this agreement:

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

The public use version can be obtained from Michigan Archives by calling (313) 763–5011. The files are currently being matched with the HCFA administrative data to verify status (i.e., Medicare status and mortality). NIA is planning to repeat this study in 1999.

Long-Term care program and market characteristics

Period: February 1992–December 1995.

Funding: $808,047.

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

Investigator: Charlene Harrington, Ph.D.

This project will collect data on and study the effects of nursing home and home health care characteristics and markets on Medicare and Medicaid services in the 50 States. Primary and secondary data for the 1990–94 period will be collected to update earlier data on previous studies for the 1978–89 period. Through surveys, data will be collected on licensed nursing home bed supply and occupancy rates, State certificate of need programs, State pre-admission screening programs, and Medicaid nursing home and home health reimbursement. Data also are being collected on Medicaid waiver programs, Boren amendment litigation, provider characteristics, resident characteristics, and deficiencies of nursing homes. Analysis will provide detailed information on each State's current methodology for determining nursing home capital costs, the impact of proposed case-mix reimbursement on operating income, reimbursement methodology for freestanding subacute units, and Medicaid methodology used to reimburse for care provided in board and care homes, geriatric day care centers, and intermediate care facilities for the mentally retarded. A publicly accessible database will be developed that will provide a complete set of demonstration data for the period 1978–94.

This project has been completed. The second State data book presenting data on the long-term-care program and market character-

istics across the 50 States and the District of Columbia has been published by the Health Care Financing Administration as *State Data Book on Long-Term Care Program and Market Characteristics, 1993* Health Care Financing Extramural Report, HCFA Pub. No. 03366. U.S. Government Printing Office Washington, D.C. February 1995. The public use data base and documentation have been received and are being reviewed.

National Health Interview Survey Disability Supplement: 1994–95

Period: June 1993–June 1994.

Award: Interagency Agreement.

Awardee: Centers for Disease Control, National Center for Health Statistics, 6325 Belcrest Road, Room 850, Hyattsville, MD 20782.

Investigator: Owen Thornberry.

The Health Care Financing Administration (HCFA) transferred funds to the National Center for Health Statistics to support the implementation of the 1994/1995 disability survey as a supplement to the National Health Interview Survey. Although HCFA provides extensive support for the disabled through the Medicare and Medicaid programs, very little is known about this population. The National Health Interview Survey Disability Supplement (NHISDS) will be the first survey on the disabled in 15 years. The NHISDS will be conducted during calendar years 1994 and 1995, with approximately 250,000 people of the 96,000 sampled households. The survey will consist of two phases:

Phase I will screen the relevant populations and will collect basic descriptive information;

Phase II will obtain information on all house-hold members who experience limitations caused by a health condition.

Data from Phase I will be used to make estimates of the prevalence of disability and to determine eligibility for Phase II questionnaires. In Phase II, separate questionnaires will be given to adult and child respondents. This survey will be the first source of information to determine the size, characteristics, service use, and out-of-pocket costs for individuals will mental retardation and related conditions. The survey of children will provide information on the number, characteristics, severity, and effects on families of children with disabilities. This survey will collect information on income and assets, along with basic disability information, to better understand the characteristics of actual and potential Supplemental Security Income recipients. The information gathered from the NHISDS will be crucial for addressing a broad number of HCFA policy concerns affecting persons with disabilities.

Questionnaires for the disability supplement have been revised. Phase I interviews began in January 1994 and Phase II adult and children interviews began during Summer 1994. The first wave of data from Phase I is available.

FUTURE DIRECTIONS FOR LONG TERM CARE

During 1996, HCFA devoted substantial resources to the further development and implementation of demonstrations to develop, implement and evaluate new coordinated systems of care for beneficiaries with disabilities, develop more consumer centered and con-

trolled services, develop outcome oriented quality measures to improve the quality of care and to test the cost effectiveness of prospective payment systems for nursing homes and home health agencies.

We will continue our efforts to develop, operate and evaluate coordinated care systems for the frail elderly, as well as younger persons with disabilities in need of long term care, including the Program of All-inclusive Care for the Elderly demonstration, the Social Health Maintenance Organization demonstration, the Community Nursing Organization demonstration, the EverCare demonstration, the Minnesota Senior Health Options demonstration, and the Health Services for Children with Special Needs demonstration. We will also continue to work with States who are developing innovative service delivery and payment interventions for dually eligible demonstrations. We plan to release a grants announcement to select States interested in reforming service delivery for dually eligible individuals along areas of interest of importance to HCFA.

HCFA will continue to test alternative payment methods for long term care services through the continuation of the Home Health Agency Prospective Payment demonstration and the MultiState Nursing Home Case Mix and Quality demonstration.

We will also continue our development of models of care that provider beneficiaries with more direction and control of long term services. We plan to release a grants announcement to select providers to participate in the Consumer Directed Durable Medical Equipment demonstration. We will be working closely with the Assistant Secretary for Planning and Evaluation to further develop and implement the 4-State Cash and Counseling demonstration.

HCFA will continue the development and testing of outcome oriented measures of quality for nursing home and home health services, as well as long term care services of persons with developmental disabilities. We will also continue our efforts to develop a quality assurance system for the PACE program.

An important new area of research and demonstration activity will build from our post acute care research to develop and test more integrated, flexible systems of post acute care that construct services and payment around beneficiaries' health care needs and preferences. Work focused on assessment tools, payment methodologies, care management systems and outcomes measures will be initiated.

Another important area that will continue to be explored is alternative financing mechanisms for long term care. Although the majority of the elderly are covered by both Medicare and supplemental insurance, a large portion of long term care services remain uncovered. Medicaid covers long term nursing care, but only after elderly individuals have depleted their resources. Research is continuing that will identify the sources of financing for long term care at various points throughout institutionalization. This research will further examine characteristics of individuals who come to rely upon Medicaid for payment for their care. By identifying the risks associated with nursing home use, we hope to be able to propose improved methods of paying for this care.

We will continue to support data collection and data analyses from projects that gather detailed data from national and State

data bases. Research is continuing on estimating future acute and long term care need and utilization based on available surveys. We will continue our efforts to improve our understanding of the characteristics, health care needs and service use of individuals eligible for both Medicare and Medicaid, drawing upon the Medicare Current Beneficiary Survey as well as developing new State data bases that link Medicare and Medicaid data. We will continue initiatives to make data bases available for research and analyses, including State Medicaid data, the Medicare Current Beneficiary Survey, and the National Recurring Data Set. We plan to expand the data gathered under the Long Term Care Program and Market Characteristics data base to capture additional State data related to States' community-based care system infrastructure.

HEALTH RESOURCES AND SERVICES ADMINISTRATION

BUREAU OF PRIMARY HEALTH CARE

The Bureau of Primary Health Care (BPHC) helps assure that primary health care services are provided to persons living in medically underserved areas and to persons with special health care needs. It also assists States and communities in arranging for the placement of health professionals to provide health care in health professional shortage areas. The Bureau provides services to older Americans through Bureau-supported Health Centers, including Community Health Centers, Migrant health Centers, Health Care for the Homeless program sites, Public Housing Primary Care program sites, the National Health Service Corps, the Division of Federal Occupational Health, and the Alzheimer's Demonstration Grant to States Program.

In 1996, the Bureau established a Geriatric Work Group, consisting of members of the various Bureau divisions and programs that serve elderly populations, to determine if there was a need for the Bureau to target elderly populations for the provision of services. A study was initiated during that year to examine service provision to older populations, as well as to identify barriers to services, in Bureau-supported Health Centers. The findings of this study will be provided in the next Committee Report.

CONSOLIDATED HEALTH CENTERS

On October 11, 1996, the President signed the Health Centers Consolidation Act of 1996. This Act consolidates the Community Health Centers, Migrant Health Centers, Health Care for the Homeless programs, and Public Housing Primary Care programs under a single statutory umbrella that revised section 330 of the Public Health Service (PHS) Act. Health Center programs are designed to promote the development and operation of community based primary health care service systems in medically underserved areas for medically underserved populations. Legislation governing this program can be found in section 330 the PHS Act, as amended (42 U.S.C. 254b). The Health Centers Consolidation Act of 1996, under section 330(a)(1) of the PHS Act, defines the term "health center" as an entity that serves medically underserved population comprised of migratory and seasonal agricultural workers, the homeless, and residents of public housing.

In fiscal year 1995, BPHC provided approximately $681 million to fund over 680 Health Center grantees in over 1,647 sites, located in medically underserved areas throughout the United States and its territories. In fiscal year 1996, approximately $755 million was provided to fund over 6856 grantees in over 3,000 sites.

Health Centers provide access to case-managed, family-oriented, culturally sensitive preventive and primary health care services for people living in rural and urban medically underserved areas. The medical services include: preventive health and dental services, acute

and chronic are services, and appropriate hospitalization and specialty referrals. Health Centers also provide essential ancillary services such as laboratory tests, X-ray, environmental health and pharmacy services. In addition, many centers provide such enabling health and community services as transportation, health education, nutrition, counseling, and translation. Case management--the coordination of the center's services with community services appropriate to the needs of the patient (social, medical, or economic)--is emphasized.

Health Centers target medically underserved, disadvantaged populations. These populations include: minorities, women of child-bearing age, infants, persons with HIV infection, substance abusers and/or homeless individuals and their families. In fiscal years 1995 and 1996, the Health Center program served more than 8,000,000 patients annually. Of this total, 8 percent were age 65 or older.

The BPHC has implemented clinical performance measures related to the primary and preventive care of elderly users. The measures include: (1) a functional assessment of activities of daily living; (2) an inventory of prescription and nonprescription drug use; and, (3) pneumococcal and influenza immunization administration.

EXHIBIT A: Breakdown by program and age cluster of the number of elderly persons who received health care services from BPHC-supported programs for the year 1995.

PROGRAM	AGE 65 + YEARS	TOTAL USERS
COMMUNITY & MIGRANT HEALTH CENTER	FEMALES: 351,128 MALES: 220,459 **TOTAL: 571,587**	Medical: 6,652,279 Dental: 1,048,666 **TOTAL: 7,700,945**
HOMELESS PROGRAM	FEMALES: 2,812 MALES: 5,713 **TOTAL: 8,525**	445,687
PUBLIC HOUSING PRIMARY CARE PROGRAM	1,357	38,910
TOTAL	**581,469**	**8,185,542**

EXHIBIT B: Breakdown by program and age cluster of the number of elderly persons who received health care services from BPHC for the year 1996.

PROGRAM	AGE 65-74	AGE 74-84	AGE 85+	SUBTOTAL ELDERLY	TOTAL USERS
1996 CLUSTER	347,744	179,730	64,614	592,088	8,020,081

THE NATIONAL HEALTH SERVICE CORPS

The National Health Service Corps (NHSC) places primary care physicians, nurse practitioners, physician assistants, certified nurse midwives, dental and mental health professionals in health professional shortage areas. There are now 2,278 clinicians serving communities and populations of greatest need (60 percent rural/40 percent urban). Older Americans with special health care needs benefit from the proximity of dedicated primary care clinicians who provide high quality health care. The NHSC works closely with Bureau-supported Health Centers, other primary care delivery systems, and the Indian Health Service to provide assistance in recruiting and retaining health personnel for the poorest, the least healthy, and the most isolated of our fellow Americans, including the aging population.

DIVISION OF FEDERAL OCCUPATIONAL HEALTH

The Division of Federal Occupational Health (DFOH) provides a variety of services related to health promotion and disease prevention in the elderly to managers and employees of over 3,000 Federal agencies. Retirement planning, care of aging parents, and prevention of osteoporosis are some examples of generic issues that are regularly addressed in educational seminars and employee assistance programs.

ALZHEIMER'S DEMONSTRATION GRANT TO STATES PROGRAM

The Alzheimer's Demonstration Grant to States Program was established under section 398 of the Public Health Service Act, as amended by Public Law 101-157, the Home Health Care and Alzheimer's Disease amendments of 1990. In fiscal year 1995, $4.9 million was awarded to the legislative ceiling of 15 States, including the District of Columbia and Puerto Rico. In fiscal year 1996, the funding of this program was reduced to approximately $4 million.

The purpose of this program is to demonstrate how existing public and private nonprofit resources within States may be more effectively identified, utilized, and coordinated to deliver appropriate respite care and supportive services to underserved persons with Alzheimer's disease, their families and their care givers. In addition, the program seeks to identify service gaps and barriers to access within communities and, where possible, develop

innovative and creative approaches to bridge these gaps and overcome barriers which will result in permanent changes and improvements to infrastructure development. In 1996, the program provided supplemental funds to several of the grantee States to implement primary health care linkages with their programs, assisting clients to access health care as well as educating primary health care providers about Alzheimer's disease, its diagnosis, treatment, and referral sources.

An evaluation of the program covering the first four years of implementation, i.e., 1992 through 1995, was conducted to monitor and assess the implementation and outcomes of the fifteen State demonstration programs. It was determined that, during those first 4 years, the program provided services to over 6,900 families, of which over 53 percent lived in rural areas and nearly 50 percent were ethnic minorities. Furthermore, it was found that over 43 percent of the clients served had not used any formal services prior to their intake into this program.

During this 4 year period of time, over 1 million units of service were provided, with the primary type of services being in-home respite and adult day care. In addition, the following services were provided: 1) case management; 2) outreach; 3) education programs for the families, care givers, community emergency personnel, volunteer staff, and health care providers; 4) support groups; 5) client advocacy; 6) legal assistance; 7) telephone help lines; and 8) transportation. Upon interviews with primary care givers, overall satisfaction with demonstration services was found to be extremely high. The demonstration program was also found to have served as a catalyst for permanent changes in service environments as well as the development of new services and resources to support these new services. Significant changes included the development of new or stronger linkages between organizations and/or service systems which had previously operated independent of one another; increased awareness of the general public about Alzheimer's disease; development and delivery of services in several communities where services did not exist previously; and development of new services and new models of service delivery, such as Mobile Day Care program in Georgia, the Safe Return program in Montana, and the Legal Aid program in California.

GERIATRIC EDUCATION CENTERS

Of the 43 Geriatric Education Centers that make up the membership of the National Association of Geriatric Education Centers, 26 received awards in FY 1995 and 21 received awards in FY 1996. In FY 1995, eighteen GECs were consortia partnerships of two or more universities with many representing multiple schools of the health professions in their respective States. In FY 1996, fourteen GECs were consortia. At the State and national level the GECs comprise a comprehensive educational system, serving as the primary coordinating body for the preparation of faculty, health professions students, and health care personnel to better serve the Nation's elderly in their own homes and in long-term care institutions and community based agencies. Over 16,000 health care professionals received education and training through the GECs in FY1995-1996. Awards were made to the following institutions in FY 1995 and FY 1996:

Consortia:	FY 1995	FY 1996
University Of California, LA	$143,662	265,801
Univ. Of California, Davis		
Univ. Of California, San Francisco		
University of Colorado	$291,186	$253,289
Regional Colorado AHEC		
Univ. Of Colorado, Colorado Springs		
Univ. Of Northern Colorado		
University of Denver		
Columbia University	$291,343	$286,904
New York University		
Beth Abraham Hospital		
University of Pittsburgh	$ 0	$139,932
Pennsylvania State University		
Temple University		
Harvard Medical School	$248,062	$ 0
Acadia Health Education Coalition		
University of Maine		
Dartmouth Medical School		
Meyers Primary Care Institute		
Fallon Healthcare System		
University of Massachusetts Medical Center		
University of Massachusetts Graduate School of Nursing		
Hunter College	$325,039	$ 0
New York Medical College		
New York School of Podiatric Med.		
SUNY College of Optometry		
University of Illinois, Chicago	$318,124	$ 0
Southern Illinois University System		
Sangamon State University		
University of Miami	$72,997	$267,217
Barry University		
Florida A&M		
Florida International University		
St. Louis University	$295,029	$295,225
U. Of Missouri, School of Optometry		
Washington U., Occupational Therapy		
St. Louis College of Pharmacy		
Kirksbille College Of Osteopathic Medicine		
University of Kentucky	$314,299 $	$ 0
East Tennessee State Univ.		
U. Of Ohio Cincinnati		
Baylor College of Medicine	$282,257	$ 0
University of Texas, Houston HSC		
Univ. Texas, Medical Branch		

Univ. Of North Texas		
Univ. Of Texas-Pan AM		
Texas Southern Univ.		
Univ. Of Houston		
Texas A&M University		
University of Florida	$245,179	$ 0
Florida A&M University		
George Washington Univ	$269,760	$267,756
Georgetown University		
Howard University		
Case Western Reserve Univ.	$293,814	
$293,448		
Ohio University college of Osteopathic Medicine		
Bowling Green State University		
Northeastern Ohio Universities College of Medicine		
Marquette University	$144,778	$227,319
Univ. Of Wisconsin-Madison		
Univ. Of Wisconsin-Milwaukee		
Milwaukee Area Technical College		
Medical College of Wisconsin		
Geriatrics Inst. Of Sinai Samaritan Medical Center		
Michigan State University	$165,359	$165,545
Wayne State University		
Michigan Primary Care Association		
St. Lawrence Hospital		
University Of New Mexico	$163,040	$268,837
New Mexico State University		
New Mexico Highlands University		
National Indian Council on Aging		
Indian Health Service		
Sisters of Charity Health Care System		
University Of Pennsylvania	$158,745	$255,613
Geisinger Medical Center		
Lehigh Valley Hospital		
Philadelphia College of Pharmacy		
University Of Minnesota	$270,000	$270,000
Rochester Community & Technical College		
Central MN Council on Aging		
Arrowhead Regional Development Commission		
Mankato State University		
Northwest Technical College		
University of Rhode Island	$0	$133,180
Rhode Island College		
Brown University		
Rhode Island Hospital		
Meharry Medical College	$158,760	$158,760

Alabama A&M University		
Tennessee State University		
Stanford University	$162,000	$269,897
San Jose State University		
Mission & Ohlone Community College		

Single Institution:

University Of Medicine & Dentistry. Of NJ	$242,051	$0
University of Hawaii	$221,299	$0
University Of Oklahoma	$107,797	$161,787
University Of Oregon	$159,821	$262,966
University Of Puerto Rico	$35,428	$162,000
University Of Texas HSC	$ 0	$108,000
University of Washington	$107,598	$161,914

Awards for the 26 GECs totaled $5,487,427 for Fiscal Year 1995. Funding for FY 1996 was $4,675,390. Awards for FY 1997 are expected to be approximately $6 million. These Centers are educational resources providing multi disciplinary and interdisciplinary geriatric training for health professions faculty, students, and professionals in allopathic medicine, osteopathic medicine, dentistry, pharmacy, nursing, occupational and physical therapy, podiatric medicine, optometry, social work, and related allied and public or community health disciplines. They provide comprehensive services to the health professions education community within designated geographic areas. Activities include faculty training and continuing education for practitioners in the disciplines listed above. The Centers also provide technical assistance in the development of geriatric education programs and serve as resources for educational materials and consultation.

During FY1995, a three phase Geriatric Education Futures Project was developed to improve geriatric education in the health professions and thereby respond to a national health care need. The first phase was the development of eleven study groups to develop white papers on the status of geriatric education in medicine, nursing, dentistry, public health, social work, allied and associated health, interdisciplinary education, ethnogeriatrics, case management, managed care and long-term care. Resulting recommendations were presented to Federal and non-Federal and response panels during the second phase, the National Forum on Geriatric Education and Training, and an agenda for action to meet workforce needs was accepted within the context of shared responsibility for projected outcomes. Two reports emerged from the these phases: "A National Agenda for Geriatric Education: White Papers and A National Agenda for Geriatric Education: Forum Report". Copies are available from the Bureau of Health Professions, HRSA. The third phase of the Futures Project is the development of innovative educational collaborative. Examples of such collaborative in FY1995-FY1996 include an interdisciplinary collaborative effort composed of six professional associations, the National Association of Area Agencies on Aging, an Area Agency on Aging, a foundation, and the Bureau of Health Professions of HRSA to outline a project designed to increase the quality, appropriateness and consumer accessibility to health and long term care systems; and a project to develop a model Interdisciplinary Professional Education

Collaborative as a second generation to a HRSA, PEW and Institute of Health Care Improvement project. It's purpose is to find effective educational methods to prepare new health care professionals with quality improvement knowledge, skills, and competencies for integrated professional work aimed at meeting and improving individual and community health needs and making services more cost effective.

FACULTY TRAINING PROJECTS IN MEDICINE, DENTISTRY, AND PSYCHIATRY

Nine joint medicine and dentistry projects were funded under the Faculty Fellowship Program in Geriatric Medicine, Dentistry, and Psychiatry, Currently, Section 777b provides the only funding for faculty development in geriatric medicine and dentistry in the country. These interdisciplinary programs have four learning components: Longitudinal clinical experience, teaching, research, and administration.

The following institutions received five year awards.

	FY 1995	**FY1996**
University of California, Los Angeles	$180,448	$185,380
University of Connecticut	$261,751	$324,259
Boston University	$301,346	$258,183
Harvard University	$339,318	$343,930
University of Michigan	$357,854	$364,169
University of Medicine and Dentistry of New Jersey	$302,885	$341,066
Duke University	$315,478	$321,895
University of North Texas	$261,303	$289,848
University of Texas, San Antonio	$311,098	$343,327

CONTRACTS UNDER TITLE VII OF THE PHS ACT

Funding-FY1995-FY1996
Project
State University of New York at Buffalo
"Education Performance Outcomes Measures Model"
8/13/96-8/12/97-$25,000

Project
Baylor College of Medicine
"Tenth Workshop for Key Staff of Geriatric Education Centers"
7/19/96-7/18/97 - $149,000

Project
American Society on Aging
"Local Implementation of a Key Ethnogeriatrics Recommendation"
8/6/96 - 5/5/97 - $6,460

Project
Institute for Health Care Improvement
"Community-Based Quality Improvement Education for the health Professions"
9/30/96 - 9/29/98 - $150,228

PUBLICATIONS

A National Agenda for Geriatric Education: Forum Report, Volume 2. Rockville, MD: Interdisciplinary, Geriatrics and Allied Health Branch, Division of Associated, Dental and Public Health Professions, Bureau of Health Professions, Health Resources and Services Administration, Public Health Service, U.S. Department of Health & Human Services. 1996

A National Agenda for Geriatric Education: White Papers, Volume 1. Rockville, MD: Interdisciplinary, Geriatrics and Allied Health Branch, Division of Associated, Dental and Public Health Professions, Bureau of Health Professions, Health Resources and Services Administration, Public Health Service, U.S. Department of Health & Human Services. 1995

EVENTS

National Forum on Geriatric Education and Training, April 21-23, 1995, Georgetown University Conference Center, Washington, DC.

Recommendations for future case management education, training and research from the national forum on geriatric education, 3rd International Conference on Long Term Care Case Management, AMERICAN SOCIETY ON AGING, San Diego, CA - December 4-7, 1996.

Ethnogeriatrics recommendations from the national forum on geriatric education, 22nd Annual Meeting, ASSOCIATION FOR GERONTOLOGY IN HIGHER EDUCATION, Philadelphia, PA - March 2, 1996.

Health professions education in geriatrics: A national agenda tracer report, ASSOCIATION FOR GERONTOLOGY IN HIGHER EDUCATION, Philadelphia, PA - March 1, 1996.

A. Revise the general section as follows (pp. 203 and 204):

Bureau of Health Professions

The Bureau of Health Professions (BHPR) provides national leadership to assure a health professions workforce that meets the health care needs of the public. The Bureau has established six strategic functions to guide the implementation of the Bureau's programs to achieve its mission. These functions are:

1. Enabling access to health care through improved health professions distribution.

2. Enabling culturally competent health care through improved racial and ethnic diversity

and cultural competence in the health professions workforce.

3. Ensuring adequate information, analysis and planning to strategically enable national health professions workforce development.

4. Enabling ongoing improvement of the quality of the health professions practice.

5. Enabling ongoing enhancement of the quality of health professions education through improved educational research and financing.

6. Providing public information and technical assistance relating to health professions.

The strategy defined by these functions will be implemented through a variety of collaborative public and private efforts and programs supported and operated by the Bureau. Programs include: education and training grant programs for institutions such as health professions schools and health professions education and training centers; loan and scholarship programs for individuals, particularly those from disadvantaged backgrounds; the National Practitioner Data Bank; and the Vaccine Injury Compensation Program. In addition, BHPr administers several education-service network multidisciplinary and inter-disciplinary programs such as the Area Health Education Centers (AHECs), the Geriatric Education Centers (GECs), and Rural Interdisciplinary Training Programs.

The Bureau supports the Council on Graduate Medical Education, which reports to the Secretary and the Congress on matters related to graduate medical education, including the supply and distribution of physicians, shortages, or excesses in medical and surgical specialties and subspecialties, foreign medical graduates, financing medical educational programs, and changes in types of programs. It also supports the National Advisory Council on Nurse Education and Practice which provides advice and recommendations to the Secretary concerning policy matters relating to nurse workforce, education, and practice improvement.

The National Vaccine Injury Compensation Program is administered by BHPr. The program which became effective October 1, 1988, was created by the National Childhood Vaccine Injury Compensation Act of 1986, as a no-fault system through which families of individuals who suffer injury or death as a result of adverse reactions to certain childhood vaccines can be compensated without having to prove negligence on the part of those who made or administered the vaccines.

BHPr maintains a federally sponsored health practitioner data bank on all disciplinary action and malpractice claims. The National Practitioner Data Bank (NPDB) was created by The Health Care Quality Improvement Act of 1986, Title IV of P.L. 99-660, as amended November 19886. The Act authorized the Secretary of Health and Human Services to establish a data bank to ensure that unethical or incompetent medical and dental practitioners do not compromise health care quality. The NPDB is a central repository of information about: malpractice payments made on behalf of physicians, dentists, and other licensed health care practitioners; licensure disciplinary actions taken by State medical boards and State boards of dentistry against physicians and dentists; and adverse professional review actions

taken against physicians, dentists, and certain other licensed health care practitioners by hospitals and other health care entities, including health maintenance organizations, group practices, and professional societies. The NPDB opened on September 1, 1990.

B. Revise the Division of Medicine Section (p. 206) as follows:

Division of Medicine

The Division continues to support through its grant and cooperative agreement programs significant educational and training initiatives in geriatrics.

Twelve predoctoral grantees and 54 graduate program grantees under section 747, Family Medicine Training, indicated that they are actively involved in the development, implementation, and evaluation of their geriatrics curriculum and training. The predoctoral grantees received funds totaling $590,440, the residency program grantees received funds totaling $364,296 specifically for developing and enhancing geriatrics curriculum and training experiences. In addition, 14 faculty development programs reported that they provided geriatrics training. Eight of the section 747 Family Medicine Departments program grants received awards totaling $498,133 for the purpose of strengthening geriatric training and carrying out research activities in this area.

Under section 748, the General Internal Medicine and General Pediatrics Residency Training Programs reported 10 grantees who provided geriatric medicine training a total of $157,213.

Eight Physician Assistant Training Program (section 750) grantees have instituted training activities in geriatrics. These grantees were awarded $158,024 specifically for their efforts in this area.

Six grantees receiving support for Pediatric Primary Care Residency Training under section 751 authority have included curricular emphasis in geriatric health. These grantees received a total of $308,691.

C. Revise the Division of Nursing Section (p. 207) as follows:

Division of Nursing

The Division of Nursing continues to administer grants awarded through four programs: (1) Advanced Nurse Education, (2) Nurse Practitioner and Nurse-Midwifery, (3) Special Projects, and (4) Professional Nurse Traineeships. The fourth program provides funds to schools which allocate these funds to individual full-time master's and post-master's nursing students who

are preparing to be nurse practitioners, nurse-midwives, nurse educators, public health nurses, or in other clinical nursing specialties.

Under section 821, the Advanced Nurse Education Program supported three grants totaling $644,643 for geriatric nursing programs leading to a master's or doctoral degree. Graduates of these programs are prepared broadly to meet a wide range of needs relative to the elderly in many settings, but are particularly prepared to deal with the older individual with multiple health care needs. In addition, the program prepares nurses who can teach and offer consultation in this important field.

Under section 822(a), the Nurse Practitioner and Nurse-Midwifery Program supported six master's or postmaster's geriatric nurse practitioner programs totaling $1,054,439 in grant support. As nurses with advanced academic preparation and clinical training, they are prepared as primary health care providers to manage the health problems of the elderly in a variety of settings, such as long term care facilities, ambulatory clinics and the home. They provide nursing care which includes the promotion and maintenance of health, prevention of disease, assessment of health needs, and long term nursing management of chronic health problems. Emphasis is placed on teaching and counseling the elderly to actively participate in their own care and to maintain optimal health.

Under section 820, the Nursing Special Projects Grant Program supported seven projects totaling $506,984 to cover six institutions providing paraprofessional fellowships for RN training, and one nursing clinic to demonstrate methods to improve primary health care access in medically underserved communities. The fellowship program targets approximately 46 individuals employed by nursing facilities, including long-term care facilities, or home health agencies as paraprofessionals. The nursing clinic project, awarded to The University of Delaware, Newark, Delaware for a five-year period, is designed to establish a community-based nurse-managed Health Center to improve access to primary care for older adults. The HEALTH (Healthy Elder-Adult Living Through Holistic Healthcare) Center provides a wide variety of health promotion, disease-prevention, and chronic disease management services through case management by advanced practice nurses (APNs). The HEALTH Center initially featured two extremely needed services lacking in Delaware: comprehensive geriatric assessment and mental health services for older adults. In addition to filling health care gaps, the HEALTH Center provides clinical experiences for nursing students that will prepare them to provide the specialized care needed by older adults. Project activities are based in home and community settings in both urban and rural areas.

Office of Rural Health Policy

The Office of Rural Health Policy was established in 1987 at the urging of the Senate Special Committee on Aging in order to address severe shortages of health services in rural areas, where one quarter of the Nation's elderly live. Aging-related issues are of particular importance to the Office, since rural counties have, on average, a higher percentage of seniors over 65 years of age than urban counties; and these residents are often poorer, sicker, and more isolated than their urban counterparts.

To strengthen support for health services in rural areas, the office plays a collaborative role throughout the Department and with the States and the private sector. For example, it apprises interest groups, such as the National Council on Aging and the American Association of Retired Persons about its activities and about the needs of the rural elderly. Within the Department the Office advises the Secretary, in particular, on the affects that Medicare and Medicaid programs have on rural health care, on the shortage of health care providers, the viability of rural hospitals, and the availability of primary care and also emergency medical services to elderly and other rural residents.

The Office supports local and State initiatives to build rural health care services through a $27.8 million grant program to rural communities, themselves, and a $3 million program of matching grants to the States to support State offices of rural health, which can recruit rural providers and assist their rural communities in developing more local health services.

The Office of Rural Health Policy also promotes informed policy making by administering a small $3.2 million program of grants for policy-relevant studies at established rural research centers throughout the country. These centers provide data capability on a wide range of rural health concerns, including areas relevant to the elderly. For example, one study currently underway looks at the development in rural communities of assisted living facilities to determine what challenges exist to their growth and viability. Another is comparing mental health treatment for residents of rural nursing homes with treatment available to residents of urban facilities. Also under study is the supply of health practitioners for the care of chronically ill Medicare beneficiaries in rural areas.

The Office also participates in the Vice President's multi-departmental initiative to develop the Nation's information highway. In concert with the effort to explore the development of rural health care networks, the office administers $$5.5 in telemedicine grants to rural communities who want to test the ability of telecommunications technologies to bring specialized health care to the citizens. For example, this technology can allow some elderly citizens to visit with their doctors without leaving their own homes, if a visiting nurses bring special equipment that adapts to the in-home television.

The Office of Rural Health Policy has worked with other Federal offices and agencies, such as the Health Care Financing Administration, the Department of Agriculture, the Department of Transportation, and the National Institute on Aging, to sponsor workshops and seek public advice on a range of rural needs that include emergency medical services, managed care options for Medicaid and Medicare clients, physician recruitment, and rural economic development.

To enhance dissemination of information on strategies for better health services to rural regions, the Office initiated a national rural health information and referral service with USDA that is available to rural residents throughout the Nation with a toll-free line (1-800-633-7701) and through an electronic bulletin board.

The Office also channels public advice on rural issues to the Department by staffing the Secretary's National Advisory Committee on Rural Health, a citizen's advisory panel chartered in 1987 to address health care crises in rural America.

OFFICE OF INSPECTOR GENERAL

INTRODUCTION

The Inspector General Act establishes the statutory authority and responsibilities for the OIG. The OIG's mission is to: (1) protect the integrity of departmental programs and the health and welfare of program beneficiaries; (2) promote the economy, efficiency, and effectiveness of departmental programs and operations; and (3) prevent and detect fraud, waste and abuse in departmental programs and operations.

This mission is accomplished by conducting independent and objective audits, evaluations, and investigations, designed to reach all organizational levels of the Department and provide timely, useful, and reliable information and advice to Departmental officials, the Administration, the Congress and the public. OIG's goal is to detect and prevent fraud and abuse, and to ensure that beneficiaries receive high-quality, necessary services at appropriate payment levels.

Within the Department, the OIG is an independent organization, reporting to the Secretary and communicating directly with the Congress on significant issues. The OIG is comprised of the following components:

The Office of Audits Services (OAS) performs audit activities which include: conducting and overseeing audits of HHS programs, operations, grantees and contractors; identifying systemic weaknesses that give rise to opportunities for fraud and abuse; and making recommendations to prevent their recurrence. OIG auditors also perform financial statement audits near the Chief Financial Officer (CFO) Act of 1990 and the Government Management Reform Act (GMRA) OF 1994.

The Office of Investigations (OI) develops cases concerning fraud, waste, abuse, and mismanagement which occur within the Department's programs. Working with Federal and State law enforcement agencies, OIG investigators seek criminal, civil actions and exclusions against those who commit fraud or who thwart the effective administration of HHS programs. OIG investigations focus on: the providers of services and supplies under Medicare and Medicaid; program applicants and grantees; beneficiaries and other recipients of Federal funds; and HHS employees.

The Office of Evaluation and Inspections (OEI) conducts short-term program evaluations (called inspections) that focus on issues of concern to the Department, the Congress, and the public, such as Medicare services, device and drug approvals/removals, child support enforcement programs, and Medicare client satisfaction. The results of this work generate rapid and reliable information on how well HHS programs are operating and offer recommendations to improve their efficiency and effectiveness.

The Office of Enforcement and Compliance (OEC) is responsible for the imposition of those mandatory and permissive program exclusions and civil money penalty (CMP) and assessment actions not handled by the Office of Counsel to the Inspector General (OCIG), Civil Recoveries Branch. The office serves as a liaison with HCFA, State Licensing Boards and other outside organizations and entities with regard to exclusion, compliance and enforcement activi-

ties. It develops models for corporate integrity, compliance and enforcement programs; monitors ongoing compliance, exclusion, enforcement activities and HCFA suspension agreements; and promotes industry awareness of corporate integrity and enforcement agreements developed by the OIG.

The Office of Counsel to the Inspector General is responsible for providing all legal service and advice to the Inspector General, Principal Deputy Inspector General and all the subordinate components of the Office of Inspector General, in connection with OIG operations and administration. OIG fraud and abuse enforcement activities, and OIG activities designed to promote efficiency and economy in the Department's programs and operations. The OCIG is also responsible for litigating civil money penalty (CMP) and program exclusion cases within the jurisdiction of the OIG, for the coordination and disposition of False Claims Act qui tam and criminal, civil and administrative matters involving the Department of Justice (DoJ), and for the resolution of voluntary disclosure and program compliance activities.

The Office of Management and Policy (OMP) provides support services to OIG, including congressional relations, legislative and regulatory review and public affairs, strategic planning and budgeting, financial and information management, resources management, and preparation of the OIG's semiannual and other reports.

ACCOMPLISHMENTS

Within HHS OIG we are continuing to streamline our operations while maintaining our vigorous pursuit of fraud, waste and abuse. As examples of our streamlining efforts, we completed early outs and buyout programs targeted at reducing management positions (SES through GS–13) and closed 17 out of 65 field offices. On March 31, 1995, the Social Security Administration became an independent agency with its own OIG formed of staff from the HHS OIG. With the departure, OIG has had to reexamine its use of resources in order to concentrate its work more fully in areas of health and welfare. Our total savings for fiscal years 1995 and 1996 total $14.9 Billion. Our accomplishments included the second largest health care fraud settlement ever, against a health care corporation for kickbacks and fraud in its home infusion, oncology, hemophilia and human growth hormone businesses. The company agreed to plead guilty and pay approximately $161 million in criminal fines, civil restitution and damages. The settlement included a corporate compliance plan.

HEALTH CARE

In May 1995, The President announced a 2-year partnership of Federal and State agencies working together to prevent and detect health care fraud in specific industries. This Operation Restore Trust initially targets five States which together account for 40 percent of the Nation's Medicare and Medicaid beneficiaries. Operation Restore Trust, led by HHS OIG working jointly with the Health Care Financing Administration (HCFA) and the Administration on Aging (AoA), represents one of the largest and most complex efforts against health care fraud ever undertaken. The project

is designed to share resources and collaborate with numerous entities to prevent and detect fraud and abuse in three rapidly growing sectors of the health care industry: home health agencies, nursing facilities and durable medical equipment suppliers. Operation Restore Trust also prompted a new OIG fraud hotline, 1 800–HHS–TIPS, and a voluntary disclosure program that encourages health care entities to come forward with fraud they discover for themselves.

During this period we marked the 1-year anniversary of Operation Restore Trust. In the first year, 32 criminal convictions, 10 civil judgments and 18 indictments were obtained. Twenty-eight criminal convictions, 9 civil settlements and 18 indictments involved nursing facilities and related medical services cases, and 4 convictions and 1 settlements concerned home health agencies. In addition, OIG has identified more than $37 million in fines, recoveries, settlements and civil monetary penalties during this same period. Thirty-six exclusions of ORT providers from the Medicare and Medicaid programs for convictions of health care fraud have been processed.

The new hotline received more than 23,600 calls and letter, of which well over 6,600 were related to Department programs. Of the 780 calls or letter related to ORT during this time period, about 560 were related to nursing homes and related medical services, and 2220 to home health agencies.

Medicare Patient Transfers: This report is the result of OIG's review of transfer recovery projects undertaken jointly by OIG, HCFA and Medicare Fiscal Intermediaries. The projects identified overpayments that occurred because transfer of patients between PPS hospitals were erroneously reported and paid as discharges. In total, these projects resulted in Medicare Part A trust fund recoveries totaling $219 million and annual savings totaling $8 million. In addition, it is estimated that $22 million will be recovered by FIs from transfer transactions that warrant further resolution. The HCFA concurred with our recommendations that it place a high priority on recovering the remaining overpayments, including those over 4 years old, and that it inform OIG of the final resolution of the remaining unresolved cases.

Hospital Reporting to the National Practitioner Data Bank: The OIG conducted this inspection in response to a PHS request to determine how hospitals are responding to their legal obligation to report adverse actions to the National Practitioner Data Bank. The report noted that about 75 percent of all hospitals in the United States have never reported an adverse action taken against practitioners to the data bank, and that there has been considerable State-by-State variation in reporting rates.

OIG recommended that PHS support further inquiry to foster a better understanding of the factors influencing hospital reporting to the data bank and sponsor a conference to focus attention on issues influencing such reporting. Further, OIG proposed that PHS work with the Health Care Financing Administration (HCFA) to ensure that the Joint Commission on Accreditation of Healthcare Organizations assesses more fully hospitals' compliance with the law. The PHS and HCFA agreed to prepare a joint letter that will be sent

to the Joint Commission urging it to devote greater attention to hospital compliance with the data bank law.

NATIONAL INSTITUTES OF HEALTH

The National Institutes of Health (NIH) is the principal biomedical research arm of the Federal Government. This report highlights a number of research advances conducted or supported during 1995 and 1996 by NIH. Part of the NIH, the National Institute on Aging (NIA), is the primary sponsor of aging research in the United States.

Section 1 of this report outlines NIA's key advances for 1995. Section 2 outlines NIA's key advances for 1996. Other NIH components also conduct or support aging research. They are the National Cancer Institute; the National Center for Research Resources; the National Eye Institute; the National Heart, Lung, and Blood Institute; the National Institute of Nursing Research; the National Institute of Arthritis and Musculoskeletal and Skin Diseases; the National Institute of Dental Research; the National Institute of Diabetes and Digestive and Kidney Diseases; the National Institute of Mental Health; the National Institute on Alcohol Abuse and Alcoholism; the National Institute of Environmental Health Sciences; and the National Institute on Deafness and Other Communication Disorders. Section 3 provides selected findings from these other NIH institutes.

SECTION 1

1995 INTRODUCTION

NIH was created in 1974 to conduct and support research on aging processes with a focus on diseases and other special problems of older people. The remarkable life span that has been realized during this century now presents Americans with three important and related challenges: how to maintain quality of life with advanced age, how to provide cost-effective health care, and how best to divide adult life into working years and retirement years.

The "graying of America," that is, those demographic changes that will occur as the post-World War II baby-boom generation ages, is markedly raising the median age of America's population. The aging of our society will impact health care costs, regardless of the means by which these costs are covered. The over-85 age group is the fastest growing segment of the American population and is often referred to as the "oldest old."

Even with the hope of major advances in the treatment and prevention of debilitating disease, the demand for long-term care is expected to expand dramatically in our society. Research will be pursued on many different aspects of long-term care in general and particularly on new and evolving forms of care. NIA supports research on preventing the need for long-term care or institutionalization, enhancing the quality and efficiency of such care, easing the burden of care, and forecasting the requirements for care.

Alzheimer's disease continues to be a top research priority for NIA. This disease currently affects as many as four million older Americans and their families, causes enormous personal suffering, and costs the nation at least $90 billion each year. Without the de-

velopment of new treatments, cures, or preventive approaches to this dreaded disease, the number of individuals and families devastated by Alzheimer's disease will likely increase up to five-fold within the next 50 years.

In addition to Alzheimer's disease, priority initiatives include research on the biology of the aging process and on physical disabilities such as osteoporosis and cardiovascular disease. These initiatives are wide-ranging and can be based on cutting-edge laboratory technologies or upon simple by highly effective strategies such as exercise or behavioral interventions. The goal of NIA-supported research is to understand the basic mechanisms of normal aging and age-associated disease and disability and to translate this basic knowledge into treatment and prevention strategies.

Basic research

NIA funded basic research is a prerequisite for the rational development of treatment and prevention strategies. Because of the advances from basic aging-related science made possible by NIA support, real hope exists for true increases in independence and active life expectancy, helping to stem the rising cost of health care expenditures. To prevent or cure diseases associated with age such as cancer, cardiovascular disease, osteoporosis, and Alzheimer's disease, we need to continue extensive basic research into their underlying causes as well as to better understand the aging process itself.

For example, research will continue on antioxidants to discover their role and protective action against the damaging effects of naturally occurring "free radicals" on subcellular components. There is increasing evidence that certain nutrients, including vitamin C, vitamin E, and betacarotene, serve as agents of free radical capture and otherwise augment the body's natural protective mechanisms. Any preventive effects of antioxidants would have extraordinary potential for forestalling a wide range of degenerative diseases. With the escalating costs of medical treatment and care for an aging population, simple preventive therapies involving dietary supplementation may have tremendous benefits.

Molecular genetic studies are developing evidence that longevity and cellular senescence (loss of a cell's ability to divide and reproduce itself) are, in part, under genetic control. Characterization of the specific genes which promote longevity and postpone aging and cellular senescence are central to discovering the mechanisms which govern longevity and aging in humans. Knowledge of these fundamental mechanisms will guide and hasten the development of effective prevention and intervention strategies to extend human longevity and health span.

Major breakthroughs have recently occurred in Alzheimer's disease (AD) research that promise to yield definitive results in the near future. Most recently, NIA-supported researchers at Duke University found that a variation of the apolipoprotein E (ApoE) gene, ApoE4, is associated with an unexpectedly high number of AD cases and is probably a major risk factor to developing AD. It is not yet clear how APoE4 affects cellular function. Depending on the results of this research, new diagnostic tests may identify those

persons at risk for AD and lead to protective therapies and better outcomes.

Since 60 percent of U.S. deaths are due to vascular disease, NIA has a prime interest in supporting research on age-associated vascular disease. During atherosclerosis, some of the vascular smooth muscle cells (VSMC) begin to multiply and produce proteins which they secrete into their environment. Intramural researchers have discovered that VSMC, when placed in an environment that simulates arterial injury, not only proliferate, but invade membranes and proteins that normally surround the VSMC and the inner lining of blood vessels. Thus, therapeutic measures to prevent this invasion may reduce the extent of the atherosclerotic process, with a significant reduction in vascular disease and in health care costs.

Applied/Clinical research

NIA supports pre-clinical and clinical treatment research on AD, made possible by past investments in basic laboratory studies. Tacrine, recently approved by the FDA for use in Alzheimer's patients, was tested several years ago in a major clinical trial and found to have an effect in delaying the progress of disease in some patients. However, it provides only temporary relief, and NIA continues its work towards developing and testing new treatments that will allow patients to continue to function independently. NIA is currently testing the drug Deprenyl in combination with the antioxidant vitamin E in a clinical trial. Preliminary results are due by early 1995.

NIA is supporting a number of major clinical initiatives which address the problems of physical frailty and loss of independence that are associated with older persons. Physical frailty is a major cause of long-term care needs and imposes annual costs of at least $54 billion. Results from ongoing NIA-supported studies have provided convincing evidence of the benefits of exercise for maintaining independent function in older persons. FICSIT (Frailty and Injuries: Cooperative Studies of Intervention Techniques) is a set of clinical trials; some interventions have shown more than a 30 percent reduction in fall rates, which could markedly lower the rate of disabling injuries such as hip fractures.

Osteoporosis affects over 25 million Americans, mainly women, and is a serious public health problem since associated fractures are a major cause of disability in older people: costs associated with hip fractures exceed an estimated $7 billion annually. NIA-supported research into new therapies and interventions would impact a very large percentage of the older population and save billions of dollars in health care costs.

Recently, attention has focused on treating degenerative conditions such as osteoporosis, osteoarthritis, and muscle atrophy through replacement therapy with "trophic" factors. These factors promote growth and maintenance of tissues such as bone, muscle, and cartilage.

NIA has a keen interest in research particularly relevant to older women. There are many questions surrounding the health implications of menopause and hormonal changes in women and will continue support for a major initiative, the Women's Health and Aging Study, to determine what diseases and other events cause and in-

fluence disability in women age 65 years and older. NIA is also committed to research which focuses upon minority subpopulations and the similarities and differences which exist between them and non-minority populations, such as their relative use of long term care services.

These and other initiatives described in the following pages are representative of NIA's broad research portfolio. As we approach the next century, it will be through the continued support of this research that we can develop the means to prevent or cure the major causes of costly disease and disability to maintain good health and independence for older Americans.

EXTRAMURAL RESEARCH

Alzheimer's disease

Recent genetic discoveries have shed new light on the causes and biological mechanisms which result in the development of Alzheimer's disease (AD). Among the potential causes of AD, genetic factors have been implicated to a much greater extent than was previously suspected. It is now known that mutations in the amyloid precursor protein (APP) gene and in a gene localized to a small region of chromosome 14 account for most inheritance of early onset AD. Late onset AD has been more difficult to trace, but linkage to chromosome 19 was reported in some late onset families. Recently, ApoE4, whose gene is located on chromosome 19, has been shown to be associated with greater increased risk of AD. This may account for the chromosome 19 linkage reported earlier. More significantly, the ApoE4/AD association has been found not just in late onset families but also in the general population. The increased risk associated with ApoE4 could account for many AD cases previously designated "sporadic."

Larger epidemiological studies are necessary to confirm the association of ApoE4 with AD. Should ApoE4 be found to be a major factor in determining AD susceptibility, modification of ApoE4 activity would become an attractive target for development of therapeutics. Ultimately, the elucidation of the complete molecular pathway which results in the development of AD will allow the design of optimal pharmacological treatment and prevention strategies.

Risk factors associated with AD

One of the long range goals of AD research is to determine the full range of risk factors for AD which will lead to a more complete understanding of its etiology. A major theme of epidemiological research in Alzheimer's disease is to address specific biomedical problems in minority and other distinct population groups in an effort to extend knowledge about age-specific incidence, prevalence rates, and risk factors for the onset of AD. Three studies have recently been initiated in African-American populations. The major purpose is to identify and clarify the risk factors for Alzheimer's disease and multi-infarct dementia (MID) in three groups of patients—those with Alzheimer's disease, those with MID, and those with multiple strokes but without evident cognitive dysfunction. The investigation will provide important new information about risk and protective factors for cognitive and functional decline in older Afri-

can-Americans. NIA also supports the Honolulu Dementia Study. The objectives of this study are to determine rates and risk factors for Alzheimer's disease and vascular dementia in aging Japanese-American men.

Sleep

As many as half of the older population suffer from chronic sleep disturbance, a condition that frequently leads to problematic use of sedative medication, reduced quality of life, and increased morbidity and mortality. NIA supported studies on sleep disorders, such as the multi-center "Established Populations for the Epidemiologic Study of the Elderly" (EPESE), provide support for the effective detection, treatment, and prevention of sleep disorders. Data generated from EPESE have shown that sleep disorders are often associated with poorer self-perceived health, increased depressive symptoms, physical disability, respiratory symptoms, and over-the-counter medication use. Treatment and prevention of sleep disorders can result in savings in health expenditures as well as enhancing the quality of life of older persons.

Control of cell proliferation in aging and cancer

Regulation of cell proliferation is required to maintain the human body's equilibrium. NIA research has provided a greater understanding not only of normal cell proliferation but also the causes and effects resulting from cell senescence—the loss of proliferation capacity—or the opposite, uncontrolled proliferation seen in cancer. Understanding these biological mechanisms will further our knowledge of normal aging and cancer at the cellular level and promises to provide key contributions to unravelling the fundamental mechanisms underlying the aging process and other age-related diseases in the near future.

Research progress is currently being made in several areas. Two NIA-funded laboratories have independently obtained evidence that p53, a tumor suppressor proteins, induces expression of another protein which binds to kinases, a class of enzyme, and inhibits their function. The activity of these kinases is essential for replication. Further research will reveal the mechanisms of these reactions with the ultimate goal of designing drugs which can restore this tumor suppressive property.

A second protein of interest to both aging and cancer research is a protein known as bcl-2, which inhibits a natural process known as programmed cell death. If this programmed death is inhibited the result will be overpopulation of cells, as in cancer. This is also thought to be one explanation for benign prostatic hypertrophy. The mechanism for controlling bcl-2 expression needs to be elucidated, opening up the possibility of interventions to regulate bcl-2 when needed.

A third area of interest to both aging and cancer research is the role of telomere shortening in controlling cell proliferation. Telomeres are repeated DNA sequences found at the ends of chromosomes that shorten each time a cell divides. A very recent working hypothesis is that telomeres shorten because of the "end-replication problem," and that continued proliferation requires some, as yet undefined, minimal telomere length. The implications of this

research are that both senescence and cancer could be regulated by developing interventions which either prevent telomere shortening or inhibit telomerase activity.

Role of oxidative damage in aging

"Free oxygen radical" damage has long been believed to be a risk factor for the degenerative processes which accompany aging. These compounds can damage DNA, proteins, and lipids. The resulting damage can lead to cancers or dysfunctional proteins and damaged membranes which lessen a cell's ability to carry out its proper function. There is increasing evidence that certain micro-nutrients, including vitamins C and E, serve as agents of free radical capture or "antioxidants," and augment the body's protective mechanisms. The preventive effects of antioxidants have potential for forestalling a range of degenerative diseases. There appears to be a role for dietary antioxidants in the prevention of some cancers, senile dementias, and cardiovascular diseases. Simple preventive schemes involving dietary supplementation could lead to significant savings in the costs associated with medical treatment.

Biology of aging muscle

A decrease in mass and functional capability of skeletal muscle contributes substantially to the impairment of locomotive performance that accompanies human aging and is a significant risk factor for physical frailty. NIA continues to support basic research into the molecular basis of skeletal muscle growth, age-related muscle degeneration, and selective fiber atrophy. The development of effective intervention strategies to retard or prevent age-related muscle degeneration is dependent on basic research to delineate the underlying mechanisms. Such interventions would be expected to significantly extend human health span, reduce frailty, and increase independence and quality of life for older adults.

Protein structure and function

NIA is also focusing efforts on determining the structures of proteins which have undergone non-hereditary changes to their amino acids. For many years it has been clear that "modified proteins" accumulate during aging and may interfere with normal cellular processes. These unstable proteins lead to such age-related problems as cataracts, interrupted blood flow to the heart and brain, failure of the immune system, impaired ability to heal wounds, and loss of cognitive function. NIA is attempting to discover the mechanisms by which modification of proteins occur, why they accumulate in aging, and the physiological consequence of these changes. Understanding these mechanisms may ultimately lead to effective treatment and prevention strategies.

Treatment of Alzheimer's disease (AD)

The primary manifestation of AD dementia is intellectual/cognitive deterioration and the sole FDA approved drug for the treatment of AD currently on the market, Tacrine, provides only temporary relief for treatment of AD. In FY 1991, the Drug Discovery Groups in AD program was initiated to facilitate the pre-clinic development of new compounds for treating Alzheimer's disease by

expanding the range of approaches to drug treatment beyond the current focus. The research activities of three of the Groups deal with attempts to circumvent the blood brain barrier's ability to keep out peripherally administered peptides and proteins. This is important because one potential treatment for AD would be to raise the concentration in the brain of neurotrophic factors which promote the health and well being of neurons. Since neuron death and dysfunction is a major problem in AD, these factors may be effective in delaying or reversing cognitive and behavioral symptoms of AD.

Behavioral aspects of AD

NIA also supports research aimed at ameliorating those alterations in behavior, mood, and function associated with AD that cause the greatest stress for family members, and difficulties for both professionals and family members in providing optimal care. It is important to provide tools for families and nursing homes which will replace physical and pharmacological restraints. The goal is to reduce the severity and frequency of disruptive behavior, to allow patients to live in the least restrictive environmental and manner, to maximize dignity and independence, and to retain or reestablish self-care practices.

NIA supports several research projects examining the extent, causes, and consequences of caring for people with AD and related dementias. These include ten coordinated research projects to examine the nature and outcomes of special care units for persons with dementia. Other activities include initiatives in family caregiving and health services, burdens of care research in special populations, specifically minority family caregivers; supportive environments and everyday functioning; and demographic and economic aspects of Alzheimer's disease.

In 1991, the NIA, in conjunction with the National Institute for Nursing Research and the Alzheimer's Association, began fourteen pilot feasibility studies for new and innovative methods for managing the behavioral symptoms associated with AD. The symptoms of special concern included wandering, disturbed sleep, pacing, agitation, feeding and dressing difficulties, incontinence and toileting difficulties, screaming and other vocalizations, aggression and violence, and inappropriate sexual behavior. Studies were specifically sought for strategies to enhance AD patients' self-care abilities and activities of daily living. These feasibility studies will lay the scientific and clinical groundwork that may lead to large-scale clinical studies/trials on the assessment and nonpharmacologic management of secondary symptoms and disabilities.

Language, attention and cognition

Cognitive dysfunction in aging is defined by the changes in neural and psychological processes that control or regulate attention, memory, thought, communication, spatial competence, decision making, and other cognitive processes. Ongoing studies are being conducted to explore the range of normal and abnormal cognitive processing. A particularly exciting development is the use of neuroimaging techniques that permit researchers to image the brain while cognitive processing occurs. These techniques hold

great promise for isolating brain structures which control various aspects of cognitive function and for determining what parts of the brain are controlling age-related changes in cognitive function.

Frailty and physical functional independence

Physical frailty is a major cause of long-term care needs and afflicts over 3.25 million older Americans. Epidemiologic studies have shown a relationship between impairment and strength, endurance, gait, and the occurrence of loss of independence. FICSIT (Frailty and Injuries: Cooperative Studies of Intervention Techniques) is an NIA supported set of clinical trials which have demonstrated that fall rates in moderately frail older persons can be reduced significantly by intervention targeted to individuals' specific fall risk factors. Other findings show that balance, strength, and endurance training can markedly improve physical performance abilities in a wide variety of older populations ranging from relatively healthy community-dwelling persons to very frail nursing home residents. Other research has demonstrated that the administration of growth hormone has been associated with arresting or reversing degenerative tissue changes which decrease strength and mobility.

Claude D. Pepper Older Americans Independence Centers

The NIA added one new Claude D. Pepper Older Americans Independent Center (OAIC) in fiscal year 1993 and plans to add at least one additional center in fiscal year 1994. The OAICs were authorized by Congress to promote research on interventions that can help older people live independently, and avoid institutionalization or prolonged hospitalization. Besides testing specific ways to prevent disability, the OAICs train additional researchers capable of doing such studies and disseminate information on successful interventions to clinicians and the general public.

Cardiovascular disease

Cardiovascular diseases and stroke account for more deaths in the population 75–84 years old than the next nine leading causes of death together. Cardiovascular diseases associated with aging include hypertension, stroke, ischemic heart disease, heart failure, peripheral vascular disease, cardiac arrhythmias, and impairments in blood pressure regulation which cause intermittent hypotension. The incidence and prevalence of these conditions rise with age.

NIA supported investigators at the Claude Pepper Center at Harvard have shown that a reduction in overall heart rate variability is associated with aging, congestive heart failure, coronary artery disease, sudden death syndromes, and after-meal low blood pressure. Although the average heart rate did not differ between the age groups or sexes, heart rate variability was greater in women than men at all ages. The increase in heart rate variability in women compared to men may be related to lower cardiovascular disease risk and greater longevity in women. Future studies are needed to gain a better understanding of this and other mechanisms by which age and gender contributes to cardiovascular diseases. NIA plans a significant research initiative in this area for fiscal year 1994.

Osteoporosis and bone quality

The progressive loss of bone, which is universal after middle age, very commonly leads to osteoporosis, a condition characterized by increased skeletal fragility. NIA supports a range of research into the causes and treatment of osteoporosis. Research aimed at identifying markers and risk factors that predict changes in bone mass, bone competence, and fracture susceptibility is of vital importance in identifying individuals at risk and evaluating the effectiveness of treatment strategies.

For example, while diabetes has been hypothesized to be a risk factor for bone loss and osteoporosis, recent research has shown that some diabetic women actually had increased bone mass compared to non-diabetic women. This distinction did not appear among men. This gender-related difference suggests that certain hormonal agents would play a potentially important role as risk factors and/or in a therapeutic strategy to preserve bone mass. Additional research has uncovered a link between cigarette smoking and reduced bone mass on the hip. These findings are particularly important, not only in light of the public health implications, but because they also apply to men, in whom the need for research on risk factors for osteoporosis has received little attention.

The decrease in estrogen levels which follows the onset of menopause frequently results in rapid bone loss which often precedes osteoporosis. Recent research has discovered the osteoclasts (cells that break down and remove bone) are target cells for estrogen, and that estrogen directly inhibits the breakdown of bones by osteoclastic cells. This finding will encourage the development of new approaches which will be effective in halting bone breakdown and hence preventing osteoporosis.

Menopause and post-menopausal problems

Menopause is a universal event in female aging and is also associated with an acceleration in the rate of bone loss. However, it is unclear whether osteoporosis in old age is greater in women who had a relatively early menopause compared to those whose menopause was later. Recently, a study has shown that the total number of reproductive years may be a significantly more sensitive index for identifying women at increased risk of osteoporosis. In order to gain an increased understanding of the inner-relationship between menopause and osteoporosis and other problems associated with menopause, NIA began a major initiative in this area in fiscal year 1994. Because the menopausal experience in minority women has been particularly neglected, special emphasis in minority populations is an integral part of this initiative.

NIA also continues to support the NIH Women's Health Initiative, which includes 70,000 post-menopausal women ages 50–79. This study is intended to assess the long term benefits and risk of hormone therapy as it relates to cardiovascular disease, osteoporosis, and breast and uterine cancer. Related to this effort, NIA began the Women's Health and Aging Study which is exploring the causes and course of physical disability in women aged 65 and older. The study will also provide important information on how the disease-disability relationship is modified by cognitive

functioning; on psychological factors; and on social, economic, and medical resources of older women.

Failure to thrive and malnutrition

The "failure to thrive" syndrome consists of weight loss, decreased appetite, poor nutrition, and inactivity. It is often accompanied by dehydration, depressive symptoms, impaired immune function, and low serum cholesterol. NIA actively encourages research to develop interventions designed at preventing, arresting, or reversing the failure to thrive syndrome. NIA is also interested in research on a variety of dietary disorders in older persons, especially malnutrition and the role of nutrition in overall health status in old age. There is a great deal of conflicting information on dietary recommendations for older people, leading to inappropriate use of dietary supplements and potentially harmful eating habits. Research in this area can lead to the development of scientifically sound guidelines for older people, particularly those relating to medications or to diseases that may require dietary changes to maintain functioning.

Improving long term care for the elderly

Recent discussions of health care reform emphasize research in regard to long-term care needs. Identifying factors that subsequently lead to placement in nursing homes (NH) is of particular importance for recognizing those at risk and then developing interventions that can minimize, if not eliminate, associated risks. NIA research provides valuable information for predicting NH placement and mortality. These analyses confirmed the predictability of several key sociomedical risk factors—living alone, having fewer non-kin social supports, low sense of personal control, and other functional limitations.

The NIA Special Care Initiative Study predicts, examines, and evaluates the use of long term care services and practices, and identifies strategies for modifying and improving services for those in need. The idea behind a Special Care Unit (SCU) is that people with dementia might benefit from specially designed programs or environments that are different from those provided in a traditional nursing home setting. While special care units have proliferated across the country in recent years, very little is known about their effectiveness in caring for Alzheimer's patients, in relieving burdens of care for the patient's family, or how these programs compare to traditional nursing home care in terms of cost and effectiveness. The NIA Special Care Unit Initiative projects are designed to evaluate the impact of these new care units on people with Alzheimer's disease, their families, and nursing home staff. These studies will provide the public, nursing home facilities personnel, and policy makers with the first comprehensive look at how special care units work.

Self-care refers to a broad range of activities undertaken by an individual to maintain or promote health, as well as to detect, prevent and treat common health problems and conditions. Research being conducted in this area seeks to assess the extent and nature of self-care practiced by older adults, the strategies used to main-

tain independence, the relationship between self-care and other forms of care, and the subsequent use and costs of health care.

Economic and health status of the elderly

The well-being of America's elderly clearly depends on their economic and health security. The reciprocal and multidimensional relationship between income and health in adult life is poorly understood; almost nothing is known about the effects of these transitions at advanced ages.

Two major new NIA-supported studies aim to clarify how people experience and evaluate their health and economic status from immediate pre-retirement years to very old age. The Health and Retirement Study (HRS) follows transitions in reliance on earned income, private pensions, Social Security, Medicare benefits, etc. in an initial sample of over 12,000 persons aged 51–61 years. An emerging portrait of this population depicts sharp contrasts between desires for gradual retirement and actual departure from the work force. The role of health and disability in the timing of retirement, and of retirement in the health and economic well-being of this cohort, are also being examined. An auxiliary study, Asset and Health Dynamics of the Oldest-Old (AHEAD), follows 7,300 persons aged 70 years and over—almost a third of them over age 80—to examine how late-life changes in physical and cognitive health affect, and are affected by, patterns of saving and income flows.

NIA also plans to support up to six Demographic Centers on Population Aging which apply state-of-the art demographic, economic, and mathematical methods to analyses of these and other new databases, providing timely reports on national public policy issues. The centers will include outreach activities that benefit researchers at many institutions across the nation.

Aging and family life

Family based research identifies how health, illness, and disability in later life are affected by intergenerational exchanges, informal caregiving for frail elders, and cultural/ethnic diversity in family relationships. These relationships are pivotal to the health and health care of older people. This research contributes to an understanding of adequacy of informal care for frail elders and of the factors that determine the use of health care services by older people and their caregivers. In advancing basic social science research, family aging studies seeks an understanding of interpersonal relationships in physical and emotional health and illness across the life span.

Special populations

The NIA continues to be committed to minority populations, women, and rural older populations. Most recently, the Institute began a research effort to establish Exploratory Centers for Research on Health Promotion in Older Minority Populations. These centers will conduct pilot research and plan for a program of medical, behavioral, and social research; medical and psychosocial interventions; and programs of health education and community outreach aimed at improving the health status of older ethnic minority populations.

NIA is vigorously expanding its minority research focus and minority participation in all of its research initiatives. For example, investigators are testing intervention strategies to prevent frailty in older black and Hispanic-American populations and focusing on health conditions such as hypertension, diabetes, and prostate cancer, which are disproportionately prevalent in older Americans. NIA also supports four rural health centers established to explore the special health needs of older rural Americans, including access to and results of health care services.

The long-term goals of the NIA intramural research program (IRP) are: (1) to conduct basic research relevant to understanding aging processes and age-associated disabilities. The IRP conducts the landmark Baltimore Longitudinal Study of Aging and is a major setting for post-doctoral training of promising investigators.

INTRAMURAL RESEARCH

Intervening in aging processes

The causes of aging are complex and involved both internal and environmental factors that damage molecules, cells, and tissues as well as the ability of the host to resist and repair such damage. IRP scientists, using the latest techniques of molecular and cellular biology, continue to search for the causes of aging and ways to retard and reverse age-associated deficits before they progress to disease, disability, and institutionalization. Current projects include: (1) investigations of DNA repair in genes including those with implications in malignancy and longevity; (2) research on the mechanisms by which the death of cells is increased with age and diseases such as Alzheimer's disease and osteoarthritis; (3) studies on the loss of host defense to aging; and (4) the potential use of gender therapy to prevent or reverse age deficits or diseases.

Regarding the immune system, it is well known that many older individuals show an impaired immune response that puts them at greater risk of infections. NIA and National Cancer Institute scientists have defined a novel cell surface protein that is essential for immune activation. Better definition of the molecular components in the immune response offers new possibilities for enhancing appropriate and suppressing inappropriate immunologic reactions.

Baltimore Longitudinal Study of Aging (BLSA)

The BLSA, begun in 1958, seeks to understand how and why we age. The study panel is a group of over 1,100 highly dedicated women and men, from 20 to 97 years of age, who have volunteered to come to Baltimore every two years for intensive study to establish their physiologic and psychologic status. Over 160 new participants have been recruited as part of a multi-year strategy to enroll 350 more women and minorities, meeting specific health criteria, for major initiatives with hypotheses about gender and racial differences. Biologic samples are collected from participants at sequential visits and banked which, with the extensive health and behavioral data assembled over time, allows "instantaneous longitudinal studies" to be conducted. These studies would otherwise take a decade or more to complete and cost millions of dollars. Initial research projects using a newly established DNA bank include

studies of age-associated changes in DNA repair and preferential DNA repair in breast cancer. A vascular initiative is examining age, race, and gender differences in blood pressure, arterial stiffness, thickening of the heart muscle and the relationship of these parameters to heart and vascular disease. The BLSA Perimenopausal Study is characterizing the biological and psychosocial antecedents of the menopausal transition in 200 women.

Alzheimer's Disease (AD)

The IRP has a focused research program on the etiology, diagnosis, and treatment of AD. The distinctive aspect involves applying and refining sophisticated technologies—positron emission tomography, magnetic resonance imaging, and spectroscopy—to study patients throughout the disease course to yield new insights. For example, NIA scientists have devised new ways to evaluate drug efficacy using only a few patients by studying the longitudinal "trajectory" of function and pathology in individual patients. These are being applied in studies to evaluate sites and mechanisms of action in AD. NIA scientists have hypothesized that early functional and metabolic deficits in AD reflect reversible failure of nerve impulse transmission. Research will continue to study the use of drugs on the course of AD to delay development of morbidity and hospitalization. NIA scientists have also shown that biopterin, a natural compound that regulates many fundamental brain mechanisms, is reduced in the cerebrospinal fluid of certain AD patients. A clinical trial has been initiated to study the possible role of biopterin in the pathophysiology of AD and of its potential as a therapeutic agent.

Vascular disease

A major ongoing intramural program studies age-associated vascular disease such as atherosclerosis, hypertension, and stroke. NIA studies show that older men and women with higher fitness levels generally have arteries which are less stiff than those of less fit individuals. These results suggest that the age-associated increase of arterial stiffness may be slowed by aerobic exercise; longitudinal follow-up is underway. Researchers have found that, with age, vascular smooth muscle cells become highly motile and invasive and produce degradative enzymes that destroy normal blood vessel architecture and weaken the blood vessels. Various compounds have been found to stabilize the dedifferentiation of the smooth muscle cells and further research will continue on these prototype drugs. Other opportunities that are being pursued include: (1) the use of gene therapy as a potential new approach to the treatment of coronary artery disease; (2) studies of the relationship between hypertension associated with stress and high sodium intake, particularly in minorities; and (3) insights into the basic cellular and molecular mechanisms contributing to renarrowing of an artery following balloon dilation.

Frailty, osteoporosis, hormone replacement therapy and women's health

Issues of women's health and well-being command special attention within the IRP and include the following emphases: First, a

decline in growth hormone (GH) levels parallels the loss of muscle as well as the development of frailty. Recent intramural studies show that a natural stimulator of growth hormone production, growth hormone releasing hormone, restores the normal pattern and level of GH in older individuals. Significant increases in muscle strength were apparent after six weeks of treatment suggesting that such factors could be utilized to reverse certain age-associated diseases and disabilities. If successful, this therapeutic approach could speed recovery and reduce bed days and hospital costs. Also, a collaborative trial is underway comparing the effects of replacement of GH and a gender appropriate sex steroid in 160 women and men. This will enable the effects of hormone therapy on a wide variety of relevant health variables to be compared in women versus men. A National Institute for Nursing Research and NIA collaborative intramural program will continue to examine post-operative complications from hip fracture and devise behavioral nursing interventions to enhance outcomes.

Diabetes and other age associated metabolic defects

NIA conducts a multifaceted research effort to develop new therapies that are safe and specific for the control of blood glucose in older diabetic patients to prevent the disease's late complications. Significant progress has been made in defining and modifying the regulatory signals controlling pancreatic insulin secretion. INA scientists have found that the action of insulin can be enhanced and prolonged by preventing the removal of phosphate from the activated form of the insulin receptor. These results are being aggressively pursued given their promise for opening new avenues in the treatment of diabetes associated with aging.

Longitudinal studies of prostate disease and PSA

Collaborative studies will continue to investigate potential uses of rates of change in prostate-specific antigen (PSA) levels to improve clinical detection of prostate cancer and benign prostatic hyperplasia (BPH). Recent findings suggest that: (1) rates of change of PSA are significantly more accurate than the traditional single measure for the early detection of prostate cancer; (2) certain PSA criteria now in use may lead to many unnecessary prostate biopsies and should be dropped from clinical practice; and (3) PSA tests may be useful in guiding optimal treatment decisions for BPH.

SECTION 2

1996 INTRODUCTION

Congress created the NIA in 1974 as part of the NIH. At that time, aging research was just in the early stages of developing ways to explore the fundamentals of the aging process. Now, over 20 years later, the science base has grown in depth, breadth, and detail. And with this growth have come new insights into the processes and the experience of aging.

Driving an increasing interest in aging research is a projected dramatic increase in the older population. People over 65, who were four percent of the U.S. population in 1900, will constitute ap-

proximately 13 percent in the year 2000 and 20 percent by the year 2025. The over-85 age group is the fastest growing segment of the American population and is often referred to as the "oldest old". This boom in the population of older Americans will have a profound impact on the Nation's health, social, and economic institutions.

Research in aging over the last two decades has contributed to the realization that aging should not be equated with inevitable decline and disease. Consider Alzheimer's disease (AD): This form of dementia has now been linked to alterations in specific proteins and has been shown to affect specific regions of the brain. As a result, it is no longer possible to think of AD as "senile dementia," an old and discredited term which implied that losing one's memory was simply part of growing older. Part of this new perspective has its roots in the use of new technologies to explore the fundamental biology of aging. Where researchers once theorized about the causes of growing old, they now have the means—in recombinant DNA techniques and nuclear magnetic resonance, for instance—to track down the actual mechanisms of aging in cells and tissues. Once the mechanisms of aging are understood, the interactions between aging and disease will yield to preventive measures and treatments for the disorders that often accompany aging.

Fueling the growth of this science are increasingly important links between aging research and other areas of biomedical and behavioral investigation. For example, the study of aging cells now overlaps substantially with research on the cellular mechanisms of cancer and cardiovascular disease. Similarly, the study of the aging brain now has numerous intersections with basic neurobiology and research on brain disease. Increasingly, research on aging has become an integral part of mainstream health research.

Even with the hope of major advances in the treatment and prevention of debilitating diseases, the demand for long-term care is expected to expand in our society. Research will be conducted on many aspects of long-term care, particularly on new and evolving forms of care. NIA supports research on preventing the need for long-term care or institutionalization, enhancing the quality and efficiency of such care, easing the burden of long-term care, and forecasting the requirements for long-term care.

Alzheimer's disease is a top research priority for NIA. It currently affects as many as four million older Americans and their families, causes enormous personal suffering, and costs the nation billions of dollars each year. Without the development of new treatments, cures, or preventive approaches to this dreaded disease, the number of individuals and families devastated by Alzheimer's disease will likely increase up to five-fold within the next 50 years. In addition to Alzheimer's disease, priority initiatives include research on the biology of the aging process and on physical disabilities such as osteoporosis and cardiovascular disease. These initiatives are wide-ranging and can be based on cutting-edge laboratory technologies or upon simple but highly effective strategies such as exercise or behavioral interventions. The goal of NIA-supported research is to understand the basic mechanisms of normal aging and age-associated disease and disability and to translate this basic knowledge into treatment and prevention strategies.

BASIC RESEARCH

Caloric restriction and biomarkers of aging

As aging becomes more and more a topic of public concern, interest in interventions to delay or eliminate the consequences of aging has grown enormously. Although the molecular processes that must be responsible for species-specific rates of aging are poorly understood, the gross physical and physiological manifestations of aging are well characterized in many species. The differences in these aging changes within and between species suggest that aging is a multi-process phenomenon. As a result, chronological age is not a good predictor of physiological or functional age. Better measures of physiological or functional age are known as "biomarkers of aging." The NIA is currently in the seventh year of a ten year initiative to develop a set of biomarkers of aging which could be used as measures of aging-related biological changes in experimental systems and in human beings.

It has been known since early this century that caloric restriction extends the lifespan of rodents; useful biomarkers of aging might predict the life extension that results from caloric restriction. Studies conducted so far show that caloric restriction retards the development of virtually all age-related lesions and tumors, reduces oxidative damage to neurons and slows the decline in the immune system associated with aging. An understanding of how caloric restriction produces this effect would provide important insights into preventive measures and therapies to retard and/or alleviate the effects of aging. The NIA and the Food and Drug Administration (FDA) have sponsored more than 30 groups to conduct research on biomarkers and caloric restriction. Currently, they are in the final stages of testing in rodent models prior to considering their translation to human studies.

The roles of oxidative damage and programmed cell death in aging

Oxidative damage to critical cell components is chronic and ubiquitous in living cells. Although extensive repair systems exist in these cells, repair is never 100 percent complete. The purpose of this initiative is to determine: (1) what factors regulate the amount of damage incurred by cells, (2) what factors regulate the repair of this damage, (3) whether unrepaired damage contributes to aging, (4) the role of "cell suicide" in eliminating damaged cells, and (5) whether interventions can be developed to retard aging. Recent research results by NIA grantees include the following:

long-lived nematode (round worm) mutants express increased levels of antioxidant defense enzymes, and higher levels of antioxidant enzymes in fruit flies extend maximum life span.

when "β-amyloid" protein, which accumulates in the brains of patients with Alzheimer's disease, is placed in solution it generates reactive oxygen capable of killing neurons through oxidative damage.

mice carrying one or more extra copies of the antioxidant defense enzyme "superoxide dismutase" are more resistant to oxidative stress compounds which induces diabetes in animal models.

When oxidative stress overwhelms the cellular defense and repair systems, an alternative protective strategy for the organism is for the damaged cell to actually commit suicide. Whereas this may be the best way to eliminate a heavily damaged and potentially cancerous liver cell, the elimination of a neuron has more serious consequences because of the inability to replace lost neurons. Thus, an understanding of how cell death is regulated may be crucial not only in preventing cancer, but also in preventing neurodegenerative disease. Recent research results of NIA grantees include the identification of several genes required for induction of the programmed cell death pathway.

Cellular senescence

It is possible that specific genes determine how many times a cell divides or proliferates and that the end of cell division, known as senescence, helps determine certain aspects of aging. Most cells are limited in the amount of times they can divide; a built-in barrier to unlimited growth. This limit is higher in longer-lived species, such as humans, than in shorter-lived species. Hence, human cells can proliferate more times than mouse cells. This and other observations have led to speculation that life spans and aging may be linked to the limit on cell division.

Cellular senescence intrigues researchers for another reason: While on one hand it limits life span, it may also prevent cancer. When the limit on cell division is removed, as it is for presently unknown reasons in cancer cells, the cells continue growing indefinitely. If cell senescence is indeed one of the fundamental mechanisms of aging, as some biologists speculate, then aging itself may be the flip side of the cancer coin, the byproduct of a mechanism that prevents cells from growing into tumors. Whatever the "purpose" or end result of cell senescence, the genes that regulate it are the focus of intense study. NIA-supported scientists in several laboratories have already isolated genes that seem to promote cell proliferation—called oncogenes—and other genes that seem to stop proliferation, often referred to as tumor suppressor genes. Understanding why and how these genes are "turned on" or expressed may uncover new pathways for understanding both aging and cancer.

It has been found, for example, that each time human or animal cells divide, there is a loss of DNA from the ends of each chromosome. The ends of chromosomes are called "telomeres". When telomeres have shortened beyond a critical point, cells can no longer divide and are senescent. This mechanism would limit the amount of cell division that any cell can undergo, potentially limiting life span but also providing protection against the uncontrolled cell division that occurs in cancer. Recent analysis, however, has shown that an enzyme called telomerase can reverse telomere shortening in some normal cells such as sperm cells, as well as in cancer cells where telomerase allows cancer cells to continue uncontrolled division. Further molecular and genetic studies of telomeres and telomerase are therefore of potential importance for the understanding of both aging and cancer, and will be supported by NIA.

Gene therapy

Whereas aging results from both genetic and environmental factors, appropriately designed genetic interventions may be able to slow aging due to both kinds of factors. For example, increased expression of genes for antioxidant enzymes might be effective in reducing damage due to oxidative stress in specific tissues. If specific age-related degenerative changes can be delayed by genetic intervention, high quality of life can be maintained, and health care costs can be delayed until later in life. This will be of particular benefit if the period of time ultimately spent in ill health can be shortened, and if the severity of the loss of function can be attenuated, thus reducing overall health costs.

For example, it is well known that would healing declines with age. An NIA grantee is carrying out basic studies to determine what factors are limiting wound healing in aged animals. He has developed a protocol to test whether treatment of tissue with transforming growth factor by injection along the line of the incision prior to surgery improves wound healing. Preliminary results with another cytokine show a temporary increase in wound strength. Such studies offer great potential if they could be applied to the elderly undergoing elective surgery. This research is also attempting to develop a safe and effective method for introduction of the gene coding for cytokine DNA into the tissue around wounds.

Mechanisms of neuronal cell dysfunction

Understanding why brain cells become dysfunctional and die in older persons is of primary concern to NIA; elucidating the underlying causes could lead to new therapeutic strategies to delay, correct, or prevent the loss of these vital cells and the resulting neurological deficits. Research into mechanisms of nerve cell death and the compensatory response of central nervous system cells has been recently stimulated by NIA. Critical to an understanding of some of the neurodegenerative diseases may be the link that impaired energy metabolism could have with nerve cell death. NIA will also encourage research on protein transport and signal transduction at the nerve cell membrane. Study of the components essential for membrane function will provide information on how the specialization of nerve cell surface is constructed, but even more importantly, will show how it may change leading to a variety of neurodegenerative diseases as well as the conditions such as cognitive decline normally associated with aging.

Sensory and sensory-motor dysfunction

Visual and hearing impairments are present in respectively about 10 and 32 percent of American adults aged 65 years and older. The somatosensory areas of touch, temperature, pain, and motion are also important to successful aging but have received even less attention than studies of visual and hearing dysfunction. All too often older individuals have more than one sensory impairment. Because individual researchers tend to focus work on the study of one sense or another, questions about neural mechanisms that may be common to sensory processing and/or sensory dysfunction have not been explored adequately. The NIA stimulates multimodal sensory research, addressing questions such as the con-

tribution of sensory processes to the control of balance, posture, and locomotion, areas of importance because impairments can severely compromise the mobility for older adults. Falls in older adults, which account for almost all of the 250,000 hip fractures occurring annually and commonly result in long-term disability, may be due in large part to impairments in these sensory systems.

ALZHEIMER'S DISEASE

Alzheimer's disease will reach critical proportions in the U.S. and other countries as the population ages. We are now faced with a major public health crisis if something is not done to halt the progress of this dreaded disease. Since the prevalence of Alzheimer's disease increases dramatically with age after about 65 years, delay of the onset of Alzheimer's disease by five years would substantially reduce the number of cases, and a delay of ten years would largely eliminate the disease in the normal human lifespan. Several exciting recent genetic discoveries have shed new light on the etiology and pathogenesis of Alzheimer's disease. Recently, apolipoprotein E4 (ApoE4), a blood protein whose gene is located on chromosome 19, has been shown to be associated with greatly increased risk of Alzheimer's disease. This extremely important observation has been confirmed in a number of laboratories and is the first report of a major biological risk factor of the disease. In addition, there are many laboratories currently involved with trying to identify the gene on chromosome 14 associated with early-onset familial Alzheimer's disease. Other important studies in the etiology area include extensive analysis of the cellular, genetic, and molecular parameters of nerve cell function in health and in disease. Such basic research will provide a necessary understanding of the molecular underpinnings of Alzheimer's disease. Alzheimer's disease research has been of paramount importance at NIA since the Institute came into existence. To conquer the disease and to bring urgently needed support to patients, families, and researchers, NIA has built a nationwide framework for research and assistance. The structure includes:

Alzheimer's Disease Centers (ADCs).—Located at major medical institutions around the country, the 28 ADCs are collecting and studying longitudinal data on the disease; working to translate research advances into clinical services; and educating and training professionals. Satellite centers in rural and remote communities are recruiting minority participants into the Centers' programs.

Drug Discovery Groups.—Located at six research centers, these groups are designing, developing, and testing new drugs aimed at delaying, halting, or reversing the progress of Alzheimer's disease. These groups focus on drugs at the pre-clinical stage, before testing in people.

Cooperative Study Units.—These 32 research sites are conducting cooperative clinical studies (i.e., in people) of drugs developed by the Drug Discovery Groups and other projects. The first study to assess the effectiveness of Deprenyl plus Vitamin E in slowing the course of the disease began in October, 1992. Another study, for drug and behavioral treatment of agitation began in June, 1994, and a study of the anti-inflammatory drug prednisone for treatment of Alzheimer's disease began in November, 1994. A con-

ference was held in 1994 to evaluate the state-of-the-art in behavioral management in Alzheimer's disease, and to discuss the possibility of initiating larger-scale studies.

Alzheimer's Disease Education and Referral Center (ADEAR).—This clearinghouse with its toll-free number (800–438–4380) is a central source of information on all aspects of the disease. During calendar year 1994, 82,022 calls were received.

Consortium to Establish a Registry for Alzheimer's Disease.—This network is working to establish uniform standards for diagnosis to facilitate early and accurate detection of the disease and support research.

National Cell Repository.—This growing repository of blood samples from Alzheimer's disease patients facilitates the study of genetic defects associated with the disease.

A major theme in Alzheimer's disease is to extend knowledge about the age incidence, prevalence rates, and risk factors. The search for risk factors in minority and other distinct population groups could lead to better understanding of the pathophysiology of Alzheimer's disease and novel treatments. Thee ideas have been the underlying themes for three sets of studies that have been completed over the past year. One group of researchers conducted an incidence study of dementia in relation to education and occupation and found that the risk was greatest for individuals with both low education and low lifetime occupational attainment. A study by another group, done in pairs of older twins, has indicated an apparent inverse relationship of Alzheimer's disease with sustained exposure to steroidal and, possibly, non-steroidal anti-inflammatory drugs, suggesting that these agents may prevent or delay the symptoms of Alzheimer's disease. A third study found that the risk of developing Alzheimer's disease decreased significantly with increasing dose and duration of estrogen replacement therapy, suggesting that estrogen deficiency may be one of the factors that elevates a woman's risk of developing the disease. Estrogen replacement therapy may be useful for both symptomatic treatment and preventing or delaying the onset of dementia in susceptible postmenopausal women. After further preliminary research, clinical trials of anti-inflammatory drugs and estrogen may be initiated.

The clinical diagnosis of Alzheimer's disease has improved as the result of work of many investigators. In specialized research facilities, clinical diagnosis by research neurologists and psychiatrists now approaches 90 percent concordance with the subsequent neuropathological diagnosis. However, there remain important questions and gaps in knowledge. A major area in the development of new noninvasive diagnostic procedures has been that of imaging using Positron Emission Tomography (PET), Single Photon Emission Computed Tomography (SPECT), Magnetic Resonance Imaging (MRI), and Magnetic Resonance Spectroscopy Imaging (RSI), These kinds of techniques hold the promise of early diagnosis of Alzheimer's disease and the ability to monitor, non-invasively, the course of the illness.

Influenza vaccine

Influenza, commonly known as the flu, can be a very serious and often life-threatening illness in older persons. An NIA-supported study demonstrated the efficacy of an improved influenza vaccine in approximately 400 nursing home residents. Half of the participants received the commercially available influenza vaccine (HA) and the other half received an influenza vaccine against the same flue strains, but which was linked to another vaccine component, diphtheria toxoid. Clinical surveillance of all participants for respiratory illness was performed twice weekly for 5 months. During an outbreak of influenza, fewer diphtheria-toxoid-linked vaccine recipients than HA vaccine recipients had laboratory-confirmed infection. Of these recipients, fewer of the diphtheria-toxoid-linked vaccine-treated participants had bronchial and lung infections. The investigators concluded that the toxoid-linked vaccine produced greater protection from influenza infection for institutionalized elderly recipients. NIA will continue to support studies of basic cellular and molecular immunology in order to better understand the changes in immune function that occur with aging as well as clinical research because of the potential of improving vaccines for a variety of infections in older persons.

Physical frailty

NIA is supporting a number of major clinical initiatives that address the problems of physical frailty and loss of independence associated with older persons. Physical frailty is a major cause of need for long-term care and imposes annual costs of billions of dollars. Results from ongoing studies provided convincing evidence of the benefits of exercise for maintaining independent function in older persons. Some interventions from a clinical trial of frailty and injuries have shown more than a 30 percent reduction in fall rates, which could markedly lower the rate of disabling injuries such as some hip fractures. Tow studies have demonstrated efficacy of interventions to prevent falls and improve strength in frail order persons. Both have received widespread attention from health care providers and the public and have begun to influence health care practices for older persons.

One study employed a "targeted intervention" strategy for frail community-dwelling subjects with a variety of risk factors for falls. The subjects received individualized treatment for their particular risk factors including medication adjustments, strength and balance training, instruction on safe practices to avoid lightheadedness and environmental hazards, and raining in specific activities such as getting in and out of the bathtub. Over a one-year follow-up period, the treated subjects had 44 percent fewer falls per year than the control group who received social visits only.

In another controlled study of frail nursing home residents, it was found that a ten-week resistance exercise program approximately doubled leg strength, increased walking speed by 11 percent, improved stair-climbing power by 28 percent, and led to increased spontaneous physical activity. This study also found that

supplementing the diet with protein and calories had no effect alone and no significant additional effect when combined exercise.

Menopause and aging

There is little consensus on the significance of menopause in healthy aging or on its role in the chronic diseases/disorders of old age such as cardiovascular disease, osteoporosis and urinary incontinence. Not surprisingly, considerable controversy exists over the scope of the physiological changes surrounding menopause or that appear later in life that are attributable to reduce ovarian function per se. Menopause is a universal phenomenon; however, the manifestations of menopause are not. Cross-cultural research demonstrates considerable variability between populations in symptom presentation and associated psychosocial and physiological effects of those symptoms.

In order to gain an increased understanding of the inter-relationship between menopause and disorders such as osteoporosis, cardiovascular disease, and the other chronic diseases and disorders of old age, NIA began a major research initiative in this area in 1994. Future success in preventing and managing diseases and disorders which impact on post-menopausal women will require a substantially improved knowledge base to differentiate the contribution of "hormone deficiency" from that of aging. Advances can do much to clarify ambiguities in the presentation of age-related disease, improve diagnosis and treatment, and ultimately reduce health care costs. Similar considerations also apply to age-related changes in other endocrine factors, such as growth hormone and testosterone.

NIA also continues to support the NIH Women's Health Initiative, which includes 70,000 post-menopausal women ages 50–79. This study is intended to assess the long term benefits and risk of hormone therapy as it relates to cardiovascular disease, osteoporosis, and breast and uterine cancer. Related to this effort is NIA's Women's Health and Aging Study which is exploring the cases and course of physical disability in women aged 65 and older. The study will provide important information on how the disease-disability relationship is modified by cognitive functioning; on psychological factors; and on social, economic, and medical resources of older women.

Osteoporosis

Osteoporosis and its consequences, particularly vertebral and hip fractures, are a significant cause of frailty, morbidity, and even mortality in old age. NIA-supported osteoporosis research includes clinical studies of age-related bone loss and fracture epidemiology, intervention trials to prevent or reverse bone loss, studies of skeletal biology and the effects of sex steroids and growth factors on bone cell function. Five clinical studies recently funded will conduct prospective longitudinal studies to determine the contributions of age and ovarian hormone status to changes in bone mass as women approach and cross menopause. Some studies will explore underlying mechanisms whereby menopause-related changes accelerate bone remodelling and adversely impact on bone mineral metabolism.

Future progress in the prevention and treatment of osteoporosis clearly requires an expanded knowledge of the pathophysiology of this disorder. In particular, NIA will seek research studies to determine the most appropriate methods for studying the biology of the aging human skeleton. Such an approach will permit us to understand the nature of the age- and menopause-related changes that lead to bone loss. In addition, it will facilitate the identification of risk factors for, and specific markers of, the occurrence or reversal of bone loss, which will be valuable in identifying the potential of response to treatment, and/or monitoring the course of treatment.

Biology of age-related muscle weakness (Sarcopenia)

Although a number of studies have noted correlations of age-related changes in muscle properties will disability and metabolic impairments, considerable gaps in our knowledge are still present. With respect to outcomes, muscle weakness in the extremities contributes to loss of functional independence and falls. However, we still know little about (1) which age-related changes in specific muscle properties (e.g., mass, isometric strength, isokinetic strength, rate of torque development, fiber type distribution, fatiguability) significantly affect function and performance of specific tasks (walking, maintaining balance, etc.), and (2) what level of changes in muscle properties is required to significantly affect function.

Age-related changes in muscle properties may also contribute to non-insulin dependent diabetes mellitus, osteoporosis, risk for fracture, impaired fracture healing rates, and risk for hypo- and hyperthermia. Clarifying these relationships, including their quantitative aspects, would reveal much about the pathologic significance of these changes in muscle and their overall health impact.

Self-care and aging

NIA is currently supporting research on the nature, extent, and outcomes of self-care behaviors in diverse populations of older people in order to develop social and behavioral interventions for encouraging health and effective functioning in later life. While health surveys have indicated that most older people engage in some form of self-care behavior, there has been a lack of specification in these prior surveys. NIA is now documenting the wide variability in older people's self-care practices, specifying factors associated with engaging in particular self-care behaviors (e.g., self-management for chronic health conditions and self-care practices to compensate for functional limitations affecting routine activities of everyday living). Such specifications are important for documenting the links between particular self-care practices and illness or disability.

Inappropriate self-care can lead to delays in seeking needed care or conversely, overutilization of the medical care system for trivial symptoms. Recent NIA studies on medical self-care dispel myths that suggest older people are incapable of recognizing the significant of illness symptoms and that they are more prone than younger persons to use inappropriate strategies that could exacerbate conditions. While most older people have a good knowledge of symptoms and risks, NIA studies show there is a need for greater

health education regarding the causes and consequences of common non-specific symptoms (such as fatigue, sleep difficulties, headache, an stomach pain), which are often erroneously attributed to age or stressful situations. Future research initiatives are being planned to develop a better understanding of complex processes involved in care-seeking and to suggest ways to better interpret symptoms and self-treatment.

Minority aging and long-term care

Dramatic increases are expected in the number of non-minority older people, 92 percent by the year 2030; but the projected growth in the older minority population—over 250 percent by 2030—points to a need for research on aging in minority populations. Recent comparisons show that with comparable levels of frailty, African-Americans are less likely to enter nursing homes or enter at older ages than non-minorities. Other findings are that family care is more common than the use of formal care for all minorities, and that recent immigrants are least likely to be institutionalized. Future studies, however are challenged by the need to disentangle the influence of cultural preferences for home or institutional care from the effect of socioeconomic differences for the largely disadvantaged older minority population. Understanding these and other ethnic variations in long term care has significant implications for structuring of formal services and assisting the possibly cost-effective alternative of continued family care.

Cognitive factors in everyday functioning of older people

NIA supports research on social, behavioral, and biological factors affecting cognitive functioning as people age. More recently, effects are being directed at the implications of declines in cognitive functioning for older people's ability to perform daily tasks, such as driving, decision-making, and understanding and following medical instructions. Of particular importance for such tasks are changes in "attentional resources"—the ability to identify and process relevant information simultaneously from multiple sources. While older people perform less well in general on tasks requiring divided attention, expertise in or familiarity with the task considerable lessens older people's disadvantage. Research has confirmed that older people have greater difficulty than younger people in understanding written medical instructions. However, how the information is presented can have a significant impact upon comprehension. For example, older people can more easily understand instructions presented as a list as opposed to paragraphs. Taken together, these and other research projects highlight the practical implications of basic cognitive research for the daily lives of older people. For example, those older people who suffer deficits in visual attention are at greater risk for automobile accidents. NIA research has shown that through proper training and practice, these deficits can be overcome or lessened.

Demography of population aging

Population aging will become one of the most important social phenomena of the next half century, especially when the babyboom generation becomes eligible for Social Security and Medicare. How

this nation and its institutions accommodate themselves to the dramatic demographic age-shift will have a significant effect on the quality of life in the twenty-fist century. NIA-supported research in the field of demography of aging can be characterized by an orientation towards intergenerational relations, especially within the family; and a focus on the characteristics and behaviors of older people themselves, especially in he critical areas of economics and health. To further these goals, NIA recently funded nine Demography Centers to promote the use of data from national surveys of health, retirement, and long-term care by the larger research and policy-making communities. The field of "biodemography" is emerging, which integrates biological and genetic research with demographic methods, and which should enable a better understanding of how to forecast life and health expectancies.

Research progress in the demography of aging is currently being made in several areas. According to NIA-funded studies, it is evident that the rate of increase in human mortality slows after age 95; possibly even declining after age of 110, and that centenarians are the fastest growing age group. The findings emerging from this body of research are increasingly being used to inform actuarial estimates for the Social Security and Medicare Trust Funds. One interesting study of a small group of nuns suggests that persons who earn college degrees and constantly challenge their minds, are likely to live longer and suffer less from dementia. One hypotheses explaining this finding is that education builds a greater "brain reserve capacity" which can better compensate for the affects of neurological disorders.

The Health and Retirement Study (HRS), which follows persons aged 51–61, has completed the second interview wave. The HRS will be used to study topics such as the influence of health and private pensions on retirement, the impact of changing Social Security's age of eligibility provisions, and the impact of the Americans with Disabilities Act. The Asset and Health Dynamics of the Oldest-Old study, which follows persons age 70 years and over to examine the interplay of family and economic resources and late life health transitions, has completed the first wave of data collection; analysis is underway.

INTRAMURAL RESEARCH

The Intramural Research Program (IRP) supports research conducted by government scientists in Baltimore, Maryland and at the NIH Clinical Center, as well as the operation of NIA's Epidemiology, Demography, and Biometry Program and also supports the post-doctoral training of promising investigators in the intramural laboratories.

Intervening in aging processes

The causes of aging are complex and involve both environmental and internal factors that damage molecules, cells, and tissues and the ability of the host to resist and repair such damage. NIA scientists, using the latest techniques of molecular and cellular biology, are making significant progress in elucidating mechanisms that underlie aging processes and in devising ways to retard and reverse age associated deficits. Findings and related opportunities

include the following. (1) A commonly occurring mineral has been shown to inhibit programmed cell death (apoptosis) of endothelial cells following removal of growth factors and to improve the angiogenic response in aged animals. This may be a useful strategy to restore the growth of blood vessels in degenerative diseases of aging. (2) Chondrocytes (cells responsible for production of cartilage) can be induced to divide in culture by treatment with growth factors and then stimulated to reform cartilage when injected back into mice. This lays the foundation for cell-based repair of cartilage defects that are common in age associated disease of cartilage. (3) NIA scientists developed techniques to measure DNA damage and its repair in the telomeres (end regions of chromosomes that decay with aging) and recently demonstrated that repair declines with age. (4) The isolation of factors from old animals that inhibit blood vessel formation and tumor growth is ongoing. Analysis of spontaneous rat breast tumor cells may yield insights into the loss of suppressor gene function in the progression of breast cancer.

Baltimore Longitudinal Study of Aging (BLSA)

The BLSA, begun in 1958, seeks to understand how and why we age. At this stage of its evolution, health outcomes are accumulating and participants, now numbering over 1,170, have been followed for significant segments of their lives. A BLSA DNA bank is being established; enabling protocols on apoE risk and protective factors in cognitive aging and on preferential DNA repair in breast cancer to proceed. BLSA studies also explore the role of risk factors for health and longevity, such as obesity, glucose and insulin metabolism, and plasma cholesterol. Each of these has been shown to continue to play a role into very old age, but the definition of "normality" for each must be age-specific. Prevention efforts depend upon accurate definition of risk, and such data are becoming uniquely available through the BLSA. A ten year BLSA study of the causes and natural history of prostate cancer, benign prostatic hyperplasia (BPH) and normal prostatic growth in Caucasian and African-American men continues. The BLSA perimenopausal study is an intensive evaluation of 100 Caucasian and 100 African-American women who will be seen four times each year until menses have ceased for two years or hormone replacement is begun. Age-matched men, premenopausal women and older postmenopausal women already enrolled in the BLSA provide contrast groups to assess the separate effects of sex and estrogen status on normal aging.

Alzheimer's disease (AD)

The IRP has a focused research program on the etiology, diagnosis and treatment of AD. Scientists have shown that overexpression of mutant forms of the amyloid precursor protein (APP), which have been implicated in AD, correlates with a reduced rate of capillary tube formation when cells are grown in culture and leads to enhanced cell death in differentiated neuronal cells. These results suggest new approaches for AD treatment involving reducing the expression of APP and intervening in the cell death pathway induced by APP. Also, recent studies suggest that apolipoprotein E

(ApoE) is a risk factor for AD and that the ApoE4 gene is more frequent in AD patients. IRP scientists are relating ApoE4 genotypes of BLSA participants to repeated cognitive assessments made over the past 30 years. As this research continues, ApoE genotypes will be related to normal and pathological rates of cognitive changes, especially risks for developing AD.

Vascular disease

The ongoing intramural research on age associated vascular disease will continue to capitalize on recent advances. These include the finding that the injury-transformed vascular smooth muscle cell, which is largely responsible for the vascular blockage in restenosis—renarrowing of an artery following angioplasty or balloon dilation—is critically dependent on intact microtubule function. Intramural scientists have found that taxol, a potent microtubule stabilizing agent, prevents this vascular narrowing by 70–80 percent in an animal model without significant toxicity. Others are investigating the potential utility of gene therapy to induce the formation of new blood vessels and enhance collateral blood flow to compromised or damaged heart tissues and to prevent restenosis after coronary artery angioplasty. "Advanced glycation endproducts" (AGE) are proteins that accumulate in the blood stream and blood vessels of diabetic patients and older individuals; these products interact with specific receptors present on circulating blood and blood vessel cells. Intramural scientists, in concert with extramural colleagues, have made a number of recent discoveries that have fueled a growing excitement about the potential role of this system as a novel therapeutic target for preventing and alleviating vascular disease. These include observations suggesting that the signalling pathway activated by this receptor plays an important role in the progression of all vascular disease and that activation of these receptors leads to increased intracellular oxidant stress.

Frailty, osteoporosis, hormone replacement and women's health

Issues of women's health and well-being command special attention within the intramural program. Studies are ongoing with models of postmenopausal osteoporosis to determine the efficacy of an analog of the common antibiotic tetracycline in preventing accelerated bone loss. A collaborative clinical trial comparing the effects of growth hormone, sex steroid replacement, and growth hormone combined with sex steroid in men and women over 65 continues; it is expected to provide important new data on the risk benefit ratio of such treatments in older people. Women aged 65–75, treated for two years with constant oral estrogen/low dose daily protestin, showed improved bone mineral density, decreased biochemical evidence of bone resorption, a decrease in percent body fat, increases in lean body mass, and improved cholesterol profiles compared with BLSA controls. A new study of the interactions of treatment with growth hormone releasing hormone with and without estrogen replacement therapy on bone biochemistry and microanatomy in osteoporotic women 55–75 years of age has begun. A National Institute for Nursing Research and NIA study of elderly patients hospitalized with hip fracture suggests that an aggressive

nursing intervention during the acute period of hospitalization could improve function and increase independence at discharge.

Diabetes and other age associated metabolic defects

Metabolic abnormalities, including type II diabetes, are extremely common in the older population. A major intramural initiative is underway to develop new therapies that are safe and specific for the control of blood glucose in older diabetic patients to prevent the disease's late complications. Molecular approaches are being used to address the factors responsible for type II diabetes—an impaired ability of the beta cells of the pancreas to respond to blood glucose and a decreased insulin responsivity at target tissues—and to elucidate underlying mechanisms. Intramural studies have shown that specific gut hormones can restore beta cell responsiveness in conjunction with glucose and also increase insulin effects on insulin sensitive tissues. To investigate potential therapeutic strategies, studies of the effects of acute and chronic treatments of the pancreatic beta cells with these hormones and their effects on skeletal muscle, a major site of insulin resistance, are being pursued. Emphasis is directed to defining further a region of the insulin receptor that is essential for its activation status to prolong insulin's action. These advances are being aggressively pursued given their promise for opening new therapeutic avenues.

SECTION 3

RESEARCH ADVANCES ON AGING SUPPORTED AND CONDUCTED BY OTHER NIH INSTITUTES

National Center for Research Resources

Old age is often a slow decline into frailty and dependence. Researchers studying the aging process find that muscles—or lack of them—play an important role in determining quality of life. Physical impairment is a major cause of institutionalization in nursing homes, costing this country billions of dollars each year. An insidious condition called sarcopenia—loss of muscle tissue—seems to be a strong contributor to physical deterioration. Only recently has it become apparent that muscle loss begins as early as age 35 and is much greater than previously thought. Sarcopenia, largely masked by increases in fat, leads to loss of strength, balance, mobility, and ultimately independence.

Dr. William J. Evans of the Knoll Physiological Research Center at Pennsylvania State University, supported by the National Institute on Aging and the National Center for Research Resources, has shown that strength training with exercise machines and free weights in men and women 60 to 98 years old—some in nursing homes—in many cases doubled or tripled the muscle mass. Although walking, biking, and swimming are healthy exercises, "the way one prevents or reverses sarcopenia is through resistance exercise, or strength training," Dr. Evans emphasizes.

National Institute of Neurological Disorders and Stroke

The National Institute of Neurological Disorders and Stroke (NINDS) is the lead institute for research on a number of nervous system disorders—such as Parkinson's disease and stroke—that

occur with greater frequency in older people. The institute also conducts and supports research on a number of other diseases that occur more commonly in older people, such as Alzheimer's disease.

Parkinson's disease

In 1995, Congress encouraged the NIH to sponsor a research planning workshop on Parkinson's disease. This debilitating disease affects more than 500,000 Americans and causes progressive symptoms including tremor, muscle rigidity, and immobility that ultimately lead to total disability and death. Because the disease most commonly affects people in later life, the number of people with Parkinson's disease and the associated costs will grow as the average age of the American population increases.

In response to this Congressional directive, the Parkinson's Research Planning Workshop, co-sponsored by NINDS, NIA, NIEHS, and NIMH, took place August 28–30, 1995. The workshop's purpose was to bring together key Parkinson's disease researchers and experts from other fields to foster new ideas and research directions that might lead to rapid advances in the understanding and treatment of the disease.

The workshop discussions centered upon several major themes. Chief among these was the recognition that both genetic and environmental factors are important in understanding Parkinson's disease. Many participants also emphasized a need to identify biological traits, or biomarkers, that would allow researchers to identify people at risk for developing Parkinson's disease, allow earlier diagnosis of the disease, and mark its progression. Participants encouraged collaboration between basic and clinical scientists. In recognition of the common themes emerging from research on different diseases, they also called for collaboration with scientists outside the Parkinson's field.

The discussions highlighted several key areas for productive investigation, but Parkinson's is a complex disease and there is no definitive cure on the immediate horizon. Improved understanding of the underlying biology of the disease will lead to better ways of relieving the symptoms of Parkinson's patients and ultimately halting the underlying degeneration of brain cells.

Efforts to locate a gene responsible for some cases of Parkinson's disease intensified after the August 1995 workshop. In the fall of 1996, scientists from the NINDS and the NCHGR (now the NHGRI), in collaboration with researchers from the UMDNJ-Robert Wood Johnson Medical School in New Brunswick, New Jersey, and the Istituto de Scienze Neurologiche in Naples, Italy, pinpointed the location of such a gene. Previously, most scientists believed the disease was due almost exclusively to environmental factors such as drugs on toxic chemicals, although in most cases, no environmental cause has been identified. But many people appear to have an inherited susceptibility to the disease. The significance of the NIDS/NHGRI finding is that scientists now believe that a single gene alteration can cause Parkinson's disease. The next step will be to find and identify the specific gene involved, which is located somewhere within a region of DNA on the long arm of chromosome 4. Learning the gene's exact location and isolating it may eventually lead to genetic testing that will enable early diagnosis

and treatment for all forms of Parkinson's disease—not only inherited cases, but also those with no familial link. It may also help researchers discover how the disease occurs and how to develop methods of preventing or curing it.

Stroke

In 1995, about 500,000 Americans suffered a stroke. Of these strokes, about 80 percent were ischemic, caused by a blood clot that reduces blood flow to the brain. The remaining 20 percent were hemorrhagic strokes, caused by bleeding into the brain. Stroke ranks as the third leading cause of death in the country after heart disease and cancer, killing about 150,000 Americans each year. The overall cost of stroke to the nation is estimated to be $30 billion each year.

In December 1995, NINDS-funded investigators published the results of a 5-year clinical trial demonstrating that treatment with the clot-dissolving drug t-PA is an effective emergency treatment for acute ischemic stroke despite some risk from bleeding. The trial found that carefully selected stroke patients who received t-PA treatment within 3 hours of their initial stroke symptoms were at least 30 percent more likely than untreated patients to recover from their stroke with little or no disability after 3 months. The nationwide study included more than 600 stroke patients.

The drug t-PA works by dissolving the blood clots that block brain arteries. Although it had been proven effective in the treatment of heart attack, t-PA's potential as a treatment for stroke had been unclear because of an increased risk of brain hemorrhage. Bleeding into the brain within 36 hours of treatment worsened strokes in 6.4 percent of those patients in the NINDS trial who received t-PA compared to 0.6 percent of those who received placebo. Overall, however, there were greater numbers of stroke survivors who were able to live normal lives in the t-PA treated group, leading the investigators to conclude that the use of t-PA for stroke is beneficial. Furthermore, the NINDS trial showed lower levels of brain hemorrhage than previously published stroke trials involving clot-dissolving drugs.

The investigators agree that substantial efforts by the health care community will be necessary before t-PA can be used on a widespread basis. These efforts include intensive public education about the signs of stroke and the importance of immediate treatment, the organization and training of medical personnel to evaluate and treat stroke patients, as well as planning for the rapid transport of patients to treatment centers through emergency medical services.

National Institute on Nursing Research

Americans expect to live longer than earlier generations, but these additional years should be lived well—with health and independence intact for as long as possible. Nursing researchers are exploring interventions with this goal in mind in order to preserve cognition and the ability to function, and to maintain or improve quality of life.

The National Institute of Nursing Research (NINR) supports studies that address these and other health issues of the older pop-

ulation, including prevention of illness and disability; health promotion strategies; management of the symptoms of chronic diseases, including pain; interventions for family caregivers to help them maintain their own health as well as that of their ill relatives; and end-of-life care to promote a comfortable death with dignity.

Among the findings of FY 1995–96 are two that hold promise to improve older people's recovery from the effects of immobility and illness.

Immobility is frequently associated with more serious chronic illnesses, and a preventable secondary effect, pressure ulcers, still occurs too often. These ulcers are caused by constant pressure on the body's bony areas, which results in damage and death of skin, muscle and bone tissues. The care of these wounds is quite costly, estimated to the $737 million nationally. Nursing home populations have benefited from an assessment scale developed by nurse researchers that identifies patients most likely to develop pressure ulcers within a few days of their entering a nursing home, thus alerting the staff to the need for immediate preventive action. The assessment scale has been adapted for use in routine clinical practice and has been incorporated into the "Guidelines on Pressure Ulcers" published by the Agency for Health Care Policy and Research.

Stroke patients usually have low endurance for exercise, although physical activity is thought to be important in the recovery process. When patients with moderate hemiparesis used an exercise bicycle regularly for 30 minutes 3 times a week for 10 weeks, they improved not only their aerobic capacity, but also their sensorimotor function, as measured by such factors as sensation, balance and awareness of body position. The exercise training also significantly improved systolic blood pressure. The nursing research findings indicate that patients who have a propensity for increased blood pressure during activity could benefit from an aerobic exercise program to lower their systolic pressure, thereby reducing their risk of a future stroke.

National Institute of Environmental Health Sciences

The incidence, prevalence, and severity of many chronic conditions increase with age. As the elderly segment of the U.S. population increases, it will be important to understand which conditions are an inevitable consequence of aging and which are due to cumulative effects of low-dose environmental exposures that could be prevented. Scientists already know that cancer initiation and progression is influenced by environmental exposures. It is only beginning to be appreciated that other disease states—cardiovascular disease, respiratory problems, kidney function impairment—can also be influenced by involuntary, environmental exposures.

These research needs are being pursued by the National Institute of Environmental Health Sciences (NIEHS). It is the mission of the NIEHS to define (1) how environmental exposures affect our health, (2) how individuals differ in their susceptibility to these exposures, and (3) how these susceptibilities change with age. Some of the important work at the NIEHS on the environmental components of aging-related disorders is described below.

Cancer. An environmental component for many cancers is clearly established. Since its inception, the NIEHS has supported work exploring the connection between environmental exposures and cancer risks. This work continues in ongoing investigations into the risks of lung cancer from household radon exposures and the risks of breast cancer from a variety of exposures including pesticides, polychlorinated biphenyls, and other estrogenic compounds. Some of the most exciting work is being done in linking environmental risk factors to underlying individual vulnerabilities, such as defective genetic repair mechanisms or inadequate detoxification mechanisms. This work includes:

Breast Cancer: Isolation to two breast cancer susceptibility genes, BRCA1 and BRCA2, by NIEHS scientists working with non-Institute research teams.

Prostate Cancer: Studies of a vitamin D receptor gene variant that showed an association with increased prostate cancer risk.

Urinary Bladder Cancer: An epidemiologic study that showed a 70% increased risk for bladder cancer development in individuals lacking the gene that codes for the carcinogen detoxification enzyme, glutathione transferase M1.

Senescence ("Aging") Gene: NIEHS scientists are interested in understanding the processes governing cellular aging, or senescence. An NIEHS laboratory identified the first senescence gene, a finding with important implication in understanding the molecular basis of cancer.

Impaired Kidney Function and Lead Exposure: NIEHS-supported scientists discovered a link between lead exposure and impaired kidney function. This study showed that even low blood lead levels, a measure of lead exposure, correlated with significant reductions in kidney function as measured by serum creatine concentration. Environmental sources of lead include old paints, lead solder, some ceramic glazes, and dusts and soils that were contaminated by automobile exhausts from leaded gasoline. These studies give further support to the need to continue these environmental programs and also provide clinicians with an important diagnostic tool for determining causes for reduced renal functions in patients.

Hypertension and Lead Exposure: High blood pressure, or hypertension, is a leading risk factor for heart disease. A new NIEHS-supported study identified a potentially important environmental component of this disease—long-term lead exposure. This finding is particularly important because lead is an environmental agent whose exposure can be controlled.

Neurodegenerative Disorders: Neurodegenerative disorders such as Alzheimer's and Parkinson's might well prove to be the consequence of long-term, low-level exposures to environmental compounds. Understanding the environmental components of these diseases is complicated by the fact that individuals probably differ in their susceptibility to these effects and that there is probably a long latency period between exposure and disease expression. The NIEHS is investigating the environmental causes of these diseases, with particular emphasis on neurotoxic compounds such as metals and solvents.

Osteoporosis: Osteoporosis is a crippling bone disorder that worsens with age and, in women, accelerates after menopause. NIEHS-

supported scientists are investigating environmental agents that could play a role in increasing (e.g., cadmium) or reducing (e.g., natural plant estrogens) disease risks. Additionally, work has led to a reevaluation of current air quality standards to assess their ability to protect the public's health. Asthma, a frequently fatal condition that can persist from childhood, is being intensely studied by NIEHS-funded scientists who are examining the role of indoor exposures, including cockroach and dust mite allergens, and the efficacy of allergen control strategies in reducing asthma attacks.

Environmental Justice: Those least likely to enjoy a long and healthy life are those who inhabit the bottom rungs of the socioeconomic ladder. A critical research need is to determine if their health problems are due solely to low income or due in part to the environmental consequences of low income. These consequences would include hazardous jobs, lead-contaminated homes, living in neighborhoods near hazardous waste sites, and water sources contaminated by pollutants leaching from landfills. The NIEHS has provided vigorous leadership in the area of environmental justice and continues to reach out to disadvantaged communities to understand what unique environmental risks that might face that could affect their health.

National Institute of Mental Health

In elderly people, major depression may be chronic or recur frequently, and, while their depressive episodes can be treated successfully, elderly people are more prone to relapse during continuation therapy than are younger patients. NIMH is conducting a study of elderly outpatients susceptible to recurrent depression who are on maintenance treatment after having been successfully treated for a depressive episode, with the objective of learning how to identify which patients will benefit from a particular form of maintenance psychotherapy after discontinuation of antidepressant medications. Researchers assessed the subjective sleep quality that patients had achieved early in their continuation treatment phase and found that a high percentage of patients who report good subjective sleep quality at this point remained well over the next year, provided they also received maintenance psychotherapy once a month.

The efficiency of vascular function in the brain is increasingly commanding the attention of researchers interested in diverse facets of health and illness in older people. Now, and NIMH-funded investigator has reported that a particular gene product the E–4 type of apolipoprotein, which is a known risk factor for coronary artery disease, cerebral atherosclerosis, and Alzheimer's disease also is more commonly associated with the occurrence of depression in advanced old age as opposed to depression with an earlier onset among older patients. This finding sparks particular interest in light of the fact that depressed, elderly cardiac patients have much higher rates of mortality than do comparably aged patients who are not depressed. Further information about apolipoprotein variants as correlates of, and possibly risk factors for mental disorders in late life may prove to have implications for tailoring pharmacologic treatments with an eye toward maximizing treatment effects and minimizing side effects, or even preventing symptom development.

The potential import of the finding is buttressed by a separate NIMH-funded study in which researchers have described a specific clinical profile of elderly patients with what appears to be a subtype of depression associated with cerebrovascular disease. This subtype of depression describes patients whose lack of depressive thought patterns marks a departure from an otherwise "classic" presentation of depressive symptoms. If the syndrome of vascular depression is validated, it may have direct treatment implications. Animal studies suggest that some antidepressant promote neurological recovery after cerebrovascular incidents, but others inhibit recovery.

Research has shown that the apolipoprotein E4 (ApoE4) allele is a genetic risk factor for both familial and sporadic Alzheimer's disease, and it is estimated that up to 65 percent of patients carry this allele, compared to only 24–31 percent of healthy controls. In studies with a group of Alzheimer's disease patients, NIMH-supported researchers found that there is no correlation between the ApoE4 "dosage" (number of these alleles in a patient's DNA) and the rate of cognitive decline. In a related study, these researchers also found that this ApoE4 risk factor is associated with increased behavioral disturbances in Alzheimer's disease.

National Institute on Deafness and other communication disorders

PSP, Parkinson's, and Alzheimer's

Errors in differentiating the diagnosis of individuals with various neurodegenerative diseases can have serious medical consequences. For example, progressive supranuclear palsy (PSP), a rare disease, is often misdiagnosed as the more prevalent Parkinson's disease because the two diseases share many motor symptoms and signs. Because PSP does not respond to medications for Parkinson's disease, the misdiagnosis can delay appropriate intervention. Research has revealed that testing of the sense of smell may be useful in the differential diagnosis of individuals in the early stages of PSP. PSP patients perform well on smell identification tests, whereas Parkinson's disease patients perform poorly. Further, the applications of contemporary imaging and molecular biologic techniques to biopsies of olfactory sensory tissue may prove useful in the early diagnosis of brain diseases, such as Alzheimer's disease, in which the olfactory neurons are the only affected neural tissue that can be readily obtained from living patients.

Hearing aid developments

National Institute of Deafness and Communication Disorder (NIDCD) scientists funded through the Small Business Innovation Research program have made progress in alleviating ringing "feedback," a common complaint of many hearing aid users. By physically delivering sound deeper into the ear canal via improved hearing aid shell designs, hearing aid users experience less feedback and reduced occlusion effects, a common complaint of hearing aid users described as "hollowness" or a feeling of "talking inside a barrel."

Voice Disorders Associated with Parkinson's Disease

Of the 1.5 million individuals with the progressive neurogenic disorder Parkinson's disease, at least 89% have a breakdown in their ability to speak. The long-term goals of one study are to evaluate the efficacy of a model of behavioral voice treatment for these patients and to examine the physiologic and neural mechanisms underlying voice and speech changes that occur during treatment or with progression of the disease. Preliminary analysis indicates beneficial increases in movement of the vocal folds and improved stability of the voice accompanying treatment. To further assess the underlying changes associated with successful treatment, a number of patients with Parkinson's disease are being evaluated for variables in speech physiology such as vocal loudness, voice quality, and speech intelligibility. All of these measures improve significantly after treatment that focused on the voice. In most cases, these posttreatment improvements were maintained for one to two years without additional treatment. After voice treatment, patients reported that they spoke more often and had more confidence because people could now understand them. These findings document that Parkinson's disease patients can make changes in their speech production in response to voice treatment; they also suggest that stimulating improved phonation may be a key to improving their overall speech production.

Collaborative efforts to improve hearing aids

The NIDCD continues an innovative collaboration with the Department of Veterans Affairs (VA) in an effort to support the development of better hearing aids. Five initiatives have been developed and are in various stages of implementation. These initiatives include a call to the research community for the submission of grant proposals to determine how hearing aids affect speech understanding, in quiet and in noise, published in January 1994. There was also a call for research to determine ways to measure the benefit received from hearing aids by persons who are hearing impaired, also published in 1994. A contract for a program of device development for hearing aids will begin in the near future. This will support the design and evaluation of creative new technologies and strategies for hearing aids. The protocol for a first clinical trial has been developed and is expected to begin in Fiscal Year 1995 through an interagency agreement with the VA. The clinical trials will identify specific subgroups of individuals who benefit most from the existing and newly developed hearing aid technologies. A hearing aid research and development conference, scheduled for September 1995, will be a national forum for the presentation of research relevant to hearing aids. This collaborative effort between the NIDCD and the VA is facilitating progress towards the improved use of existing devices, as well as stimulating research to develop new technologies and devices.

Century auditory processing in elderly people

Early diagnosis of certain dementias is now being facilitated by a battery of central auditory tests with elderly patients. One disease known to cause deterioration of neuronal circuits is a form of Alzheimer's disease called "Mild Senile Dementia of the Alz-

heimer's type." These patients also suffer from hearing loss. Using an extensive audiologic testing battery, it was demonstrated that all measures of pure-tone hearing and recognition of simple words were similar between subjects with neurodegenerative disease and otherwise normal elderly subjects. However, when presented with complex sentence tests specifically designed to assess the processing capabilities of the higher level auditory structures, patients with mild neurodegenerative disease could not perform the test. Mild neurodegenerative diseases appear to affect central auditory processing and thus the ability to process more complex acoustic signals.

Cochlear implant technology

The NIDCD, together with the Office of Medical Applications of Research, convened a NIH Consensus Development Conference on Cochlear Implants in Adults and children on May 15–17, 1995. Cosponsored by NIA, NICHD, NINDS, and the Department of Veterans Affairs, the conference summarized current knowledge about the range of benefits and limitations of cochlear implantation. One of the major conclusions of the panel addressed the auditory criteria for adult implant candidacy. Previously, only adults with profound hearing impairment were candidates for implantation, and individuals receiving marginal benefit from hearing aids were not considered implant candidates. However, recent data show that most marginally successful hearing aid users will have improved speech perception performance with a cochlear implant. The panel therefore concluded that it is reasonable to extend cochlear implants to postlingualy hearing-impaired adults currently obtaining marginal benefits from other amplification systems, increasing the number of Americans to some one million who may benefit from a cochlear implant.

Hearing loss and its effect on older women

Projections based on figures from the National Center for Health Statistics estimate that by the year 2030, at least 21 million Americans beyond 65 years of age will be classified as hearing impaired. Age-related hearing loss (presbycusis) is a seemingly complex disorder developed in senior years, typically characterized by a decrease in speech understanding, though not necessarily a parallel decrease in sensitivity to simple tones. The functional consequences of hearing loss in senior citizens, as evidenced by its impact upon psycholosocial well-being, can be substantial. This is particularly true for elderly women since during their later years an increased susceptibility to a variety of conditions of aging seems only to further the functional impact of the hearing loss. To gain a better understanding of gender-specific presbycusis, NIDCD-supported investigators are exploring the pathophysiologic factors potentially related to hearing capabilities in older women, to include the relation between incidence of hearing loss and cardiovascular risk factors.

National Institute on Alcohol Abuse and Alcoholism

Problems of alcohol abuse and alcoholism among the elderly remain a priority at the National Institute on Alcohol Abuse and Al-

coholism (NIAAA). In fact, one of NIAAA's 14 Alcohol Research Centers focuses exclusively on understanding the brain changes that result from both chronic and acute alcohol uses, characterizing the clinical manifestations of these phenomena, and developing and evaluating methods for screening and intervention among elderly alcohol-abusing and alcoholic patients.

Major objectives at the Alcohol Research Center on Aging include characterizing how alcohol interacts with aging to produce central nervous system abnormalities; developing strategies for early diagnosis and treatment of alcoholism in older individuals; and understanding how aging interacts with alcohol consumption in interfering with complex motor activities, such as driving.

Investigators use state-of-the-art noninvasive brain imaging technologies (i.e., positron emission tomography and magnetic resonance imaging) to better characterize the mechanisms underlying alcohol-induced central nervous system changes in the elderly. Investigators also conduct detailed electroencephalographic studies of sleep physiology in alcohol-dependent and nonalcohol-dependent elderly subjects and use computer simulation of driving performance to assess changes in performance under conditions of intoxication. Ongoing NIAAA research projects investigate:

Combined effects of alcohol abuse and the aging process on alterations of brain metabolism, brain receptor binding, and neuropsychological functioning;

The interactions of chronic alcohol use, sleep apnea, sleep disruption, and aging;

The effects of alcohol on complex driving skills in the elderly, including the effects of sleep deprivation on driving performance;

The effectiveness and acceptability of brief intervention strategies on drinking problems in older adults;

The role of alternations in serotonin on the clinical features and pharmacotherapy of alcoholism among the elderly,

As the proportion of the U.S. population reaching old age continues to grow, the relevance and importance of alcohol use and abuse in this age segment increases.

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
3 U09AG05389-09S1	GRAVENSTEIN, STEFAN STUDY SECTION CHAIRMANS FUND (NIH)	07-20-95/10-31-97	U.S. PHS PUBLIC ADVISORY GROUPS	200,000
1 P01AG12983-01	GOLDSTEIN, SAMUEL STUDIES ON THE CELLULAR AND MOLECULAR BIOLOGY OF AGING	04-01-95/	UNIVERSITY OF ARKANSAS MED SCIS LTL	
5 P01AG00001-21	PETERS, ALAN NEURAL SUBSTRATES OF COGNITIVE DECLINE	02-01-95/01-31-97	BOSTON UNIVERSITY	899,328
5 T32AG00029-20	COHEN, HARVEY J BEHAVIOR AND PHYSIOLOGY IN AGING	07-01-95/04-30-96	DUKE UNIVERSITY	249,821
5 R01AG00029-21	PATTERSON, DAVID GENE EXPRESSION IN SOMATIC CELLS IN THE AGING PROCESS	07-10-95/06-30-97	ELEANOR ROOSEVELT INST FOR CANCER RE	480,910
5 T32AG00030-19	STORANDT, MARTHA A AGING AND DEVELOPMENT	09-01-95/04-30-96	WASHINGTON UNIVERSITY	202,081
5 T32AG00037-19	BENGTSON, VERN L MULTIDISCIPLINARY RESEARCH TRAINING IN GERONTOLOGY	09-01-95/04-30-96	UNIVERSITY OF SOUTHERN CALIFORNIA	460,421
5 T32AG00045-19	MITTENESS, LINDA S TRAINING IN SOCIOCULTURAL GERONTOLOGY	09-01-95/04-30-98	UNIVERSITY OF CALIFORNIA SAN FRANCIS	276,788
5 T32AG00048-18	ZARIT, STEVEN H INTERDISCIPLINARY TRAINING IN GERONTOLOGY	07-01-95/04-30-96	PENNSYLVANIA STATE UNIVERSITY-UNIV P	100,736
5 T32AG00057-18	MARTIN, GEORGE M GENETIC APPROACHES TO AGING RESEARCH	05-01-95/04-30-96	UNIVERSITY OF WASHINGTON	412,447
3 T32AG00057-18S1	MARTIN, GEORGE M GENETIC APPROACHES TO AGING RESEARCH	09-01-95/04-30-96	UNIVERSITY OF WASHINGTON	20,195
5 T32AG00080-16	OLDSTONE, MICHAEL B A NEUROBIOLOGIC AND IMMUNOLOGIC ASPECTS OF AGING	07-01-95/04-30-96	SCRIPPS RESEARCH INSTITUTE	213,597
2 T35AG00086-16	SISKIND, GREGORY W SHORT-TERM TRAINING STUDENTS IN HEALTH PROFESSIONAL SCHO	04-15-95/	CORNELL UNIVERSITY MEDICAL CENTER	
5 T32AG00093-14	FINCH, CALEB E TRAINING IN ENDOCRINOLOGY AND NEUROIOLOGY OF AGING	09-05-95/04-30-96	UNIVERSITY OF SOUTHERN CALIFORNIA	282,120
3 T32AG00093-14S1	FINCH, CALEB E TRAINING IN ENDOCRINOLOGY AND NEUROIOLOGY OF AGING	09-20-95/04-30-96	UNIVERSITY OF SOUTHERN CALIFORNIA	18,368

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 T32AG00096-13	COTMAN, CARL W TRAINING IN THE NEUROBIOLOGY OF AGING	02-01-95/04-30-96	UNIVERSITY OF CALIFORNIA IRVINE	201,272
7 N03AG00102-013	 PROVIDE SUPPORT SERVICES/UTILITIES--GERONTOLOGY RESEARCH	12-16-94/12-31-94	JOHNS HOPKINS BAYVIEW MEDICAL CENTER	
7 N03AG00102-014	 PROVIDE SUPPORT SERVICES/UTILITIES--GERONTOLOGY RESEARCH	01-01-95/12-31-95	JOHNS HOPKINS BAYVIEW MEDICAL CENTER	2,845,354
3 N03AG00102-015	 PROVIDE SUPPORT SERVICES/UTILITIES--GERONTOLOGY RESEARCH	02-22-95/12-31-95	JOHNS HOPKINS BAYVIEW MEDICAL CENTER	
3 N03AG00102-016	 PROVIDE SUPPORT SERVICES/UTILITIES--GERONTOLOGY RESEARCH	07-31-95/12-31-95	JOHNS HOPKINS BAYVIEW MEDICAL CENTER	150,000
3 N03AG00102-017	 PROVIDE SUPPORT SERVICES/UTILITIES--GERONTOLOGY RESEARCH	09-01-95/12-31-95	JOHNS HOPKINS BAYVIEW MEDICAL CENTER	614,223
2 T32AG00105-11A1	CAPLAN, ARNOLD I CELLULAR & MOLECULAR AGING	08-15-95/04-30-96	CASE WESTERN RESERVE UNIVERSITY	178,115
3 N03AG00106-010	 RENTAL OF COMPACTOR AND REMOVAL OF TRASH	10-18-94/08-14-95	SSC SMALL BUSINESS MARYLAND	24,558
5 T32AG00107-12	COLEMAN, PAUL D TRAINING IN GERIATRICS AND NEUROBIOLOGY OF AGING	05-01-95/04-30-96	UNIVERSITY OF ROCHESTER	286,412
2 T32AG00110-11	ROVINE, MICHAEL J TRAINING IN AGING RESEARCH METHODOLOGY	08-15-95/	PENNSYLVANIA STATE UNIVERSITY-UNIV P	
2 T32AG00114-11	FAULKNER, JOHN A MULTIDISCIPLINARY RESEARCH TRAINING IN AGING	09-01-95/04-30-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	382,748
2 T32AG00115-11	POLGAR, PETER R PRE- AND POSTDOCTORAL TRAINING IN BIOCHEMISTRY OF AGING	08-20-95/04-30-96	BOSTON UNIVERSITY	327,960
2 T32AG00117-11	DUNKLE, RUTH E SOCIAL RESEARCH TRAINING ON APPLIED ISSUES OF AGING	05-15-95/04-30-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	415,503
5 T32AG00122-09	ROTH, JESSE RESEARCH TRAINING IN GERONTOLOGY AND GERIATRICS	01-01-95/04-30-96	JOHNS HOPKINS UNIVERSITY	264,572
5 T32AG00131-11	CRISTOFALO, VINCENT J TRAINING IN THE CELLULAR AND MOLECULAR ASPECTS OF AGING	08-10-95/04-30-96	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	35,064

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET START	DATES END	INSTITUTION	TOTAL
FY: 95					
5 T32AG00134-10	WEISSERT, WILLIAM G PUBLIC HEALTH AND AGING	09-01-95	04-30-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	152,728
5 T32AG00139-09	MYERS, GEORGE C SOCIAL AND MEDICAL CENOGRAPHY OF AGING	12-01-94	11-30-95	DUKE UNIVERSITY	193,127
5 T32AG00140-20	GOLDSCHEIDER, FRANCES K DEMOGRAPHY OF AGING	07-01-95	06-30-97	BROWN UNIVERSITY	64,636
5 T32AG00144-09	KOHAL, JEROME RESEARCH TRAINING IN GERIATRIC MEDICINE	08-01-95	04-30-96	CASE WESTERN RESERVE UNIVERSITY	103,864
5 T32AG00149-09	BRANDT, JASON RESEARCH TRAINING IN DEMENTIAS OF AGING	08-20-95	05-31-96	JOHNS HOPKINS UNIVERSITY	127,063
5 T32AG00153-08	KASL, STANISLAV V RESEARCH TRAINING IN THE EPIDEMIOLOGY OF AGING	08-01-95	04-30-96	YALE UNIVERSITY	7,967
5 T32AG00155-08	ELDER, GLEN H, JR DEMOGRAPHY OF AGING AND THE LIFE COURSE	09-01-95	04-30-96	UNIVERSITY OF NORTH CAROLINA CHAPEL	102,713
2 T32AG00156-06A1	HORN, JOHN L FORMING CAREERS IN DEVELOPMENTAL NEUROCOGNITION	08-15-95	04-30-96	UNIVERSITY OF SOUTHERN CALIFORNIA	303,716
2 T32AG00158-08	BURING, JULIE E TRAINING PROGRAM IN EPIDEMIOLOGIC RESEARCH ON AGING	07-01-95	04-30-96	BRIGHAM AND WOMEN'S HOSPITAL	141,663
5 T32AG00164-08	DEMENT, WILLIAM C RESEARCH TRAINING IN GERIATRIC SLEEP DISORDERS MEDICINE	07-01-95	04-30-96	STANFORD UNIVERSITY	115,343
5 T32AG00165-08	BOWMAN, BARBARA H TRAINING PROGRAM IN MOLECULAR BASIS OF AGING	05-01-95	04-30-96	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	111,207
5 T32AG00172-08	CUMMINGS, JEFFREY L DEMENTIA AND BEHAVIORAL NEUROLOGY: RESEARCH FELLOWSHIP	08-01-95	04-30-96	UNIVERSITY OF CALIFORNIA LOS ANGELES	75,824
5 T32AG00175-08	SMITH, ANDERSON D RESEARCH TRAINING IN COGNITIVE AGING	05-10-95	04-30-96	GEORGIA INSTITUTE OF TECHNOLOGY	66,057
5 T32AG00177-07	PRESTON, SAMUEL H DEMOGRAPHY OF AGING	09-01-95	04-30-96	UNIVERSITY OF PENNSYLVANIA	120,634
2 T32AG00181-06	CAULEY, JANE A TRAINING IN THE EPIDEMIOLOGY OF AGING	05-25-95	04-30-96	UNIVERSITY OF PITTSBURGH AT PITTSBUR	194,182

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 T32AG00182-07	ETTINGER, WALTER H, JR TRAINING GRANT: GERONTOLOGY AND GERIATRIC MEDICINE	07-01-95/04-30-96	WAKE FOREST UNIVERSITY	308,304
5 T32AG00183-07	DARLINGTON, GRETCHEN J CELL & MOLECULAR BIOLOGY OF AGING	07-01-95/04-30-96	BAYLOR COLLEGE OF MEDICINE	237,981
3 T32AG00183-07S1	DARLINGTON, GRETCHEN J CELL & MOLECULAR BIOLOGY OF AGING	09-01-95/04-30-96	BAYLOR COLLEGE OF MEDICINE	21,369
5 T32AG00184-06	HU, TEH-WEI ECONOMICS OF AGING AND HEALTH SERVICES	01-01-95/12-31-95	UNIVERSITY OF CALIFORNIA BERKELEY	112,945
2 T32AG00185-06	HOYER, WILLIAM J AGING AND COGNITIVE NEUROSCIENCE	09-01-95/	SYRACUSE UNIVERSITY AT SYRACUSE	
5 T32AG00186-07	WISE, DAVID A ECONOMICS OF AGING TRAINING PROGRAM -- EXTENSION	07-01-95/04-30-96	NATIONAL BUREAU OF ECONOMIC RESEARCH	143,977
5 T32AG00189-07	LIEM, RONALD K CELLULAR AND NEUROBIOLOGICAL ASPECTS OF AGING	05-01-95/04-30-96	COLUMBIA UNIVERSITY NEW YORK	258,182
5 T32AG00194-07	HAMERMAN, DAVID AGING TRAINING GRANT	05-30-95/04-30-96	YESHIVA UNIVERSITY	331,409
5 T32AG00196-07	MEYER, EDWIN M TRAINING IN THE NEUROBIOLOGY OF AGING	08-05-95/04-30-96	UNIVERSITY OF FLORIDA	80,389
2 T32AG00197-10	KAHANA, EVA F RESEARCH TRAINING IN SOCIAL ASPECTS OF HEALTH AND AGING	07-01-95/	CASE WESTERN RESERVE UNIVERSITY	
2 T32AG00204-06	WINGFIELD, ARTHUR TRAINING IN COGNITIVE AGING IN A SOCIAL CONTEXT	05-01-95/04-30-96	BRANDEIS UNIVERSITY	120,421
2 T32AG00208-06	WEISS, KENNETH M POPULATION BIOLOGY, GENERATIONS, AND COHORT SUCCESSION	05-05-95/04-30-96	PENNSYLVANIA STATE UNIVERSITY-UNIV P	116,001
2 T32AG00209-06	RUSSELL, ROBERT M RESEARCH TRAINING PROGRAM IN NUTRITION AND AGING	08-15-95/04-30-96	TUFTS UNIVERSITY MEDFORD	106,131
5 T32AG00212-05	CUMMINGS, STEVEN R GERONTOLOGY AND GERIATRIC MEDICINE	09-01-95/08-31-98	UNIVERSITY OF CALIFORNIA SAN FRANCIS	184,129
5 T32AG00213-05	ERSHLER, WILLIAM B BIOLOGY OF AGING AND AGE RELATED DISEASES	07-01-95/04-30-96	UNIVERSITY OF WISCONSIN MADISON	137,716

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 T32AG00214-05	HEISTAD, DONALD D INTERDISCIPLINARY RESEARCH TRAINING PROGRAM ON AGING	07-01-95/04-30-96	UNIVERSITY OF IOWA	360,343
5 T32AG00216-04	GAGE, FRED H TRAINING IN THE NEUROPLASTICITY OF AGING	09-01-95/08-31-96	UNIVERSITY OF CALIFORNIA SAN DIEGO	116,632
5 T32AG00219-04	GOLDBERG, ANDREW P RESEARCH TRAINING OF GERONTOLOGY AND EXERCISE PHYSIOLOGY	07-01-95/04-30-96	UNIVERSITY OF MARYLAND BALT PROF SCH	187,416
5 T32AG00220-02	MARKSON, ELIZABETH MULTIDISCIPLINARY TRAINING PROGRAM IN AGING RESEARCH	07-01-95/04-30-96	BOSTON UNIVERSITY	183,385
5 T32AG00221-04	HERMALIN, ALBERT I TRAINING IN THE DEMOGRAPHY OF AGING	09-01-95/04-30-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	227,049
5 T32AG00222-04	POTTER, HUNTINGTON TRAINING IN THE MOLECULAR BIOLOGY OF NEURODEGENERATION	09-01-95/04-30-96	HARVARD UNIVERSITY	306,864
5 T32AG00223-02	RAMSDELL, JOE W GERIATRIC RESEARCH INSTITUTIONAL TRAINING GRANT	05-01-95/04-30-96	UNIVERSITY OF CALIFORNIA SAN DIEGO	77,682
5 T32AG00226-03	KEMPER, SUSAN RESEARCH TRAINING PROGRAM IN COMMUNICATION AND AGING	08-01-95/04-30-96	UNIVERSITY OF KANSAS LAWRENCE	124,676
5 T35AG00230-03	RICHARDSON, ARLAN G SHORT-TERM TRAINING STUDENTS IN HLTH PROF SCHOOLS	05-01-95/04-30-96	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	51,786
5 T32AG00231-03	LEVY, PAUL S EPIDEMIOLOGY AND BIOSTATISTICS IN AGING RESEARCH	09-01-95/04-30-96	UNIVERSITY OF ILLINOIS AT CHICAGO	117,918
5 T32AG00237-02	SCHOEN, ROBERT POSTDOCTORAL TRAINING IN THE DEMOGRAPHY OF AGING	07-01-95/04-30-96	JOHNS HOPKINS UNIVERSITY	59,960
5 T32AG00238-02	BURKHAUSER, RICHARD V ECONOMICS & DEMOGRAPHY OF AGING	07-01-95/04-30-96	SYRACUSE UNIVERSITY AT SYRACUSE	62,877
1 T32AG00239-01A1	DAN, ALICE J RESEARCH TRAINING IN MIDLIFE/OLDER WOMEN'S HEALTH	07-01-95/	UNIVERSITY OF ILLINOIS AT CHICAGO	
5 T32AG00241-02	KAHANA, EVA F PREDOC TRNG: SOCIAL ASPECTS OF HEALTH RESEARCH AND AGING	08-01-95/04-30-96	CASE WESTERN RESERVE UNIVERSITY	94,274
5 T32AG00242-02	WISE, PHYLLIS M MOLECULAR AND CELLULAR BASIS OF BRAIN AGING	05-01-95/04-30-96	UNIVERSITY OF KENTUCKY	186,755

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 T32AG00243-02	WAITE, LINDA J SPECIALIZED TRAINING PROGRAM IN THE DEMOGRAPHY & ECON.	05-01-95/04-30-96	UNIVERSITY OF CHICAGO	171,036
5 T32AG00244-02	KAROLY, LYNN A POSTDOCTORAL TRAINING IN THE STUDY OF AGING	05-01-95/04-30-96	RAND CORPORATION	67,260
3 T32AG00244-02S1	KAROLY, LYNN A POSTDOCTORAL TRAINING IN THE STUDY OF AGING	08-10-95/04-30-96	RAND CORPORATION	19,550
1 T32AG00245-01	SMALL, GARY H UCLA GERIATRIC RESEARCH FELLOWSHIP PROGRAM	05-20-95/04-30-96	UNIVERSITY OF CALIFORNIA LOS ANGELES	63,450
3 T32AG00245-01S1	SMALL, GARY H UCLA GERIATRIC RESEARCH FELLOWSHIP PROGRAM	09-15-95/04-30-96	UNIVERSITY OF CALIFORNIA LOS ANGELES	26,496
1 T32AG00246-01	LEE, RONALD D TRAINING IN THE DEMOGRAPHY AND ECONOMICS OF AGING	08-15-95/04-30-96	UNIVERSITY OF CALIFORNIA BERKELEY	42,402
1 T32AG00248-01	CEFALU, CHARLES A NATIONAL RESEARCH SERVICE AWARD (T32)	07-01-95/	GEORGETOWN UNIVERSITY	
2 K12AG00294-11	MEI, JEANNE Y PHYSICIAN SCIENTIST PROGRAM AWARD	09-15-95/07-31-96	HARVARD UNIVERSITY	741,744
5 R01AG00322-21	RACKOVSKY, SHALOM R AGING--CONFORMATIONAL CHANGES OF COLLAGEN	07-01-95/06-30-96	MOUNT SINAI SCHOOL OF MEDICINE OF CU	135,454
2 K12AG00353-09	SEEGMILLER, J E PHYSICIAN SCIENTIST PROGRAM AWARD	09-14-95/08-31-96	UNIVERSITY OF CALIFORNIA SAN DIEGO	169,625
5 P01AG00378-23	CRISTOFALO, VINCENT J CELLULAR SENESCENCE AND CONTROL OF CELL PROLIFERATION	01-15-95/12-31-95	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	788,792
3 R01AG00424-32S1	EFFROS, RITA B COLORIC RESTRICTION AND T CELL COSTIMULATORY PATHWAYS	12-01-94/04-30-95	UNIVERSITY OF CALIFORNIA LOS ANGELES	
3 R01AG00424-32S2	MALFORD, ROY L LIFE EXTENSION EFFECT OF CALORIC RESTRICTION	02-20-95/04-30-95	UNIVERSITY OF CALIFORNIA LOS ANGELES	43,442
5 R01AG00424-33	MALFORD, ROY L LIFE EXTENSION EFFECT OF CALORIC RESTRICTION	05-20-95/04-30-96	UNIVERSITY OF CALIFORNIA LOS ANGELES	343,667
3 R37AG00425-30S1	HOLLOSZY, JOHN O EXERCISE INDUCED BIOCHEMICAL AND ANATOMIC ADAPTATIONS	05-01-95/06-30-95	WASHINGTON UNIVERSITY	5,000

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 R37AG00425-31	HOLLOSZY, JOHN O EXERCISE INDUCED BIOCHEMICAL AND ANATOMIC ADAPTATIONS	07-01-95/06-30-96	WASHINGTON UNIVERSITY	252,739
5 R37AG00443-21	SCHIFFMAN, SUSAN S GUSTATORY AND OLFACTORY CHANGES WITH AGE	12-01-94/11-30-95	DUKE UNIVERSITY	236,866
7 K11AG00452-05	DONALDSON, DEIRDRE M MOLECULAR BIOLOGY OF NEURODEGENERATIVE DISEASES	09-30-95/06-30-97	WASHINGTON UNIVERSITY	89,100
5 K08AG00453-05	BOULT, CHARLES E PREDICTORS OF FUNCTIONAL ABILITY	01-01-95/12-31-95	UNIVERSITY OF MINNES WIN CITIES	71,200
5 K01AG00463-05	REDFERN, MARK S POSTURAL CONTROL IN THE ELDERLY	05-01-95/04-30-96	UNIVERSITY OF PITTSBURGH AT PITTSBUR	92,340
5 K04AG00465-04	JOHNSON, LARRY BIOLOGY OF THE AGING HUMAN TESTIS	12-01-94/11-30-95	TEXAS A&M UNIVERSITY HEALTH SCIENCE	69,260
5 K07AG00469-06	MASORO, EDWARD J GERIATRIC LEADERSHIP ACADEMIC AWARD	04-01-95/03-31-96	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	84,396
5 K07AG00474-06	POTTER, JANE F GERIATRIC LEADERSHIP ACADEMIC AWARD	04-01-95/03-31-96	UNIVERSITY OF NEBRASKA MEDICAL CENTE	86,400
5 K08AG00481-03	RUBIN, CRAIG D TREATMENT OF SENILE OSTEOPOROSIS	03-01-95/02-29-96	UNIVERSITY OF TEXAS SW MED CTR/DALLA	70,686
5 K07AG00485-06	ERSHLER, WILLIAM B GERIATRIC LEADERSHIP ACADEMIC AWARD	07-15-95/06-30-96	UNIVERSITY OF WISCONSIN MADISON	91,223
5 K12AG00488-05	SORENSEN, LEIF B GERIATRIC ACADEMIC PROGRAM AWARD	09-30-95/08-31-96	UNIVERSITY OF CHICAGO	409,860
2 K12AG00489-06	HAHN, THEODORE J UCLA GERIATRIC ACADEMIC PROGRAM	09-01-95/	UNIVERSITY OF CALIFORNIA LOS ANGELES	
5 K08AG00499-05	BRANDEIS, GABRIEL H URINARY INCONTINENCE IN FRAIL ELDERLY WOMEN	08-10-95/07-31-96	BOSTON UNIVERSITY	74,196
5 K12AG00503-05	ABRASS, ITAMAR B GERIATRIC ACADEMIC PROGRAM AWARD	01-01-95/09-29-95	UNIVERSITY OF WASHINGTON	407,658
2 K12AG00503-06	ABRASS, ITAMAR B GERIATRIC ACADEMIC PROGRAM AWARD	09-30-95/08-31-96	UNIVERSITY OF WASHINGTON	468,154

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 K08AG00504-05	BLACK, RONALD S UBIQUITIN IN ALZHEIMERS DISEASE	02-05-95/01-31-96	WINIFRED MASTERSON BURKE MED RES INS	81,540
5 K01AG00508-05	LEVKOFF, SUE E EXCESS DISABILITY IN COGNITIVELY IMPAIRED AGED	07-10-95/06-30-97	HARVARD UNIVERSITY	91,800
5 K11AG00509-05	JURIVICH, DONALD A REGULATION OF HEAT SHOCK GENE EXPRESSION IN SENESCENCE	09-01-95/08-31-96	NORTHWESTERN UNIVERSITY	85,565
5 K08AG00510-06	GURWITZ, JERRY H DRUG INDUCED ILLNESS IN THE ELDERLY--NSAIDS AS A MODEL	07-10-95/06-30-96	BRIGHAM AND WOMEN'S HOSPITAL	81,540
5 K11AG00516-05	CHOI, AUGUSTINE M GENETIC RESPONSES OF THE AGING LUNG TO OXIDATIVE STRESS	04-01-95/03-31-96	JOHNS HOPKINS UNIVERSITY	90,785
5 K08AG00518-04	CAMPBELL, JAMES W MEASUREMENT OF FAMILY FUNCTION IN ELDERLY PERSONS	02-01-95/01-31-96	CASE WESTERN RESERVE UNIVERSITY	74,795
5 K01AG00519-05	ALEXANDER, NEIL B AGING, CHAIR MOBILITY, AND MUSCULOSKELETAL IMPAIRMENT	09-01-95/08-31-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	98,720
5 K08AG00520-04	OBEID, LINA M TRANSCRIPTIONAL REGULATION OF PROTEIN KINASE C BETA	04-01-95/03-31-96	DUKE UNIVERSITY	74,987
5 K12AG00521-05	WEINER, LESLIE P NEUROGERONTOLOGY	08-01-95/07-31-96	UNIVERSITY OF SOUTHERN CALIFORNIA	
5 K08AG00524-05	INOUYE, SHARON K CLINICAL PREDICTORS OF DELIRIUM IN THE ELDERLY	07-15-95/06-30-96	YALE UNIVERSITY	74,932
5 K08AG00526-05	SCHMADER, KENNETH E EPIDEMIOLOGY OF HERPES ZOSTER AND POSTHERPETIC NEURALGIA	09-01-95/08-31-96	DUKE UNIVERSITY	71,479
2 K07AG00532-04	CRISTOFALO, VINCENT J GERIATRIC LEADERSHIP ACADEMIC AWARD	12-22-94/11-30-95	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	54,000
5 K11AG00533-05	VOCI, JAMES M NT4 CHARACTERIZATION OF A NOVEL NEUROTROPHIC FACTOR	07-12-95/06-30-96	CASE WESTERN RESERVE UNIVERSITY	87,307
5 K08AG00537-06	RUBINSTEIN, DANIEL BRURION IMMUNE SENESCENCE, AUTOIMMUNITY, AND AGING	08-01-95/07-31-96	BOSTON MEDICAL CENTER	77,942
2 P01AG00538-19	COTMAN, CARL W BEHAVIORAL AND NEURAL PLASTICITY IN THE AGED	08-05-95/06-30-96	UNIVERSITY OF CALIFORNIA IRVINE	863,428

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET START	DATES END	INSTITUTION	TOTAL
FY: 95					
5 K08AG00540-04	DUBEAU, CATHERINE E DIAGNOSIS OF PROSTATIC OBSTRUCTION	03-01-95	02-29-96	BRIGHAM AND WOMEN'S HOSPITAL	75,600
5 P01AG00541-18	SCHWAB, RISE IMMUNOBIOLOGY OF AGING	09-20-95	06-30-96	CORNELL UNIVERSITY MEDICAL CENTER	1,156,338
5 K08AG00542-04	WISNIEWSKI, THOMAS DIFFUSE LEWY BODY DISEASE AND GELSOLIN	09-01-95	08-31-96	NEW YORK UNIVERSITY	80,581
5 K01AG00544-04	ADER, MARILYN ETIOLOGY OF GLUCOSE INTOLERANCE OF AGING	01-01-95	12-31-95	UNIVERSITY OF SOUTHERN CALIFORNIA	90,912
5 K08AG00546-04	REED, RICHARD L GROWTH HORMONE AND MUSCLE STRENGTH	09-01-95	08-31-96	UNIVERSITY OF MINNESOTA TWIN CITIES	73,269
5 K01AG00547-04	COHEN-MANSFIELD, JISKA TREATMENT OF AGITATION IN AGED PEOPLE	01-20-95	12-31-95	GEORGETOWN UNIVERSITY	90,071
5 K08AG00548-04	GRAVENSTEIN, STEFAN ANTIBODY DIVERSITY, AGE AND INFLUENZA VACCINE EFFICACY	01-01-95	12-31-95	UNIVERSITY OF WISCONSIN MADISON	82,822
5 K04AG00553-04	SNOWDON, DAVID A EPIDEMIOLOGY OF AGING AND ALZHEIMER'S DISEASE	01-01-95	12-31-95	UNIVERSITY OF KENTUCKY	66,004
5 K01AG00554-03	HORIUCHI, SHIRO RELATIONSHIPS BETWEEN AGING AND MORTALITY	07-01-95	06-30-96	ROCKEFELLER UNIVERSITY	83,700
5 K01AG00558-03	JUDGE, JAMES O REDUCING RISK FACTORS FOR FALLS	09-01-95	08-31-96	UNIVERSITY OF CONNECTICUT HEALTH CEN	76,172
5 K08AG00559-05	SHORR, RONALD I GERIATRIC PHARMACOEPIDEMIOLOGY	04-01-95	03-31-96	UNIVERSITY OF TENNESSEE AT MEMPHIS	74,018
5 K01AG00561-04	POWE, NEIL R ECONOMIC CONSEQUENCES OF ILLNESS IN AN AGING SOCIETY	08-15-95	07-31-96	JOHNS HOPKINS UNIVERSITY	91,236
5 K04AG00563-04	SAPOLSKY, ROBERT M GLUCOCORTICOIDS AND ALZHEIMER'S-LIKE HIPPOCAMPAL DAMAGE	08-01-95	07-31-96	STANFORD UNIVERSITY	68,240
5 K11AG00566-05	SEIFER, DAVID B ENDOCRINOLOGIC BASIS OF REPRODUCTIVE AGING	09-01-95	08-31-96	WOMEN AND INFANTS HOSPITAL-RHODE ISL	90,104
5 K01AG00567-05	GUCCIONE, ANDREW A DEVELOPMENT OF COMORBIDITY INDEX FOR ARTHRITIS RESEARCH	09-05-95	08-31-96	MASSACHUSETTS GENERAL HOSPITAL	88,166

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
7 K11AG00568-04	EIDE, FERNETTE F NEUROTROPHINS AND THE HIPPOCAMPUS	06-20-95/06-30-96	UNIVERSITY OF CHICAGO	37,574
5 K08AG00571-04	ROBIN, DEBORAH W DRUG EFFECT ON BALANCE IN THE ELDERLY	09-01-95/08-31-96	VANDERBILT UNIVERSITY	77,181
2 K01AG00577-04	OLSHANSKY, STUART J INTERDISCIPLINARY TRAINING PROGRAM ON AGING	09-15-95/08-31-96	UNIVERSITY OF CHICAGO	86,840
5 K01AG00578-04	CEFALU, WILLIAM T CALORIC RESTRICTION AND CARDIOVASCULAR AGING	09-01-95/08-31-96	WAKE FOREST UNIVERSITY	90,152
5 K08AG00580-04	LACHS, MARK S PREDICTORS OF ELDER MISTREATMENT	07-01-95/06-30-96	CORNELL UNIVERSITY MEDICAL CENTER	78,300
5 K01AG00581-04	ROGERS, MARK W PROTECTIVE STEPPING RESPONSES AND FALLS IN THE ELDERLY	08-01-95/07-31-96	NORTHWESTERN UNIVERSITY	72,752
5 K08AG00583-03	CALLAHAN, CHRISTOPHER M GERIATRIC DEPRESSION IN PRIMARY CARE	07-15-95/06-30-96	INDIANA UNIV-PURDUE UNIV AT INDIANAP	79,645
5 K01AG00585-03	BROWN, MARYBETH SIMULATED BEDREST AND TREATMENT EFFECTS ON AGING MUSCLE	04-01-95/03-31-96	WASHINGTON UNIVERSITY	61,307
7 K01AG00586-05	SEEMAN, TERESA E PSYCHOSOCIAL FACTORS & NEUROENDOCRINE FUNCTION IN AGING	08-03-95/07-31-96	UNIVERSITY OF SOUTHERN CALIFORNIA	92,610
5 K01AG00587-03	PARNELL, ALLAN M FAMILY DEMOGRAPHY OF AGING	09-01-95/08-31-96	DUKE UNIVERSITY	75,972
5 K01AG00588-03	EMBANK, DOUGLAS C DEMOGRAPHY AND ECONOMICS OF ALZHEIMERS DISEASE	07-01-95/06-30-96	UNIVERSITY OF PENNSYLVANIA	73,548
1 K01AG00589-01A1	NEUMARK, DAVID RESEARCH ON THE ECONOMICS OF AGING & AGE DISCRIMINATION	01-01-95/12-31-95	NATIONAL BUREAU OF ECONOMIC RESEARCH	92,534
5 K01AG00593-02	HEADEN, ALVIN E JR RACE, LTC SERVICE MIX, AND CAREGIVER TIME COST	01-01-95/12-31-95	NORTH CAROLINA STATE UNIVERSITY RALE	77,230
7 K04AG00594-03	MEDRANO, ESTELA E SENESCENCE IN THE MELANOCYTE	04-10-95/03-31-96	BAYLOR COLLEGE OF MEDICINE	68,736
1 K07AG00595-01A1	WEBSTER, JAMES R, JR GERIATRIC LEADERSHIP ACADEMIC AWARD	07-01-95/	NORTHWESTERN UNIVERSITY	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 K08AG00599-02	DUGAN, LAURA L FREE RADICAL MECHANISMS IN NEURAL INJURY IN VITRO	02-01-95/01-31-96	WASHINGTON UNIVERSITY	76,401
7 P01AG00599-18	MINAKER, KENNETH L PROGRAM PROJECT IN BIOMEDICAL OUTCOMES OF AGING	09-15-95/05-31-96	MASSACHUSETTS GENERAL HOSPITAL	828,680
5 K01AG00602-03	SCHMIDT, ANN M AGING, DIABETES AND VASCULAR DISEASE	07-01-95/06-30-96	COLUMBIA UNIVERSITY NEW YORK	82,890
5 K08AG00605-04	MANGIONE, CAROL M IMPACT OF CATARACT EXTRACTION IN VISUCAL FUNCTIONAL STAT	07-01-95/06-30-96	UNIVERSITY OF CALIFORNIA LOS ANGELES	74,790
5 K07AG00608-03	GOLDBERG, ANDREW P GERIATRIC LEADERSHIP ACADEMIC AWARD	07-20-95/06-30-96	UNIVERSITY OF MARYLAND BALT PROF SCH	85,356
1 K11AG00614-01A1	SMIARELLA, KENNETH T DIETARY EFFECTS ON THE AGING OF GLUTAMATE RECEPTORS	05-01-95/	COLORADO STATE UNIVERSITY	
5 K08AG00615-02	WALLACE, JEFFREY I WEIGHT LOSS AND FAILURE TO THRIVE	04-01-95/03-31-96	UNIVERSITY OF WASHINGTON	71,280
5 K07AG00618-02	GOODWIN, JAMES S LEADERSHIP ACADEMIC AWARD	04-01-95/03-31-96	UNIVERSITY OF TEXAS MEDICAL BR GALVE	86,400
5 K08AG00619-02	BILIR, BAHRI M GENE EXPRESSION IN AGING LIVER	08-01-95/07-31-96	UNIVERSITY OF COLORADO HLTH SCIENCES	81,092
5 K11AG00621-03	LEEHEY, MAUREEN A MITOCHONDRIAL DNA ANALYSIS IN HUNTINGTONS DISEASE	08-01-95/07-31-96	UNIVERSITY OF COLORADO HLTH SCIENCES	90,763
5 K07AG00622-02	KANE, ROBERT L GERIATRIC LEADERSHIP ACADEMIC AWARDS	01-01-95/12-31-96	UNIVERSITY OF MINNESOTA TWIN CITIES	89,340
5 K08AG00623-02	MAHONEY, JANE E FALLS AFTER HOSPITAL DISCHARGE	01-01-95/12-31-95	UNIVERSITY OF WISCONSIN MADISON	77,759
7 K08AG00627-02	HEUSER, MARK D FAILURE TO THRIVE IN ELDERS	03-15-95/02-29-96	UNIVERSITY OF MARYLAND BALT PROF SCH	77,220
5 K08AG00629-02	BAUER, DOUGLAS C THYROID FUNCTION AND OSTEOPOROSIS	05-01-95/04-30-96	UNIVERSITY OF CALIFORNIA SAN FRANCIS	73,440
5 K04AG00631-02	ZAKERI, ZAHRA MECHANISMS OF PROGRAMMED CELL DEATH	05-01-95/04-30-96	QUEENS COLLEGE	69,082

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 K01AG00633-02	TULLY, CHRISTINE L ZINC, B12 AND COGNITIVE DECLINE IN THE ELDERLY	07-01-95/06-30-96	UNIVERSITY OF KENTUCKY	74,452
5 K04AG00634-02	GOATE, ALISON M GENETIC APPROACH TO THE ETIOLOGY OF ALZHEIMER DISEASE	05-01-95/04-30-96	WASHINGTON UNIVERSITY	64,197
5 K07AG00635-02	WISE, DAVID A GERIATRIC LEADERSHIP ACADEMIC AWARD	04-01-95/03-31-96	NATIONAL BUREAU OF ECONOMIC RESEARCH	86,400
5 K08AG00639-02	BARZILAI, NIR AGING AND PERIPHERAL AND HEPATIC GLUCOSE METABOLISM	09-01-95/08-31-96	YESHIVA UNIVERSITY	80,460
5 K08AG00642-02	MONANE, MARK ANTIHYPERTENSIVES AND THE ELDERLY	01-01-95/12-31-95	BRIGHAM AND WOMEN'S HOSPITAL	76,810
5 K08AG00643-02	MEINER, DEBRA K CHRONIC PAIN IN THE NURSING HOME	08-01-95/07-31-96	DUKE UNIVERSITY	72,198
5 K01AG00645-02	MORIN, CATHERINE L INTERACTION OF TNF ALPHA & NUTRITION IN AGED ADIPOSE TIS	09-01-95/08-31-96	UNIVERSITY OF COLORADO HLTH SCIENCES	50,904
5 K01AG00646-02	ELIAS, PENELOPE K AGE, HYPERTENSION, AND COGNITIVE FUNCTIONING	08-01-95/12-14-96	BOSTON UNIVERSITY	91,781
5 K01AG00647-02	WONG, REBECCA ECONOMICS OF INTERGENERATIONAL TRANSFERS--US HISPANICS	08-01-95/07-31-96	JOHNS HOPKINS UNIVERSITY	80,460
5 K08AG00648-02	MARCANTONIO, EDWARD R REDUCING DELIRIUM AFTER HIP FRACTURE--A PROACTIVE MODEL	08-15-95/07-31-96	BRIGHAM AND WOMEN'S HOSPITAL	76,140
5 K11AG00649-02	YUEN, ERIC C BDNF AND OXIDATIVE INJURY IN MOTOR NEURONS	07-12-95/06-30-96	UNIVERSITY OF CALIFORNIA SAN FRANCIS	76,680
1 K01AG00650-01A1	PUGH, THOMAS CALORIES, AGING, AND LOCALIZATION OF MTDNA ABNORMALITIES	09-05-95/08-31-96	UNIVERSITY OF WISCONSIN MADISON	72,840
1 K01AG00651-01	MORAES, CARLOS T ACCUMULATION OF MITOCHONDRIAL DNA MUTATIONS IN AGING	12-01-94/	UNIVERSITY OF MIAMI	
1 K01AG00652-01	SALTZ, CONSTANCE C SERCA: HIP FRACTURE REHABILITATION AND RECOVERY	01-01-95/	UNIVERSITY OF MARYLAND BALT PROF SCH	
1 K08AG00656-01	CHIN, STEVEN SUEY-MING TAU PATHOLOGY IN PROGRESSIVE SUPRANUCLEAR PALSY	01-25-95/12-31-95	COLUMBIA UNIVERSITY NEW YORK	82,890

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 K01AG00657-02	GARDNER, ANDREW W EXERCISE REHABILITATION OF YOUNGER AND OLDER CLAUDICANTS	02-01-95/01-31-96	UNIVERSITY OF MARYLAND BALT PROF SCH	79,965
1 K11AG00658-01	OLICHNEY, JOHN ERPS AND VERBAL MEMORY IN AGING DEMENTIA AND AMNESIA	07-10-95/06-30-96	UNIVERSITY OF CALIFORNIA SAN DIEGO	75,264
1 K04AG00659-01	MAGNUSSON, KATHY R AGE RELATED CHANGE IN GLUTAMATE RECEPTORS	01-20-95/12-31-95	COLORADO STATE UNIVERSITY	63,936
1 K01AG00660-01	SPINA, ROBERT J CARDIOVASCULAR ADAPTATIONS TO EXCERCISE IN THE ELDERLY	12-01-94/	WASHINGTON UNIVERSITY	
1 K01AG00661-01	KLERMAN, ELIZABETH B REHABILITATION OF CIRCADIAN BLINDNESS IN OLDER PEOPLE	01-20-95/12-31-95	BRIGHAM AND WOMEN'S HOSPITAL	81,540
1 K04AG00663-01	KOHRT, WENDY M EXERCISE AND HRT IN OPTEOPENIC ELDERLY WOMEN AND MEN	01-01-95/12-31-95	WASHINGTON UNIVERSITY	64,386
1 K01AG00665-01	CHAPMAN, KAREN M ENERGY BALANCE IN OLDER PERSONS WITH PULMONARY DISEASE	02-01-95/	UNIVERSITY OF ILLINOIS URBANA-CHAMPA	
1 K01AG00666-01	EL-HAJJ FULEIHAN, GHADA AGE/GENDER EFFECTS ON PTH, CA++ AND SKELETAL DYNAMICS	04-10-95/03-31-96	BRIGHAM AND WOMEN'S HOSPITAL	81,540
1 K07AG00669-01	VERDERY, ROY B GERIATRIC LEADERSHIP ACADEMIC AWARD	04-01-95/	UNIVERSITY OF ARIZONA	
1 K11AG00671-01	HISAMA, FUKI M POSITIONAL CLONING OF THE WERNERS SYNDROME GENE	07-01-95/06-30-97	YALE UNIVERSITY	85,050
1 K08AG00672-01	JOSEPHSON, KAREN L NIA ACADEMIC AWARD: OUTCOMES RESEARCH IN AGING	04-01-95/	UNIVERSITY OF SOUTHERN CALIFORNIA	
1 K04AG00674-01	MC DANIEL, MARK A PROSPECTIVE MEMORY NEUROPSYCHOLOGY AND AGING	04-01-95/	UNIVERSITY OF NEW MEXICO ALBUQUERQUE	
1 K04AG00676-01	LESNEFSKY, EDWARD J MITOCHONDRIA INCREASE OXIDATIVE INJURY IN AGING HEART	07-01-95/06-30-96	CASE WESTERN RESERVE UNIVERSITY	66,960
1 K01AG00677-01	PAHLAVANI, MOHAMMAD A DOES CALORIC RESTRICTION AFFECT IL-2 TRANSCRIPTION?	08-20-95/07-31-96	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	52,195
5 R01AG00677-18	RUTHERFORD, CHARLES L ALTERNATE PATHWAYS IN CELLULAR AGING	04-05-95/03-31-96	VIRGINIA POLYTECHNIC INST AND ST UNI	177,459

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 K07AG00678-01	WYKLE, MAY L GERIATRIC LEADERSHIP ACADEMIC AWARD	04-10-95/03-31-96	CASE WESTERN RESERVE UNIVERSITY	83,472
1 K08AG00680-01	ROSEN, HAROLD N ADJUSTMENT OF ESTROGEN DOSING ACCORDING TO BONE TURNOVER	04-01-95/03-31-96	BETH ISRAEL DEACONESS MEDICAL CENTER	77,842
1 K08AG00681-01	MARQUEZ-STERLING, NUMA R ENDOCYTOTIC TRAFFICKING OF APP IN CULTURED CNS NEURONS	04-01-95/03-31-96	NORTHWESTERN UNIVERSITY	75,162
1 K07AG00682-01	ROTH, JESSE SCIENTIFIC ENHANCEMENT OF RESEARCH ON AGING	07-01-95/	JOHNS HOPKINS UNIVERSITY	
1 K07AG00683-01	THADEPALLI, HARAGOPAL GERIATRIC LEADERSHIP ACADEMIC AWARD	07-01-95/	CHARLES R. DREW UNIVERSITY OF MED &	
1 K08AG00684-01	BONOMO, ROBERT A MECHANISMS OF ANTIBIOTIC RESISTANCE IN THE NURSING HOME	09-14-95/08-31-96	CASE WESTERN RESERVE UNIVERSITY	77,842
1 K01AG00688-01	COHEN, DAVID M ROLE OF METABOLIC CHANGES IN AGING AND NEUROTOXICITY	07-01-95/	UNIVERSITY OF SOUTHERN CALIFORNIA	
1 K08AG00689-01	BINKLEY, NEIL C NIA ACADEMIC AWARD - VITAMIN K AND SKELETAL HEALTH	07-01-95/	UNIVERSITY OF WISCONSIN MADISON	
1 K01AG00690-01	YAN, SHI DU ALZHEIMERS, GLYCATION, RECEPTORS AND OXIDANT STRESS	08-20-95/06-30-96	COLUMBIA UNIVERSITY NEW YORK	82,890
1 K04AG00693-01	KINDY, MARK S PROTEIN INTERACTIONS IN AMYLOID FIBRILLOGENESIS	07-01-95/	UNIVERSITY OF KENTUCKY	
7 K04AG00694-02	PEACOCKE, MONICA GENETIC STUDIES OF CONDENS SYNDROME	12-01-95/05-31-96	COLUMBIA UNIVERSITY NEW YORK	48,324
1 K11AG00713-01	MOALLI, MARIA R MECHANOTRANSDUCTION IN TRABECULAR BONE	09-20-95/08-31-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	73,277
1 K08AG00715-01	MARGOLIS, DAVID J PREDICTION MODEL FOR THE TREATMENT OF VENOUS LEG ULCERS	09-15-95/06-30-96	UNIVERSITY OF PENNSYLVANIA	93,127
1 K01AG00723-01	DENGEL, DONALD R INSULIN ACTION, SODIUM AND EXERCISE IN HYPERTENSION	09-01-95/08-31-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	90,014
1 K04AG00724-01	PETERSON, CHARLOTTE A REGULATION OF GENE EXPRESSION IN MUSCLE SATELLITE CELLS	09-10-95/08-31-96	UNIVERSITY OF ARKANSAS MED SCIS LTL	67,500

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 R01AG00783-16	WEIGLE, WILLIAM O AGING EFFECT ON IMMUNE STATES	01-01-95/09-30-97	SCRIPPS RESEARCH INSTITUTE	247,693
5 R01AG00947-18	STEIN, GRETCHEN H GROWTH REGULATION--SENESCENT VS NONSENESCENT CELLS	07-01-95/06-30-96	UNIVERSITY OF COLORADO AT BOULDER	264,425
2 R01AG01121-15A1	COLEMAN, PAUL D COMPUTER AIDED STUDY OF DENDRITES IN AGING HUMAN BRAIN	12-01-94/	UNIVERSITY OF ROCHESTER	
5 R37AG01136-18	YEN, SHU-HUI C AGING BRAIN--IMMUNOHISTOLOGY AND BIOCHEMISTRY	07-12-95/06-30-96	YESHIVA UNIVERSITY	325,698
5 R01AG01159-19	MANTON, KENNETH G DEMOGRAPHIC STUDY OF MULTIPLE CAUSES OF DEATH	12-01-94/11-30-95	DUKE UNIVERSITY	176,300
5 P01AG01188-17	YU, BYUNG P NUTRITIONAL PROBE OF THE AGING PROCESS	06-01-95/05-31-96	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	1,134,880
3 P01AG01188-17S1	YU, BYUNG P NUTRITIONAL PROBE OF THE AGING PROCESS	06-01-95/05-31-96	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	34,079
5 R37AG01228-17	WRIGHT, WOODRING E GENE EXPRESSION IN AGING AND DEVELOPMENT	12-10-94/11-30-95	UNIVERSITY OF TEXAS SW MED CTR/DALLA	313,619
2 R01AG01548-12	RICHARDSON, ARLAN G DIETARY RESTRICTION EFFECT ON GENE EXPRESSION	04-01-95/03-31-96	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	172,765
5 P01AG01743-16	KLINMAN, NORMAN R IMMUNOBIOLOGY OF AGING	02-20-95/01-31-96	SCRIPPS RESEARCH INSTITUTE	806,037
5 P01AG01751-17	MARTIN, GEORGE M GENE ACTION IN THE PATHOBIOLOGY OF AGING	08-10-95/07-31-96	UNIVERSITY OF WASHINGTON	1,607,271
5 R01AG01760-15	KLAG, MICHAEL J PRECURSORS OF PREMATURE DISEASE AND DEATH	07-21-95/06-30-96	JOHNS HOPKINS UNIVERSITY	446,487
5 R37AG02049-16	GARRY, PHILIP J PROSPECTIVE STUDY OF NUTRITION IN THE ELDERLY	02-01-95/01-31-96	UNIVERSITY OF NEW MEXICO ALBUQUERQUE	426,674
3 R37AG02049-16S1	GARRY, PHILIP J PROSPECTIVE STUDY OF NUTRITION IN THE ELDERLY	02-20-95/01-31-96	UNIVERSITY OF NEW MEXICO ALBUQUERQUE	7,400
3 R37AG02049-16S2	GARRY, PHILIP J PROSPECTIVE STUDY OF NUTRITION IN THE ELDERLY	05-01-95/01-31-96	UNIVERSITY OF NEW MEXICO ALBUQUERQUE	5,000

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
3 N01AG02102-014	RUSSELL, ROBERT J COLONY OF AGED FISCHER 344 RAT STRAINS	08-01-95/07-31-96	HARLAN SPRAGUE DAWLEY, INC.	
5 N01AG02102-015	RUSSELL, ROBERT J COLONY OF AGED FISCHER 344 RAT STRAINS	09-29-95/12-31-97	HARLAN SPRAGUE DAWLEY, INC.	1,185,274
5 R01AG02128-15	FESSLER, JOHN H BASEMENT MEMBRANE BIOSYNTHESIS	05-01-95/04-30-96	UNIVERSITY OF CALIFORNIA LOS ANGELES	358,072
5 P01AG02132-15	PRUSINER, STANLEY B DEGENERATIVE AND DEMENTING DISEASES OF AGING	01-25-95/12-31-95	UNIVERSITY OF CALIFORNIA SAN FRANCIS	1,661,428
5 R01AG02163-14	MADDEN, DAVID J AGE AND SELECTIVE ATTENTION IN VISUAL SEARCH	05-01-95/03-31-97	DUKE UNIVERSITY	255,174
2 R01AG02205-12A3	MALEMUD, CHARLES J BEHAVIOR OF HUMAN CARTILAGE IN AGING AND OSTEOARTHRITIS	12-01-94/	CASE WESTERN RESERVE UNIVERSITY	
5 P01AG02219-15	MOHS, RICHARD C CLINICAL AND BIOLOGIC STUDIES IN EARLY ALZHEIMERS	04-01-95/03-31-96	MOUNT SINAI SCHOOL OF MEDICINE OF CU	1,233,378
3 R37AG02224-15S2	WISE, PHYLLIS M NEUROENDOCRINE AND NEUROCHEMICAL FUNCTION DURING AGING	05-01-95/06-30-95	UNIVERSITY OF KENTUCKY	5,000
5 R37AG02224-16	WISE, PHYLLIS M NEUROENDOCRINE AND NEUROCHEMICAL FUNCTION DURING AGING	07-10-95/06-30-96	UNIVERSITY OF KENTUCKY	311,227
5 R01AG02325-14	PROSTAK, KENNETH S MECHANO-ULTRASONIC PROPERTIES OF BONE IN AGING	12-22-94/11-30-96	FORSYTH DENTAL CENTER	247,414
2 R01AG02329-19	YUNIS, EDMOND J IMMUNOLOGICAL ASPECTS OF AGING	07-01-95/	DANA-FARBER CANCER INSTITUTE	
5 R01AG02331-14	CLEMMONS, DAVID R CONTROL OF FIBROBLAST REPLICATION BY IGF-BINDING PROTEIN	08-10-95/07-31-96	UNIVERSITY OF NORTH CAROLINA CHAPEL	246,634
5 R37AG02452-16	LIGHT, LEAH L DIRECT AND INDIRECT MEASURES OF MEMORY IN OLD AGE	09-01-95/08-31-96	PITZER COLLEGE	183,462
5 R01AG02467-14	KUSHNER, IRVING INDUCTION OF ACUTE PHASE PROTEIN BIOSYNTHESIS	03-05-95/02-28-96	CASE WESTERN RESERVE UNIVERSITY	193,633
5 R37AG02577-13	NIMNI, MARCEL E OSTEOGENESIS--DEVELOPMENT, MODULATION, AND AGING	12-10-94/11-30-95	CHILDREN'S HOSPITAL OF LOS ANGELES	194,890

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
2 R01AG02711-17	ANCOLI-ISRAEL, SONIA PREVALENCE OF SLEEP APNEA IN AN AGED POPULATION	04-01-95/03-31-96	UNIVERSITY OF CALIFORNIA SAN DIEGO	221,299
5 R37AG02751-14	HOWARD, DARLENE V AGING, SEMANTIC PROCESSING AND MEMORY	05-01-95/04-30-96	GEORGETOWN UNIVERSITY	98,965
2 R01AG02822-14A1	STOCKDALE, FRANK E DEVELOPMENTAL AGE AND CHANGES IN MYOSIN ISOZYMES	12-20-94/11-30-95	STANFORD UNIVERSITY	269,230
5 P01AG02908-15	BERG, PAUL DNA TRANSACTIONS AND GENOME INTEGRITY IN AGING	08-01-95/07-31-96	STANFORD UNIVERSITY	764,545
5 R01AG03051-12	REISBERG, BARRY AGING AND DEMENTIA--LONGITUDINAL STUDY	07-01-95/06-30-96	NEW YORK UNIVERSITY	261,141
4 R37AG03055-14	ELIAS, MERRILL F AGE HYPERTENSION AND INTELLECTIVE PERFORMANCE	07-01-95/06-30-96	UNIVERSITY OF MAINE	287,955
5 R37AG03188-14	WOODBURY, MAX A LONGITUDINAL MODELS OF CORRELATES OF AGING AND LONGEVITY	06-01-95/05-31-96	DUKE UNIVERSITY	212,870
5 R01AG03362-09	HARTLEY, JOELLEN T AGING AND PROSE MEMORY--BEHAVIORAL AND EEG PREDICTORS	06-01-95/05-31-96	CALIFORNIA STATE UNIVERSITY LONG BEA	175,685
5 R01AG03376-14	BARNES, CAROL A NEUROBEHAVIORAL RELATIONS IN SENESCENT HIPPOCAMPUS	05-01-95/04-30-96	UNIVERSITY OF ARIZONA	155,745
3 R01AG03417-14S1	FERNANDES, GABRIEL DIET AND AUTOIMMUNITY AND AGING	08-01-95/06-30-96	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	17,400
4 R37AG03501-14	LEVENTHAL, HOWARD SYMPTOM AND EMOTION STIMULI TO HEALTH ACTION IN ELDERLY	07-21-95/06-30-96	RUTGERS THE STATE UNIV NEW BRUNSWICK	517,980
3 R37AG03501-14S1	LEVENTHAL, HOWARD SYMPTOM AND EMOTION STIMULI TO HEALTH ACTION IN ELDERLY	08-20-95/06-30-96	RUTGERS THE STATE UNIV NEW BRUNSWICK	5,000
5 R01AG03527-13	CHATTERJEE, BANDANA AGE & HORMONE-DEPENDENT REGULATION OF A HEPATIC PROTEIN	05-07-95/04-30-98	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	183,160
5 R01AG03578-10	CHEN, KUANG Y TRANSACTING FACTORS AND CELLULAR AGING	07-01-95/06-30-96	RUTGERS THE STATE UNIV NEW BRUNSWICK	195,425
5 R01AG03763-09	WHISLER, RONALD L CELLULAR MECHANISMS OF HUMAN IMMUNOSENESCENCE	01-15-95/12-31-95	OHIO STATE UNIVERSITY	183,621

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 P01AG03934-13	ABRUTYNM, ELI TEACHING NURSING HOME	05-01-95/04-30-96	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	713,287
5 P01AG03949-14	LIPTON, RICHARD B TEACHING NURSING HOME	07-01-95/06-30-96	YESHIVA UNIVERSITY	1,334,736
5 P01AG03991-12	BERG, LEONARD HEALTHY AGING AND SENILE DEMENTIA	01-01-95/12-31-95	WASHINGTON UNIVERSITY	1,497,404
5 R01AG04058-11	WERNER, JOHN S OPTICAL AND NEURAL CHANGES IN THE AGING VISUAL SYSTEM	03-05-95/02-28-96	UNIVERSITY OF COLORADO AT BOULDER	111,480
3 R37AG04085-11S1	MURPHY, CLAIRE L CHEMOSENSORY PERCEPTION AND PSYCHOPHYSICS IN THE AGED	05-01-95/09-22-96	SAN DIEGO STATE UNIVERSITY	5,000
5 R01AG04145-13	YEN, SHU-HUI C AGING AND ALZHEIMER DEMENTIA--ROLE OF FIBROUS PROTEIN	05-15-95/04-30-96	YESHIVA UNIVERSITY	285,335
5 R01AG04212-12	OWSLEY, CYNTHIA SPATIAL VISION AND AGING--UNDERLYING MECHANISMS	04-01-95/03-31-96	UNIVERSITY OF ALABAMA AT BIRMINGHAM	190,382
3 R37AG04287-12S1	STEVENS, JOSEPH C CHEMICAL SENSES AND AGING	08-01-95/08-31-95	JOHN B. PIERCE LABORATORY, INC.	5,000
5 R37AG04287-13	STEVENS, JOSEPH C CHEMICAL SENSES AND AGING	09-14-95/08-31-97	JOHN B. PIERCE LABORATORY, INC.	229,822
5 R01AG04306-10	HASHER, LYNN A AGE, INHIBITION, AND THE CONTENTS OF WORKING MEMORY	08-01-95/07-31-96	DUKE UNIVERSITY	207,798
5 R37AG04307-13	CHASE, MICHAEL H STATE-DEPENDENT SOMATOMOTOR PROCESSES IN OLD AGE	08-01-95/07-31-96	UNIVERSITY OF CALIFORNIA LOS ANGELES	313,324
5 P01AG04342-12	OLDSTONE, MICHAEL B AGING DISEASE--TRANSGENIC/VIROLOGIC/IMMUNOLOGY STUDIES	12-01-94/11-30-95	SCRIPPS RESEARCH INSTITUTE	917,473
5 R37AG04344-12	PORTER, JOHN C AGING AND MOLECULAR NEUROENDOCRINE IMPAIRMENT	02-01-95/01-31-96	UNIVERSITY OF TEXAS SW MED CTR/DALLA	210,278
2 R01AG04360-13	FARR, ANDREW G AGE DEPENDENT MODULATION OF T CELL FUNCTION	09-01-95/07-31-96	UNIVERSITY OF WASHINGTON	207,989
3 P01AG04390-11S1A1	LIPSITZ, LEWIS A SERVING THOSE WHO IMPROVE IN COGNITION/CONTINENCE IN NHS	12-01-94/	HEBREW REHABILITATION CENTER FOR AGE	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 P01AG04390-13	LIPSITZ, LEWIS A RESEARCH NURSING HOME	09-30-95/08-31-96	HEBREW REHABILITATION CENTER FOR AGE	1,055,552
5 P01AG04418-12	HOFFER, BARRY J AMINERGIC FUNCTION IN AGING AND ALZHEIMERS DISEASE	04-01-95/03-31-96	UNIVERSITY OF COLORADO HLTH SCIENCES	905,774
5 R37AG04517-12	WINGFIELD, ARTHUR AGE AND DECISION STRATEGIES IN RUNNING MEMORY FOR SPEECH	04-01-95/03-31-96	BRANDEIS UNIVERSITY	154,687
3 R37AG04517-12S1	WINGFIELD, ARTHUR AGE AND DECISION STRATEGIES IN RUNNING MEMORY FOR SPEECH	04-01-95/03-31-96	BRANDEIS UNIVERSITY	28,493
3 R37AG04517-12S2	WINGFIELD, ARTHUR AGE AND DECISION STRATEGIES IN RUNNING MEMORY FOR SPEECH	05-01-95/03-31-96	BRANDEIS UNIVERSITY	5,000
5 R01AG04518-12	HUI, SIU LUI LONGITUDINAL STUDIES OF OSTEOPOROSIS IN AGING	09-14-95/08-31-98	INDIANA UNIV-PURDUE UNIV AT INDIANAP	110,904
5 R01AG04542-11	LANDFIELD, PHILIP W HIPPOCAMPAL SYNAPTIC STRUCTURE-PHYSIOLOGY DURING AGING	05-01-95/04-30-97	UNIVERSITY OF KENTUCKY	109,876
5 P30AG04590-11	ROCKWELL, RICHARD C FACTORS IN AGING--DEVELOPMENT RESEARCH RESOURCES	05-01-95/04-30-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	589,752
5 R01AG04736-12	THONAR, EUGENE J AGE RELATED DIFFERENCES IN CARTILAGE PROTEOGLYCANS	04-01-95/03-31-96	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	168,753
5 R37AG04791-12	NEBES, ROBERT D SEMANTIC MEMORY IN ALZHEIMERS DISEASE	04-25-95/03-31-96	UNIVERSITY OF PITTSBURGH AT PITTSBUR	144,016
5 R37AG04810-12	LU, JOHN K HORMONE SECRETION AND PREGNANCY DURING AGING	04-01-95/03-31-96	UNIVERSITY OF CALIFORNIA LOS ANGELES	201,070
3 R37AG04810-12S1	LU, JOHN K HORMONE SECRETION AND PREGNANCY DURING AGING	05-01-95/03-31-96	UNIVERSITY OF CALIFORNIA LOS ANGELES	5,000
5 R01AG04821-13	OZER, HARVEY L IMMORTALIZATION OF SV40-TRANSFORMED HUMAN CELLS	08-15-95/07-31-96	UNIVERSITY OF MEDICINE & DENTISTRY O	304,696
5 P01AG04875-12	RIGGS, BYRON L PHYSIOLOGY OF BONE METABOLISM IN AN AGING POPULATION	08-10-95/06-30-96	MAYO FOUNDATION	1,278,544
5 P01AG04953-12	ALBERT, MARILYN S AGE-RELATED CHANGES OF COGNITION IN HEALTH AND DISEASE	08-01-95/07-31-96	MASSACHUSETTS GENERAL HOSPITAL	1,061,715

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
3 P01AG04953-12S2	ALBERT, MARILYN S AGE-RELATED CHANGES OF COGNITION IN HEALTH & DISEASE	09-30-95/07-31-96	MASSACHUSETTS GENERAL HOSPITAL	33,800
2 R01AG04980-32A1	THORBECKE, GEERTRUIDA J GERMINAL CENTERS, ANTIBODY PRODUCTION, AND LYMPHOMA	07-10-95/06-30-96	NEW YORK UNIVERSITY	303,962
3 R01AG04984-08A1S1	RIKANS, LORA E AGING AND HEPATOTOXICITY	06-15-95/08-31-95	UNIVERSITY OF OKLAHOMA HLTH SCIENCES	4,533
5 R01AG04984-09	RIKANS, LORA E AGING AND HEPATOTOXICITY	09-01-95/08-31-96	UNIVERSITY OF OKLAHOMA HLTH SCIENCES	137,221
2 P50AG05128-12	ROSES, ALLEN D ALZHEIMERS DISEASE RESEARCH CENTER	05-01-95/04-30-96	DUKE UNIVERSITY	1,717,227
5 P50AG05131-12	THAL, LEON J ALZHEIMERS DISEASE	04-15-95/03-31-96	UNIVERSITY OF CALIFORNIA SAN DIEGO	2,375,000
2 P50AG05133-12	DE KOSKY, STEVEN T ALZHEIMERS DISEASE RESEARCH CENTER	05-01-95/04-30-96	UNIVERSITY OF PITTSBURGH AT PITTSBUR	1,329,368
5 P50AG05134-12	GROWDON, JOHN H ALZHEIMERS DISEASE	04-15-95/03-31-96	HARVARD UNIVERSITY	1,758,275
2 P50AG05136-12	MARTIN, GEORGE M ALZHEIMERS DISEASE RESEARCH CENTER	05-01-95/04-30-96	UNIVERSITY OF WASHINGTON	2,008,120
5 P50AG05138-12	DAVIS, KENNETH L ALZHEIMERS DISEASE	04-20-95/03-31-96	MOUNT SINAI SCHOOL OF MEDICINE OF CU	1,900,001
3 P50AG05138-12S1	DAVIS, KENNETH L ADRC TRANSGENIC CORE FACILITY	07-01-95/	MOUNT SINAI SCHOOL OF MEDICINE OF CU	
3 P50AG05142-11S2	FINCH, CALEB E ADRC CONSORTIUM	12-01-94/03-31-95	UNIVERSITY OF SOUTHERN CALIFORNIA	41,626
5 P50AG05142-12	FINCH, CALEB E ADRC CONSORTIUM	04-15-95/03-31-96	UNIVERSITY OF SOUTHERN CALIFORNIA	2,743,383
2 P50AG05144-12	MARKESBERY, WILLIAM R ALZHEIMER'S DISEASE RESEARCH CENTER	05-01-95/04-30-96	UNIVERSITY OF KENTUCKY	1,212,061
5 P50AG05146-13	PRICE, DONALD L AGING, NEURODEGENERATIVE DISEASE, AND ANIMAL MODELS	08-15-95/03-31-96	JOHNS HOPKINS UNIVERSITY	1,900,001

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 R01AG05213-10	FRIEDMAN, DAVID AGING EFFECTS ON COGNITIVE ERPD/CARDIAC WAVE EFFECT	05-01-95/07-31-97	NEW YORK STATE PSYCHIATRIC INSTITUTE	219,843
7 R01AG05214-11	ELLIS, JOHN RESPONSES OF SUBPOPULATIONS OF MUSCARINIC RECEPTORS	02-25-96/03-31-96	PENNSYLVANIA STATE UNIV HERSHEY MED	105,943
5 R01AG05233-08	FREEDMAN, ROBERT R BEHAVIORAL TREATMENT OF MENOPAUSAL HOT FLASHES	04-01-95/03-31-96	WAYNE STATE UNIVERSITY	240,498
5 R37AG05284-10	DAVIS, MARADEE A LIVING ARRANGEMENTS HEALTH AND SURVIVAL--OLDER US ADULTS	02-01-95/01-31-96	UNIVERSITY OF CALIFORNIA SAN FRANCIS	210,100
2 R01AG05317-08	WOOLLACOTT, MARJORIE H AGE RELATED CHANGES IN POSTURE AND MOVEMENT	09-30-95/07-31-96	UNIVERSITY OF OREGON	206,470
5 R37AG05333-11	PEREIRA-SMITH, OLIVIA M MOLECULAR AND CYTOGENETIC STUDIES OF HUMAN CELL AGING	05-01-95/04-30-96	BAYLOR COLLEGE OF MEDICINE	221,113
3 R37AG05333-11S1	PEREIRA-SMITH, OLIVIA M MOLECULAR AND CYTOGENETIC STUDIES OF CELL AGING	09-15-95/04-30-96	BAYLOR COLLEGE OF MEDICINE	49,995
2 R01AG05366-07A2	WITKIN, JOAN W AGING LHRH SYSTEM/EM IMMUNOCYTOCHEMICAL STUDIES	07-01-95/	COLUMBIA UNIVERSITY NEW YORK	
3 U09AG05389-08S2	LACROIX, ANDREA Z STUDY SECTION CHAIRMANS FUND (NIH)	07-20-95/10-31-97	U.S. PHS PUBLIC ADVISORY GROUPS	200,000
3 R01AG05394-09S1	ENSRUD, KRISTINE FRACTURES IN OLDER WOMEN	01-25-95/01-31-95	UNIVERSITY OF MINNESOTA TWIN CITIES	214,634
5 R01AG05394-10	ENSRUD, KRISTINE FRACTURES IN OLDER WOMEN	02-20-95/01-31-96	UNIVERSITY OF MINNESOTA TWIN CITIES	389,087
3 R01AG05407-09S1	CUMMINGS, STEVEN R FRACTURES IN OLDER WOMEN	04-01-95/04-30-95	UNIVERSITY OF CALIFORNIA SAN FRANCIS	358,000
5 R01AG05407-10	CUMMINGS, STEVEN R FRACTURES IN OLDER WOMEN	08-10-95/04-30-96	UNIVERSITY OF CALIFORNIA SAN FRANCIS	1,163,123
5 R01AG05552-09	HESS, THOMAS M SCHEMATIC KNOWLEDGE INFLUENCES ON MEMORY IN ADULTHOOD	04-01-95/03-31-97	NORTH CAROLINA STATE UNIVERSITY RALE	117,394
3 P01AG05562-10S1	HOLLOSZY, JOHN O PHYSIOLOGICAL ADAPTATIONS TO EXERCISE IN THE ELDERLY	09-25-95/04-30-96	WASHINGTON UNIVERSITY	110,623

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
2 P01AG05562-11	HOLLOSZY, JOHN O PHYSIOLOGICAL ADAPTIONS TO EXERCISE IN THE ELDERLY	07-01-95/	WASHINGTON UNIVERSITY	
5 F31AG05576-04	JASPER, JARROD E MINORITY PREDOCTORAL FELLOWSHIP	01-13-95/01-12-96	WAYNE STATE UNIVERSITY	15,880
5 F31AG05577-05	GABALDON, ANNETTE M MINORITY PREDOCTORAL FELLOWSHIP PROGRAM	10-01-95/09-30-96	UNIVERSITY OF CALIFORNIA DAVIS	15,398
5 F32AG05578-03	GAMBLE, DEBRA N MOLECULAR AND CELL BIOLOGY OF BAND 3 AGING	12-16-94/12-15-95	UNIVERSITY OF ARIZONA	28,600
5 F32AG05598-03	REBECK, G WILLIAM REGULATION OF APP IN ALZHEIMERS AND DOWNS BRAINS	12-01-94/09-30-95	MASSACHUSETTS GENERAL HOSPITAL	29,900
5 R01AG05601-11	MONNIER, VINCENT M BROWNING OF HUMAN COLLAGEN IN DIABETES AND AGING	04-01-95/03-31-96	CASE WESTERN RESERVE UNIVERSITY	164,906
5 R37AG05604-10	NIXON, RALPH DYNAMICS OF THE NEURONAL CYTOSKELETON IN AGING BRAIN	01-01-95/05-31-96	MC LEAN HOSPITAL (BELMONT, MA)	312,565
3 R37AG05604-10S1	NIXON, RALPH DYNAMICS OF THE NEURONAL CYTOSKELETON IN AGING BRAIN	05-15-95/05-31-96	MC LEAN HOSPITAL (BELMONT, MA)	5,000
5 F32AG05612-03	LADERMAN, KENNETH A CONTRIBUTION OF MITOCHONDRIAL DNA MUTATIONS OF AGING	05-01-95/04-30-96	CALIFORNIA INSTITUTE OF TECHNOLOGY	28,600
5 F31AG05615-03	HAMBLET, NATASHA S MITOCHONDRIAL DNA MUTATIONS IN ALZHEIMER'S DISEASE	11-01-94/10-31-95	EASTERN VIRGINIA MED SCH/MED COL HAM	16,071
5 F32AG05616-03	STONE, MARIA V ATTENTIVE AND PREATTENTIVE PROCESSING IN ALZHEIMERS	06-15-95/06-14-96	STANFORD UNIVERSITY	28,600
5 F32AG05619-03	SHIARELLA, KENNETH T DIET RESTRICTION EFFECT ON GLUTAMATE RECEPTOR AGING	05-03-95/05-02-96	COLORADO STATE UNIVERSITY	31,200
5 R01AG05627-11	BLASCHKE, TERRENCE F AGING AND IN VIVO VASCULAR RESPONSIVENESS	08-10-95/07-31-97	STANFORD UNIVERSITY	236,108
4 R37AG05628-11	GOOD, ROBERT A CELLULAR ENGINEERING TO TREAT/PREVENT DISEASES OF AGING	04-01-95/03-31-96	UNIVERSITY OF SOUTH FLORIDA	155,984
3 R37AG05628-11S1	GOOD, ROBERT A CELLULAR ENGINEERING TO TREAT/PREVENT DISEASES OF AGING	05-07-95/03-31-96	UNIVERSITY OF SOUTH FLORIDA	5,000

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 F32AG05629-03	DIEDRICH, JANE F NEURODEGENERATION IN PRION DISEASE	07-22-95/02-04-96	UNIVERSITY OF MINNESOTA TWIN CITIES	20,625
5 F32AG05638-02	THOMPSON, JANICE L GH/IGF-I-INDUCED STRENGTH AUGMENTATION IN ELDERLY WOMEN	01-05-95/12-31-95	STANFORD UNIVERSITY	29,900
5 F32AG05639-02	VIRTA-PEARLMAN, VALERIE J YEAST TELOMERE REPLICATION	02-20-95/02-06-96	BAYLOR COLLEGE OF MEDICINE	28,600
5 F32AG05641-02	MUSIOL, INES M VITAMIN D AND NERVE GROWTH FACTOR--EFFECTS OF AGING	12-01-94/11-30-95	STANFORD UNIVERSITY	31,200
7 F32AG05642-02	DALY, MARY C WORK DISABILITY AND POSTRETIREMENT ECONOMIC WELLBEING	07-25-95/06-29-96	NORTHWESTERN UNIVERSITY	23,700
5 F32AG05643-02	FLEMING, LYNNE M METABOLISM & EXPRESSION OF TAU & MAP2--ROLE OF STEROIDS	12-15-94/12-14-95	UNIVERSITY OF ALABAMA AT BIRMINGHAM	28,600
7 F32AG05648-03	MC SHANE, TERESA M REPRODUCTIVE AGING, NPY AND FOOD RESTRICTION	09-15-95/03-31-96	WAKE FOREST UNIVERSITY	20,067
5 F32AG05651-02	THADEN, JOHN J C ELEGANS LIFE SPAN--DAUER AND DROSOPHILA MRNA MARKERS	07-20-95/03-31-96	UNIVERSITY OF ARKANSAS MED SCIS LTL	23,700
7 F32AG05652-02	ROBLES, STEVEN J SCREENING FOR GENES INVOLVED IN CELLULAR SENESCENCE	06-22-95/06-21-96	UNIVERSITY OF ILLINOIS AT CHICAGO	28,600
1 F32AG05658-01A1	PARENT, MARISE B AGING AND CENTRAL GABAERGIC MEMORY MODULATORY SYSTEMS	04-17-95/04-16-96	UNIVERSITY OF VIRGINIA CHARLOTTESVIL	11,850
1 F32AG05659-01A1	GOLDSMITH, SARA K CLG MRNA AND PROTEIN LOCALIZATION IN ALZHEIMER DISEASE	01-01-95/	UNIVERSITY OF SOUTHERN CALIFORNIA	
5 F32AG05666-02	CLANCY, KEVIN P ISOLATION OF D14Q23 FAMILIAL ALZHEIMER DISEASE LOCUS	09-20-95/08-31-96	ELEANOR ROOSEVELT INST FOR CANCER RE	28,600
5 F32AG05667-02	HAHM, SEUNG H FUNCTION OF THE GROWTH FACTOR INDUCIBLE POLYPETIDE VGF	10-01-95/09-30-96	MOUNT SINAI SCHOOL OF MEDICINE OF CU	28,600
5 F32AG05670-02	BRADBURY, MARGARET J HORMONAL CONTRIBUTIONS TO SLEEP DETERIORATION WITH AGE	09-01-95/08-31-96	STANFORD UNIVERSITY	28,600
1 F32AG05673-01A1	CLASEY, JODY L AGING, BODY COMPOSITION AND GROWTH HORMONE SECRETION	08-01-95/02-28-97	UNIVERSITY OF VIRGINIA CHARLOTTESVIL	28,600

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 F32AG05674-01	ANGELL, MICHAEL G CALCINEURIN AND NF/AT ACTIVITY IN AGING T CELLS	02-01-95/01-31-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	23,700
1 F32AG05675-01	KALLIAINEN, LOREE K SPECIFIC FORCE DEFICITS IN MUSCLES OF OLD RATS	09-01-94/	UNIVERSITY OF MICHIGAN AT ANN ARBOR	
1 F32AG05676-01	KRAMAROW, ELLEN A EDUCATIONAL DIFFERENTIALS IN ADULT MORTALITY IN TAIWAN	01-01-95/12-31-95	UNIVERSITY OF MICHIGAN AT ANN ARBOR	28,600
3 F32AG05677-01S1	RYAN, AIMEE K SKN1 TRANSCRIPTION FACTOR IN NORMAL AND AGING SKIN	07-01-95/06-30-96	UNIVERSITY OF CALIFORNIA SAN DIEGO	23,700
1 F32AG05678-01	CASCONE, PAMELA J POST-TRANSCRIPTIONAL REGULATION OF PROGRAMMED CELL DEATH	09-01-94/	STANFORD UNIVERSITY	
1 F32AG05680-01	LING, XIAOBING ANALYSIS OF A GENE FOR AGE- AND NOISE-INDUCED DEAFNESS	10-01-94/	UNIVERSITY OF SOUTHERN CALIFORNIA	
1 F32AG05681-01	LEE, JOANNA Y ROLE OF CERAMIDE ON RB DEPHOSPHORYLATION IN SENESCENCE	09-01-94/	DUKE UNIVERSITY	
2 P50AG05681-12	BERG, LEONARD ALZHEIMERS DISEASE RESEARCH CENTER	05-01-95/04-30-96	WASHINGTON UNIVERSITY	2,039,024
1 F33AG05682-01	MAZZEO, ROBERT S SYMPATHETIC NERVOUS SYSTEM FUNCTION IN THE ELDERLY	09-01-94/	BAKER MEDICAL RESEARCH INSTITUTE	
1 F32AG05683-01	SHARMA, VIKRAM CLONING THE CHROMOSOME 14 ALZHEIMER DISEASE GENE	09-01-94/	UNIVERSITY OF WASHINGTON	
5 R01AG05683-11	POWELL, HENRY C CEREBROVASCULAR AMYLOID PROTEIN IN ALZHEIMER'S DISEASE	09-01-95/08-31-96	UNIVERSITY OF CALIFORNIA SAN DIEGO	287,419
1 F32AG05684-01	VISICK, JONATHAN E REPAIR OF DAMAGED PROTEIN AND SURVIVAL OF AGING E COLI	02-01-95/01-31-96	UNIVERSITY OF CALIFORNIA LOS ANGELES	29,900
1 F33AG05685-01	GOLDSTEIN, SAMUEL STUDIES ON SENESCENCE OF RB-RECONSTITUTED SAOS-2 CELLS	09-01-94/	DANA-FARBER CANCER INSTITUTE	
1 F32AG05686-01	GOULD, THOMAS J CATECHOLAMINE RECEPTOR FUNCTION AND AGING	02-01-95/01-31-96	UNIVERSITY OF COLORADO HLTH SCIENCES	23,700
1 F33AG05687-01	MORGAN, DAVID L PRIMARY CARE PHYSICIANS AND ALZHEIMER'S DISEASE	09-01-94/	OREGON HEALTH SCIENCES UNIVERSITY	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 F32AG05688-01	BORAWSKI-CLARK, ELAINE A INTERGENERATIONAL RELATIONS AND RESPONSIBILITIES	03-15-95/03-14-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	13,234
5 F32AG05691-02	SIMONIAN, PHILLIP L BCL-XL AND BCL-XS PROTEINS AND APOPTOSIS	10-01-95/09-30-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	23,700
1 F32AG05692-01	FABIAN, THOMAS J GLUTAMATE RECEPTOR SUBUNIT EXPRESSION DURING AGING	01-01-95/	UNIVERSITY OF UTAH	
1 F32AG05693-01	BOWENKAMP, KATHRYN E AGING CENTRAL DOPAMINE CIRCUITS AND GDNF	05-01-95/04-30-96	UNIVERSITY OF COLORADO HLTH SCIENCES	28,609
1 F32AG05694-01	TIAN, GUOLING CHAPERONIN MEDIATED FOLDING OF ALPHA AND BETA TUBULIN	09-01-95/08-31-96	NEW YORK UNIVERSITY	23,700
1 F32AG05695-01	WANG, SANDIA THE EFFECT OF AGING ON EPIDERMAL REGENERATON	01-01-95/	LANKENAU MEDICAL RESEARCH CENTER	
1 F32AG05696-01	WANG, SUYUE MECHANISM AND FUNCTION OF CELL DEATH GENE ICH-1	02-01-95/	MASSACHUSETTS GENERAL HOSPITAL	
1 F31AG05697-01	GAMBOA-PINTO, ANTONIO J MINORITY PREDOCTORAL FELLOWSHIP PROGRAM	01-01-95/12-31-95	UNIVERSITY OF CALIFORNIA SAN DIEGO	16,823
1 F31AG05698-01	WESTERHEIDE, DONICA N MINORITY PREDOCTORAL FELLOWSHIP PROGRAMS	01-01-95/08-31-95	UNIVERSITY OF TEXAS MEDICAL BR GALVE	9,383
1 F31AG05699-01	ABEYTA, MELANIA R MINORITY PREDOCTORAL FELLOWSHIP PROGRAM	12-16-94/12-15-95	UNIVERSITY OF ALABAMA AT BIRMINGHAM	13,154
3 F31AG05699-01S1	ABEYTA, MELANIA R MINORITY PREDOCTORAL FELLOWSHIP PROGRAM	12-16-94/12-15-95	UNIVERSITY OF ALABAMA AT BIRMINGHAM	2,590
1 F31AG05700-01	CONYERS, JACQUELINE R ALZHEIMER PATIENT'S CAPACITIES AND CAREGIVER ASSESSMENTS	01-03-95/01-02-96	UNIVERSITY OF CALIFORNIA IRVINE	17,018
1 F32AG05701-01	RYPMA, BART P SPATIAL COGNITION IN AGING AND ALZHEIMERS DISEASE	02-16-95/02-15-96	STANFORD UNIVERSITY	22,608
1 F32AG05702-01	MAH, STANLEY C GENETIC ANALYSIS OF CELL SENESCENCE IN YEAST	05-01-95/	MASSACHUSETTS INSTITUTE OF TECHNOLOG	
1 F32AG05703-01	BURSTROM, RUTH E PERIOP FUNCTIONAL AND COGNITIVE CHANGES IN THE ELDERLY	05-01-95/	UNIVERSITY OF WASHINGTON	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 F32AG05705-01	JONES, PAMELA P SYMPATHETIC NERVE ACTIVITY AND ADIPOSITY IN HUMAN AGING	10-01-95/09-30-96	UNIVERSITY OF COLORADO AT BOULDER	23,700
1 F32AG05707-01	KU, PO-TSAN REGULATION AND ROLE OF REL/NF-KB PROTEINS IN APOPTOSIS	09-01-95/08-31-96	UNIVERSITY OF TEXAS AUSTIN	22,608
1 F32AG05708-01	WYATT, LANCE E CELL/CELL COMMUNICATION IN AGING OSTEOBLAST LIKE CELLS	09-03-95/09-02-96	UNIVERSITY OF CALIFORNIA LOS ANGELES	29,900
1 F32AG05709-01	ROSS, LYLE O TELOMERE REPLICATION IN SCHIZOSACCHAROMYCES POMBE	01-01-95/	BAYLOR COLLEGE OF MEDICINE	
1 F32AG05710-01	KIRCHMAN, PAUL A LAG1 HOMOLOG AND YEAST REPLICATIVE LIFE SPAN	09-01-95/08-31-96	LOUISIANA STATE UNIV MED CTR NEW ORL	28,600
1 F32AG05711-01	MC ECHRON, MATTHEW D HIPPOCAMPAL CELLULAR MECHANISMS OF AGING AND LEARNING	08-15-95/08-14-96	NORTHWESTERN UNIVERSITY	22,608
1 F32AG05712-01	MC MILLAN, PAMELA J NEUROTROPHIC EFFECTS OF ESTROGEN IN THE AGING BRAIN	05-01-95/	UNIVERSITY OF WASHINGTON	
1 F32AG05714-01	CHRISTINE, CHADWICK W LONG TERM DEPRESSION IN DENTATE GRANULE CELLS	07-01-95/	UNIVERSITY OF CALIFORNIA SAN FRANCIS	
1 F32AG05715-01	FREUDENREICH, CATHERINE H ROLE OF PIF1 HELICASE IN TELOMERE REPLICATION CONTROL	07-01-95/	FRED HUTCHINSON CANCER RESEARCH CENT	
1 F32AG05716-01	NIELSON, KRISTY A NEUROPATHOLOGICAL CORRELATES OF DEMENTIA SEVERITY	07-01-95/06-30-96	UNIVERSITY OF CALIFORNIA IRVINE	28,600
2 R01AG05717-08A4	KRISHNARAJ, RAJABATHER AGE-ASSOCIATED ALTERATIONS IN HUMAN NK CELL SYSTEM	07-10-95/06-30-96	UNIVERSITY OF ILLINOIS AT CHICAGO	232,623
1 F33AG05735-01	FIELDS, JEREMY Z CONVENTIONAL AND ALTERNATIVE HEALTH PROMOTION	10-01-95/09-30-96	MAHARISHI UNIVERSITY OF MANAGEMENT	35,300
2 R37AG05739-09A1	BALL, KARLENE K IMPROVEMENT OF VISUAL PROCESSING IN OLDER ADULTS	03-01-95/01-31-96	WESTERN KENTUCKY UNIVERSITY	212,012
1 F32AG05740-01	FREUDENREICH, CATHERINE H PIF1 HELICASE AND TELOMERE REPLICATION CONTROL	09-01-95/08-31-96	PRINCETON UNIVERSITY	23,700
5 P01AG05793-10	JOHNSTON, C CONRAD, JR SOME DETERMINANTS OF BONE MASS IN THE ELDERLY	12-10-94/08-31-95	INDIANA UNIV-PURDUE UNIV AT INDIANAP	1,486,480

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
2 P01AG05793-11	JOHNSTON, C CONRAD, JR SOME DETERMINANTS OF BONE MASS IN THE ELDERLY	09-30-95/08-31-96	INDIANA UNIV-PURDUE UNIV AT INDIANAP	1,448,783
5 P01AG05842-10	WISE, DAVID A ECONOMICS OF AGING	01-01-95/12-31-95	NATIONAL BUREAU OF ECONOMIC RESEARCH	1,018,049
5 R37AG05890-11	BUDINGER, THOMAS F CEREBRAL CHEMICAL PATTERNS IN ALZHEIMERS DISEASE	07-10-95/06-30-96	UNIVERSITY OF CALIF-LAWRENC BERKELEY	245,699
5 R01AG05891-11	FRANGIONE, BLAS AMYLOIDOSIS AND ALZHEIMERS DISEASE	07-01-95/06-30-97	NEW YORK UNIVERSITY	360,690
5 R01AG05892-13	IQBAL, KHALID ALZHEIMER'S NEUROFIBRILLARY TANGLES--BIOCHEMICAL STUDIES	12-15-94/11-30-95	NEW YORK STATE OFFICE OF MENTAL HEAL	240,179
5 R01AG05893-15	HERSH, LOUIS B CHOLINE ACETYLTRANSFERASE	04-01-95/03-31-96	UNIVERSITY OF KENTUCKY	232,312
5 R37AG05894-23	FINE, RICHARD E NEURONAL CA++ SEQUESTERING COMPARTMENTS PROTECTING ROLE	05-15-95/04-30-96	BOSTON UNIVERSITY	302,246
3 R37AG05894-23S1	FINE, RICHARD E NEURONAL CA++ SEQUESTERING COMPARTMENTS PROTECTING ROLE	05-25-95/04-30-96	BOSTON UNIVERSITY	5,000
3 R01AG05917-09A2S2	ROTUNDO, RICHARD L REGULATION OF ACETYLCHOLINESTERASE SYNTHESIS & ASSEMBLY	02-05-95/06-30-95	UNIVERSITY OF MIAMI	8,115
5 R01AG05917-10	ROTUNDO, RICHARD L REGULATION OF ACETYLCHOLINESTERASE SYNTHESIS & ASSEMBLY	07-10-95/06-30-96	UNIVERSITY OF MIAMI	292,307
2 R01AG05940-09	SCHWARTZ, JANICE B EFFECT OF AGING ON CALCIUM BLOCKER KINETICS/DYNAMICS	08-01-94/	UNIVERSITY OF CALIFORNIA SAN FRANCIS	
2 R01AG05963-06A2	RICE, GRACE E OLDER ADULTS' MEMORY FOR WRITTEN MEDICAL INFORMATION	04-01-95/	ARIZONA STATE UNIVERSITY	
2 R01AG05972-11	BOWLES, NANCY L AN ANALYSIS OF WORD RETRIEVAL DEFICITS IN THE AGED	09-01-95/	BRANDEIS UNIVERSITY	
5 R01AG05977-07	EVANS, WILLIAM S REGULATION OF GONADOTROPIN SECRETION IN AGING WOMEN	01-01-95/12-31-96	UNIVERSITY OF VIRGINIA CHARLOTTESVIL	162,265
5 R01AG06036-10	ARNSTEN, AMY F COGNITIVE LOSS WITH AGE--ROLE OF CORTICAL CATECHOLAMINES	07-01-95/06-30-96	YALE UNIVERSITY	210,814

NATIONAL INSTITUTE ON AGING - ACTIVE GRANT FOR FY 1995-1996

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 R37AG06060-10	FELTEN, DAVID L MPTP DEGENERATION OF MONOAMINE SYSTEMS AND AGING	08-01-95/07-31-96	UNIVERSITY OF ROCHESTER	179,777
7 R01AG06088-10	GAGE, FRED H EMBRYONIC NERVE CELL TRANSPLANTATION IN AGED RAT BRAIN	06-01-95/01-31-97	SALK INSTITUTE FOR BIOLOGICAL STUDIE	191,119
5 R01AG06093-23	NAKAJIMA, YASUKO ULTRASTRUCTURE AND FUNCTION OF NERVE AND MUSCLE	02-01-95/01-31-96	UNIVERSITY OF ILLINOIS AT CHICAGO	201,241
5 R37AG06108-12	HORNSBY, PETER J AGING OF ENDOCRINE CELLS IN CULTURE	04-01-95/03-31-96	BAYLOR COLLEGE OF MEDICINE	266,362
3 R37AG06108-12S1	HORNSBY, PETER J AGING OF ENDOCRINE CELLS IN CULTURE	04-20-95/03-31-96	BAYLOR COLLEGE OF MEDICINE	5,000
4 R37AG06116-11	DICE, JAMES F, JR PROTEIN DEGRADATION IN AGING HUMAN FIBROBLASTS	04-01-95/03-31-96	TUFTS UNIVERSITY BOSTON	290,338
2 R37AG06127-09	GILDEN, DONALD H NEUROBIOLOGY OF VARICELLA ZOSTER VIRUS	09-25-95/06-30-96	UNIVERSITY OF COLORADO HLTH SCIENCES	349,238
5 R01AG06157-09	FAULKNER, JOHN A EXERCISE INJURY AND REPAIR OF MUSCLE FIBERS IN AGED MICE	01-01-95/06-30-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	145,839
2 R01AG06159-07A1	MENON, VIJAYA K REACTIVE PROPERTIES OF BRAIN NEUROGLIA IN AGING RATS	04-01-95/	UNIVERSITY OF CALIFORNIA DAVIS	
5 R37AG06168-10	JAZWINSKI, S MICHAL CELLULAR AGING IN A YEAST MODEL SYSTEM	09-01-95/08-31-96	LOUISIANA STATE UNIV MED CTR NEW ORL	231,970
5 R01AG06170-10	POTTER, LINCOLN T CHOLINERGIC MECHANISMS IN AGING AND ALZHEIMERS DISEASE	05-01-95/04-30-96	UNIVERSITY OF MIAMI	277,419
5 R37AG06173-10	SELKOE, DENNIS J AGING IN THE BRAIN--ROLE OF THE FIBROUS PROTEINS	02-01-95/01-31-96	BRIGHAM AND WOMEN'S HOSPITAL	311,758
3 R37AG06173-10S1	SELKOE, DENNIS J AGING IN THE BRAIN--ROLE OF THE FIBROUS PROTEINS	06-01-95/01-31-96	BRIGHAM AND WOMEN'S HOSPITAL	5,000
5 R01AG06246-10	KELLEY, KEITH W HORMONAL RESTORATION OF A FUNCTIONAL THYMUS DURING AGING	09-15-95/08-31-96	UNIVERSITY OF ILLINOIS URBANA-CHAMPA	287,802
2 R01AG06265-10	PARK, DENISE C CONTEXT EFFECTS ON THE AGING MEMORY	09-30-95/06-30-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	275,511

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
2 R01AG06348-08	GASKIN, FELICIA AUTOANTIBODIES IN ALZHEIMERS DISEASE AND NORMAL AGING	12-30-94/11-30-95	UNIVERSITY OF VIRGINIA CHARLOTTESVIL	209,168
5 R01AG06432-09	DEUTSCH, GEORG PARIETAL AND ROLANDIC RCBF ACTIVATION IN DEMENTIA	08-01-95/07-31-96	UNIVERSITY OF ALABAMA AT BIRMINGHAM	200,417
5 R01AG06434-09	GERHARDT, GREG A AGE-INDUCED CHANGES IN MONOAMINE PRESYNAPTIC FUNCTION	04-01-95/03-31-96	UNIVERSITY OF COLORADO HLTH SCIENCES	187,931
5 R01AG06442-10	PAIGE, GARY D SENSORY-MOTOR ADAPTIVE MECHANISMS IN EQUILIBRIUM CONTROL	06-01-95/05-31-96	UNIVERSITY OF ROCHESTER	236,538
5 R01AG06457-10	HORAK, FAY B PERIPHERAL AND CENTRAL POSTURAL DISORDERS IN THE ELDERLY	09-01-95/08-31-96	GOOD SAMARITAN HOSP & MED CTR(PRTLND	312,660
5 R37AG06490-10	DEMENT, WILLIAM C SLEEP, EXERCISE, AGING AND THE CIRCADIAN SYSTEM	09-05-95/08-31-97	STANFORD UNIVERSITY	186,343
5 R01AG06528-10	DAVIDSON, JEFFREY M ELASTIN AND COLLAGEN IN THE AGING PROCESS	08-01-95/09-20-96	VANDERBILT UNIVERSITY	190,109
5 R37AG06559-08	JOHNSON, COLLEEN L SOCIAL WORLD OF THE OLDEST OLD	03-01-95/02-28-98	UNIVERSITY OF CALIFORNIA SAN FRANCIS	224,415
2 R01AG06591-05	KITSON, GAY C VIOLENT DEATH: LIFE COURSE ADJUSTMENT FOR WINDOWS	06-01-95/	UNIVERSITY OF AKRON	
2 R01AG06601-09A1	KOSIK, KENNETH S THE PATHOBIOLOGY OF TAU PROTEIN	08-01-95/07-31-96	BRIGHAM AND WOMEN'S HOSPITAL	257,680
2 R01AG06601-09A2	KOSIK, KENNETH S PATHOBIOLOGY OF TAU PROTEIN	08-05-95/07-31-96	BRIGHAM AND WOMEN'S HOSPITAL	300,413
5 R37AG06605-09	CORKIN, SUZANNE H THEORETICAL ANALYSIS OF LEARNING IN AGE-RELATED DISEASE	02-05-95/01-31-96	MASSACHUSETTS INSTITUTE OF TECHNOLOG	271,279
3 R37AG06605-09S1	CORKIN, SUZANNE H THEORETICAL ANALYSIS OF LEARNING IN AGE RELATED DISEASE	09-05-95/01-31-96	MASSACHUSETTS INSTITUTE OF TECHNOLOG	5,000
3 R01AG06633-08S1	SAPOLSKY, ROBERT M CAMPAL NEURON LOSS--ROLE OF GLUCOCORTICOIDS	01-01-94/12-31-95	STANFORD UNIVERSITY	77,435
5 R01AG06647-08	MORRISON, JOHN H CORTICO-CORTICAL LOSS IN ALZHEIMERS DISEASE	04-20-95/03-31-96	MOUNT SINAI SCHOOL OF MEDICINE OF CU	234,751

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
2 R01AG06656-09A1	YOUNKIN, STEVEN G ACHE, CHAT AND CHOLINERGIC NEURONS IN AGING AND AD	09-30-95/08-31-96	MAYO FOUNDATION	246,122
5 R37AG06665-08	HORWITZ, BARBARA A AGING AND GENDER EFFECTS ON RESPONSES TO COLD	08-01-95/07-31-96	UNIVERSITY OF CALIFORNIA DAVIS	241,465
3 U01AG06781-08S1	LARSON, ERIC B ALZHEIMERS DISEASE PATIENT REGISTRY	02-05-95/06-30-95	UNIVERSITY OF WASHINGTON	25,078
5 U01AG06781-09	LARSON, ERIC B ALZHEIMER'S DISEASE PATIENT REGISTRY	07-01-95/06-30-96	UNIVERSITY OF WASHINGTON	750,434
5 U01AG06786-10	KOKMEN, EMRE ALZHEIMERS DISEASE PATIENT REGISTRY	09-01-95/08-31-96	MAYO FOUNDATION	790,659
2 U01AG06790-09A1	HEYMAN, ALBERT CONSORTIUM--ESTABLISH A REGISTRY FOR ALZHEIMERS DISEASE	09-30-95/08-31-96	DUKE UNIVERSITY	627,070
2 R01AG06806-06	KIRASIC, KATHLEEN C AGING, COGNITIVE PROCESSING, AND LEARNING ABILITIES	08-15-94/	UNIVERSITY OF SOUTH CAROLINA AT COLU	
5 R37AG06826-10	SALTHOUSE, TIMOTHY A ADULT AGE DIFFERENCES IN REASONING AND SPATIAL ABILITIES	09-01-95/08-31-96	GEORGIA STATE UNIVERSITY	187,798
5 R01AG06849-08	OSTERGAARD, ARNE L PRIMING DEFICITS & BRAIN SYSTEMS IN DEMENTIA & AMNESIA	07-01-95/06-30-96	UNIVERSITY OF CALIFORNIA SAN DIEGO	91,961
5 R01AG06860-09	CATHCART, EDGAR S AMYLOID, AGING, AND DIET	09-15-95/08-31-96	BOSTON UNIVERSITY	210,165
5 P01AG06872-09	BOHMAN, BARBARA H MOLECULAR GENETIC MECHANISMS OF AGING	05-07-95/04-30-98	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	1,003,606
5 R01AG06943-09	VLASSARA, HELEN GLYCATION IN DIABETES AND AGING	07-25-95/06-30-96	PICOWER INSTITUTE FOR MEDICAL RESEAR	291,610
5 R01AG06945-09	BLAIR, STEVEN N IMPACT OF PHYSICAL FITNESS AND EXERCISE ON HEALTH	04-01-95/03-31-96	COOPER INSTITUTE FOR AEROBICS RESEAR	464,884
5 R01AG06946-09	ORME, IAN M AGING AND IMMUNITY TO TUBERCULOSIS	08-10-95/07-31-96	COLORADO STATE UNIVERSITY	233,016
7 R01AG06969-09	BINDER, LESTER I MAPS--SEGREGATION AND FUNCTION	06-15-95/03-31-97	NORTHWESTERN UNIVERSITY	189,563

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
3 R37AG07001-08S1	LAWTON, M POWELL AFFECT NORMAL AGING AND PERSONAL COMPETENCE	05-10-95/06-30-95	PHILADELPHIA GERIATRIC CTR-FRIEDMAN	5,000
5 R37AG07001-09	LAWTON, M POWELL AFFECT NORMAL AGING AND PERSONAL COMPETENCE	07-01-95/06-30-96	PHILADELPHIA GERIATRIC CTR-FRIEDMAN	183,750
5 R01AG07004-07	KENNEY, WILLIAM L, JR AGE AND CONTROL OF HUMAN SKIN BLOOD FLOW	08-10-95/07-31-96	PENNSYLVANIA STATE UNIVERSITY-UNIV P	229,907
5 R37AG07025-09	MANTON, KENNETH G FORECASTING LIFE AND ACTIVE LIFE EXPECTANCY	08-01-95/07-31-96	DUKE UNIVERSITY	228,758
5 P01AG07123-08	SMITH, JAMES R MOLECULAR APPROACHES TO CELLULAR AGING	12-05-94/11-30-96	BAYLOR COLLEGE OF MEDICINE	852,000
2 R01AG07137-09	MC ARDLE, J JACK GROWTH CURVE OF ADULT INTELLIGENCE FROM CONVERGENCE DATA	07-01-95/05-31-96	UNIVERSITY OF VIRGINIA CHARLOTTESVIL	153,068
5 R37AG07181-09	BARRETT-CONNOR, ELIZABETH L RISK FACTORS FOR OSTEOPOROSIS IN ELDERLY	08-15-95/07-31-96	UNIVERSITY OF CALIFORNIA SAN DIEGO	363,164
3 R37AG07182-08S1	MC KINLAY, JOHN B PATHWAYS TO SUCCESSFUL CAREGIVING FOR FRAIL ELDERLY	05-01-95/06-30-95	NEW ENGLAND RESEARCH INSTITUTES, INC	5,000
5 R37AG07182-09	MC KINLAY, JOHN B PATHWAYS TO SUCCESSFUL CAREGIVING FOR FRAIL OLDER PERSON	07-10-95/06-30-96	NEW ENGLAND RESEARCH INSTITUTES, INC	292,771
5 R01AG07195-07	FORD, AMASA B SERVICES BY BLACK AND WHITE ELDERLY	07-01-95/12-31-97	CASE WESTERN RESERVE UNIVERSITY	214,793
5 R37AG07198-09	MANTON, KENNETH G FUNCTIONAL AND HEALTH CHANGES OF THE ELDERLY	01-01-95/12-31-95	DUKE UNIVERSITY	1,046,968
3 R37AG07218-08S1	HERMAN, BRIAN A MECHANISMS OF CELL DEATH IN LIVER CELLS	04-15-95/06-30-95	UNIVERSITY OF NORTH CAROLINA CHAPEL	5,000
5 R37AG07218-09	HERMAN, BRIAN A MECHANISMS OF CELL DEATH IN LIVER CELLS	07-01-95/06-30-96	UNIVERSITY OF NORTH CAROLINA CHAPEL	309,490
2 R01AG07226-04A2	SCHMUCKER, DOUGLAS L HOW DOES AGING COMPROMISE GUT MUCOSAL IMMUNITY?	12-01-94/	NORTHERN CALIFORNIA INSTITUTE RES &	
5 P01AG07232-07	MAYEUX, RICHARD P EPIDEMIOLOGY OF DEMENTIA	02-01-95/01-31-96	COLUMBIA UNIVERSITY NEW YORK	1,728,163

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 R01AG07367-08	ROGERS, JOSEPH COMPLEMENT MEDIATED MECHANISMS IN ALZHEIMERS DISEASE	09-05-95/08-31-96	SUN HEALTH RESEARCH INSTITUTE	467,622
5 R01AG07369-05	SCHIRCH, LAVERNE G PROTEIN DEAMIDATION IN PROTEIN TURNOVER AND AGING	12-01-94/11-30-95	VIRGINIA COMMONWEALTH UNIVERSITY	119,674
5 R01AG07370-07	STERN, YAAKOV PREDICTORS OF SEVERITY IN ALZHEIMERS DISEASE	07-01-95/06-30-96	COLUMBIA UNIVERSITY NEW YORK	565,672
5 R01AG07410-05	REITZES, DONALD C ROLES AND SELF--FACTORS IN DEVELOPMENT AND RETIREMENT	09-15-95/08-31-98	GEORGIA STATE UNIVERSITY	238,565
5 R01AG07424-08	ECKENSTEIN, FELIX P NEUROTROPHIC SUPPORT IN AGING AND ALZHEIMER'S DISEASE	07-01-95/06-30-96	OREGON HEALTH SCIENCES UNIVERSITY	178,297
3 R01AG07425-06S1	RICE, DOROTHY P EPIDEMIOLOGY OF CHRONIC DISEASE IN THE OLDEST OLD	03-25-95/12-31-95	KAISER FOUNDATION RESEARCH INSTITUTE	27,203
5 R37AG07444-08	WANG, EUGENIA GROWTH CONTROL IN AGING FIBROBLASTS	05-05-95/04-30-96	MC GILL UNIVERSITY	141,716
3 R37AG07444-08S1	WANG, EUGENIA GROWTH CONTROL IN AGING FIBROBLASTS	05-05-95/04-30-96	MC GILL UNIVERSITY	5,000
3 R37AG07444-08S2	WANG, EUGENIA GROWTH CONTROL IN AGING FIBROBLASTS	09-30-95/04-30-96	MC GILL UNIVERSITY	10,000
5 R01AG07449-07	TINETTI, MARY E INJURY AND FUNCTIONAL DECLINE IN ELDERLY FALLERS	08-01-95/06-30-96	YALE UNIVERSITY	311,202
5 R01AG07450-07	MACIAG, THOMAS ENDOTHELIAL CELL SENESCENCE GENES	05-01-95/04-30-96	AMERICAN NATIONAL RED CROSS	265,296
2 R01AG07467-07	OOKHTENS, MURAD EFFECT OF AGING ON INTERORGAN GLUTATHIONE HOMEOSTASIS	05-15-95/04-30-96	UNIVERSITY OF SOUTHERN CALIFORNIA	252,978
5 R01AG07469-08	MANTON, KENNETH G ACTIVE LIFE EXPECTANCY IN OLD AND OLDEST-OLD POPULATIONS	09-01-95/08-31-96	DUKE UNIVERSITY	163,788
5 R37AG07554-08	WILLOTT, JAMES F AGING AND CENTRAL AUDITORY SYSTEM MORPHOLOGY	05-01-95/04-30-96	NORTHERN ILLINOIS UNIVERSITY	89,633
3 R37AG07554-08S1	WILLOTT, JAMES F AGING AND CENTRAL AUDITORY SYSTEM MORPHOLOGY	05-01-95/04-30-96	NORTHERN ILLINOIS UNIVERSITY	5,000

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 R01AG07562-08	GANGULI, MARY EPIDEMIOLOGY OF DEMENTIA--A PROSPECTIVE COMMUNITY STUDY	08-01-95/07-31-96	UNIVERSITY OF PITTSBURGH AT PITTSBUR	689,035
3 R01AG07569-06S1	PARASURAMAN, RAJA ATTENTION IN AGING AND EARLY ALZHEIMERS DEMENTIA	03-01-95/03-31-95	CATHOLIC UNIVERSITY OF AMERICA	30,481
5 R01AG07569-07	PARASURAMAN, RAJA ATTENTION IN AGING AND EARLY ALZHEIMERS DEMENTIA	04-05-95/06-13-96	CATHOLIC UNIVERSITY OF AMERICA	141,650
5 R01AG07584-08	KUKULL, WALTER A GENETIC DIFFERENCES IN ALZHEIMERS CASES AND CONTROLS	04-01-95/03-31-97	UNIVERSITY OF WASHINGTON	299,604
5 R01AG07592-07	BARNARD, ROY J MECHANISM OF AGING INDUCED INSULIN RESISTANCE	03-01-95/02-29-96	UNIVERSITY OF CALIFORNIA LOS ANGELES	155,325
5 R01AG07607-05	BLANCHARD-FIELDS, FREDDA H ATTRIBUTIONAL PROCESSES IN ADULTHOOD AND AGING	07-01-95/06-30-96	GEORGIA INSTITUTE OF TECHNOLOGY	141,804
2 R01AG07631-06A2	BRATER, D CRAIG CLINICAL PHARMACOLOGY OF LOOP DIURETICS	09-30-95/08-31-96	INDIANA UNIV-PURDUE UNIV AT INDIANAP	304,604
5 R37AG07637-07	HERMALIN, ALBERT I RAPID DEMOGRAPHIC CHANGE AND WELFARE	04-01-95/03-31-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	404,213
3 R37AG07637-07S1	HERMALIN, ALBERT I RAPID DEMOGRAPHIC CHANGE AND WELFARE	06-01-95/03-31-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	5,000
2 R01AG07648-06A1	GOLD, PAUL E AGING AND MEMORY	09-25-95/06-30-96	UNIVERSITY OF VIRGINIA CHARLOTTESVIL	158,032
2 R01AG07654-07	FISK, ARTHUR D AUTOMATIC AND CONTROLLED PROCESSING AND AGING	09-10-95/08-31-96	GEORGIA INSTITUTE OF TECHNOLOGY	132,997
2 R01AG07657-07	SOHAL, RAJINDAR S CELLULAR AGING AND OXYGEN FREE RADICALS	04-01-95/03-31-96	SOUTHERN METHODIST UNIVERSITY	144,187
5 R01AG07695-08	LAL, HARBANS NEUROBEHAVIORAL AND IMMUNOLOGICAL MARKERS OF AGING	04-01-95/03-31-96	UNIVERSITY OF NORTH TEXAS HLTH SCI C	233,106
5 R01AG07700-08	FRIEDMAN, EITAN AGING, PROTEIN KINASE C, AND SEROTONIN RELEASE	04-01-95/03-31-96	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	229,245
5 R01AG07719-08	MURASKO, DONNA M IMMUNE PARAMETERS AS BIOMARKERS OF AGING	04-01-95/03-31-96	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	358,422

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 R01AG07724-08	WOLF, NORMAN S BIOMARKERS OF AGING--CELLULAR PROLIFERATION AND TURNOVER	04-01-95/03-31-96	UNIVERSITY OF WASHINGTON	195,959
5 R01AG07735-08	MARKOWSKA, ALICJA L BEHAVIORAL AND PHYSIOLOGICAL BIOMAKERS OF AGING	04-01-95/03-31-96	JOHNS HOPKINS UNIVERSITY	192,691
5 R01AG07747-08	BRONSON, RODERICK T AGE-RELATED LESIONS AS BIOMARKERS OF AGING	04-01-95/03-31-96	TUFTS UNIVERSITY BOSTON	223,953
5 R01AG07752-08	SONNTAG, WILLIAM E GROWTH HORMONE (GH) AND GH-DEPENDENT BIOMARKERS OF AGING	04-01-95/03-31-96	WAKE FOREST UNIVERSITY	173,800
5 R01AG07767-08	LANDFIELD, PHILIP W BIOMARKERS OF BRAIN AGING	04-01-95/03-31-96	UNIVERSITY OF KENTUCKY	222,256
5 R01AG07793-07	JAGUST, WILLIAM J LONGITUDINAL SPECT AND PET STUDIES OF DEMENTIA	04-01-95/03-31-96	UNIVERSITY OF CALIF-LAWRENC BERKELEY	263,498
5 R01AG07805-07	GRIFFITH, WILLIAM H, III PHYSIOLOGY OF CHOLINERGIC BASAL FOREBRAIN NEURONS	05-01-95/12-31-97	TEXAS A&M UNIVERSITY HEALTH SCIENCE	139,622
5 R37AG07823-07	KAHANA, EVA F ADAPTATION TO FRAILTY AMONG DISPERSED ELDERLY	07-01-95/06-30-96	CASE WESTERN RESERVE UNIVERSITY	186,577
3 R37AG07823-07S1	KAHANA, EVA F ADAPTATION TO FRAILTY AMONG DISPERSED ELDERLY	07-01-95/06-30-96	CASE WESTERN RESERVE UNIVERSITY	5,000
5 R01AG07857-09	GARDNER, ANDREW W ENERGY METABOLISM IN ALEHEIMER'S DISEASE	09-01-95/07-31-97	UNIVERSITY OF MARYLAND BALT PROF SCH	184,878
5 R35AG07909-07	FINCH, CALEB E LEADERSHIP AND EXCELLENCE IN ALZHEIMER'S DISEASE	02-01-95/12-31-95	UNIVERSITY OF SOUTHERN CALIFORNIA	695,769
5 R35AG07914-07	PRICE, DONALD L MOLECULAR NEUROPATHOLOGY OF AGING AND DEMENTIA	09-20-95/12-31-95	JOHNS HOPKINS UNIVERSITY	731,826
5 R35AG07918-07	COTMAN, CARL W NEURONAL PLASTICITY/PATHOLOGY IN ALZHEIMERS DISEASE	01-20-95/12-31-95	UNIVERSITY OF CALIFORNIA IRVINE	554,352
2 R01AG07972-06A1	DENHARDT, DAVID T IMMORTALIZATION AND THE STABILITY OF NUCLEAR TRANSCRIPTS	12-01-94/	RUTGERS THE STATE UNIV NEW BRUNSWICK	
5 R37AG07977-13	BENGTSON, VERN L LONGITUDINAL STUDY OF GENERATIONS AND MENTAL HEALTH	03-25-95/02-29-96	UNIVERSITY OF SOUTHERN CALIFORNIA	569,089

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
2 R01AG07988-06	BODEN, GUENTHER ETHANOL & FAT INDUCED INSULIN RESISTANCE IN THE ELDERLY	09-30-95/07-31-96	TEMPLE UNIVERSITY	254,410
2 R01AG07992-06A1	WRIGHT, WOODRING E MECHANISMS OF CELLULAR IMMORTALIZATION	01-01-95/12-31-95	UNIVERSITY OF TEXAS SW MED CTR/DALLA	286,288
5 R01AG07998-06	DIVENYI, PIERRE L SPEECH PERCEPTION UNDER NONOPTIMAL CONDITIONS IN AGING	02-25-95/12-31-95	EAST BAY INSTITUTE FOR RESEARCH AND	145,134
2 R01AG08010-07A2	BURGIO, KATHRYN L BIOFEEDBACK AND TREATMENT OF URINARY INCONTINENCE	04-05-95/03-31-96	UNIVERSITY OF ALABAMA AT BIRMINGHAM	430,780
5 P50AG08012-08	WHITEHOUSE, PETER J UHC/CWRU ADRC COMPETITIVE RENEWAL	06-01-95/05-31-96	CASE WESTERN RESERVE UNIVERSITY	1,716,918
2 P30AG08014-06	BECKER, ROBERT E ALZHEIMERS DISEASE CENTER CORE GRANT	05-01-95/	SOUTHERN ILLINOIS UNIVERSITY SCH OF	
2 P30AG08017-06	ZIMMERMAN, EARL A ALZHEIMER DISEASE CENTER	04-01-95/03-31-96	OREGON HEALTH SCIENCES UNIVERSITY	786,562
2 P30AG08031-06	PETERSEN, RONALD C ALZHEIMERS DISEASE CENTER	05-01-95/04-30-96	MAYO FOUNDATION	880,000
2 P30AG08051-06	FERRIS, STEVEN H ALZHEIMERS DISEASE CENTER CORE GRANT	05-01-95/04-30-96	NEW YORK UNIVERSITY	1,055,321
5 R37AG08055-07	SCHAIE, K WARNER LONGITUDINAL STUDIES OF ADULT COGNITIVE DEVELOPMENT	12-01-94/11-30-95	PENNSYLVANIA STATE UNIVERSITY-UNIV P	391,114
3 R37AG08055-07S1	SCHAIE, K WARNER LONGITUDINAL STUDIES OF ADULT COGNITIVE DEVELOPMENT	09-10-95/11-30-95	PENNSYLVANIA STATE UNIVERSITY-UNIV P	5,000
2 R01AG08076-05	IQBAL, KHALID NEURONAL CYTOSKELETAL ALTERATIONS IN ALZHEIMERS DISEASE	02-01-95/01-31-96	INSTITUTE FOR BASIC RES IN DEV DISAB	212,497
5 R01AG08084-07	POTTER, HUNTINGTON AMYLOID DEPOSITION IN AGING AND ALZHEIMER'S DISEASE	02-05-95/01-31-96	HARVARD UNIVERSITY	198,536
2 R01AG08092-04A3	SCHWAB, RISE SUBCELLULAR BASIS FOR HUMAN T CELL SENESCENCE	07-01-95/	CORNELL UNIVERSITY MEDICAL CENTER	
3 R01AG08099-06A1S1	TORAN-ALLERAND, C DOMINIQUE INTERACTION OF NGF/ESTROGEN IN CNS DEVELOPMENT AND AGING	09-30-95/08-31-98	COLUMBIA UNIVERSITY NEW YORK	179,184

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
7 R01AG08109-10	O'CONNOR, CLARE M METHYLATION OF ATYPICAL PROTEIN ASPARTYL RESIDUES	09-15-95/06-30-96	BOSTON COLLEGE	193,482
5 R01AG08122-07	WOLF, PHILIP A EPIDEMIOLOGY OF DEMENTIA IN THE FRAMINGHAM STUDY	07-01-95/06-30-96	BOSTON UNIVERSITY	261,262
5 R37AG08146-07	WISE, DAVID A PENSION PLAN PROVISIONS AND EARLY RETIREMENT EXTENSION	01-01-95/12-31-95	NATIONAL BUREAU OF ECONOMIC RESEARCH	177,618
5 R37AG08155-07	GAMBETTI, PIERLUIGI PRION DISEASES	04-01-95/03-31-96	CASE WESTERN RESERVE UNIVERSITY	330,633
3 R37AG08155-07S1	GAMBETTI, PIERLUIGI PRION DISEASES	06-15-95/03-31-96	CASE WESTERN RESERVE UNIVERSITY	5,000
3 R37AG08174-07S2	SIMPSON, EVAN R AROMATASE IN ADIPOSE--RELATIONSHIP TO AGING AND CANCER	04-15-95/06-30-95	UNIVERSITY OF TEXAS SW MED CTR/DALLA	5,000
5 R37AG08174-08	SIMPSON, EVAN R AROMATASE IN ADIPOSE--RELATIONSHIP TO AGING AND CANCER	07-01-95/06-30-96	UNIVERSITY OF TEXAS SW MED CTR/DALLA	223,041
3 R37AG08174-08S2	SIMPSON, EVAN R AROMATASE IN ADIPOSE: RELATIONSHIP TO AGING AND CANCER	09-20-95/06-30-96	UNIVERSITY OF TEXAS SW MED CTR/DALLA	50,054
2 R01AG08175-06A2	MASON, JAMES I REGULATION OF ADRENAL C19 STEROID BIOSYNTHESIS	12-01-94/	UNIVERSITY OF TEXAS SW MED CTR/DALLA	
2 R01AG08179-06A2	ZAUDERER, MAURICE VARIABLE GENE UTILIZATION IN SPECIFIC T CELL RESPONSES	07-10-95/06-30-96	UNIVERSITY OF ROCHESTER	122,003
5 R01AG08193-07	CERNY, JAN REPERTOIRE OF BACTERIAL ANTIBODY IN AGING	01-01-95/12-31-95	UNIVERSITY OF MARYLAND BALT PROF SCH	187,295
5 R01AG08200-08	ROBAKIS, NIKOLAOS K CYTOSKELETAL ASSOCIATION OF FULL LENGTH & TRUNCATED APP	08-01-95/09-29-96	MOUNT SINAI SCHOOL OF MEDICINE OF CU	211,119
5 R01AG08203-08	MURPHY, CLAIRE L OLFACTORY DYSFUNCTION IN ALZHEIMER'S DISEASE	08-01-95/07-31-96	SAN DIEGO STATE UNIVERSITY	185,774
5 R01AG08205-08	THAL, LEON J ALTERED PROTEIN KINASES IN ALZHEIMERS DISEASE	08-01-95/07-31-98	UNIVERSITY OF CALIFORNIA SAN DIEGO	202,782
5 R01AG08206-08	ARMSTRONG, DAVID M TRANSMITTER NEUROANATOMY IN ALZHEIMERS DISEASE	07-01-95/06-30-96	ALLEGHENY-SINGER RESEARCH INSTITUTE	187,269

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
2 R01AG08211-05A1	MAGAZINER, JAY EPIDEMIOLOGY OF DEMENTIA IN AGED NURSING HOME ADMISSIONS	08-07-95/07-31-96	UNIVERSITY OF MARYLAND BALT PROF SCH	581,976
5 R01AG08235-05	HULTSCH, DAVID F INDIVIDUAL DIFFERENCES IN MEMORY CHANGE IN THE AGED	12-01-94/11-30-95	UNIVERSITY OF VICTORIA	71,254
5 R29AG08256-05	CUSHMAN, LAURA A COGNITIVE FACTORS IN THE SAFETY OF OLDER DRIVERS	09-01-95/08-31-97	UNIVERSITY OF ROCHESTER	109,240
2 P01AG08291-06	LILLARD, LEE A SOCIAL AND ECONOMIC FUNCTIONING IN OLDER POPULATIONS	09-30-95/08-31-96	RAND CORPORATION	569,954
5 R37AG08303-07	MARTIN, GEORGE M HOMOZYGOSITY MAPPING OF THE WERNER SYNDROME LOCUS	05-01-95/04-30-96	UNIVERSITY OF WASHINGTON	188,616
3 R37AG08303-07S1	MARTIN, GEORGE M HOMOZYGOSITY MAPPING OF THE WERNER SYNDROME LOCUS	05-01-95/04-30-96	UNIVERSITY OF WASHINGTON	5,000
5 P01AG08321-05	ZIRKIN, BARRY R AGING AND MALE REPRODUCTIVE TRACT STRUCTURE AND FUNCTION	06-21-95/04-30-96	JOHNS HOPKINS UNIVERSITY	791,320
2 R01AG08322-07	JOHNSON, THOMAS E MOLECULAR GENETIC SPECIFICATION OF AGING PROCESSES	08-01-95/	UNIVERSITY OF COLORADO AT BOULDER	
5 R01AG08324-05	STRUMPF, NEVILLE E MAINTAINING RESTRAINT REDUCTION IN NURSING HOMES	04-01-95/03-31-96	UNIVERSITY OF PENNSYLVANIA	506,436
2 R01AG08325-06	KAWAS, CLAUDIA H RISK FACTORS AND EARLY SIGNS IN ALZHEIMERS DISEASE/BLSA	05-01-95/04-30-96	JOHNS HOPKINS UNIVERSITY	597,752
5 R37AG08346-05	LILLARD, LEE A INTERGENERATIONAL TRANSFERS IN MALAYSIA	02-05-95/01-31-96	RAND CORPORATION	129,318
2 R01AG08375-04A3	AHERN, FRANK M ALCOHOL AND CNS-RX DRUG INTERACTION IN THE ELDERLY	01-01-95/	PENNSYLVANIA STATE UNIVERSITY-UNIV P	
2 R01AG08415-06A2	ANCOLI-ISRAEL, SONIA SLEEP CONSOLIDATION IN A NURSING HOME POPULATION	07-01-95/06-30-96	UNIVERSITY OF CALIFORNIA SAN DIEGO	208,019
5 R01AG08436-04	EINSTEIN, GILLES O COMPONENTIAL ANALYSIS OF PROSPECTIVE MEMORY AND AGING	04-01-95/03-31-96	FURMAN UNIVERSITY	135,127
2 R01AG08441-06	SCHACTER, DANIEL L AGING MEMORY	01-20-95/12-31-95	HARVARD UNIVERSITY	202,909

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET START	DATES END	INSTITUTION	TOTAL
FY: 95					
5 R01AG08459-07	SOHAL, RAJINDAR S ANTIOXIDANT ENZYMES AND AGING IN TRANSGENIC DROSOPHILA	07-01-95	06-30-96	SOUTHERN METHODIST UNIVERSITY	212,416
5 R01AG08470-07	LANSBURY, PETER T, JR AMYLOID DEPOSITION IN ALZHEIMERS DISEASE	07-01-95	06-30-96	MASSACHUSETTS INSTITUTE OF TECHNOLOG	222,401
2 R01AG08487-06	HYMAN, BRADLEY T NEUROPATHOLOGICAL ALTERATIONS IN ALZHEIMERS DISEASE	12-30-94	11-30-95	MASSACHUSETTS GENERAL HOSPITAL	344,707
5 R01AG08496-03	VOM SAAL, FREDERICK S EFFECTS OF ESTROGEN ON PROSTATE FUNCTION DURING AGING	05-01-95	10-31-96	UNIVERSITY OF MISSOURI COLUMBIA	166,952
5 R01AG08505-04	FELDMAN, MARTIN L HEARING LOSS AND AGING IN THE AUDITORY SYSTEM	06-10-95	05-31-97	BOSTON UNIVERSITY	145,696
5 R37AG08514-08	GAGE, FRED H GRAFTING GENETICALLY MODIFIED CELLS	08-01-95	06-30-96	SALK INSTITUTE FOR BIOLOGICAL STUDIE	314,294
5 R01AG08523-05	MYERS, GEORGE C COLLABORATIVE STUDY OF AGING IN THE US AND AUSTRALIA	08-01-95	07-31-97	DUKE UNIVERSITY	221,276
5 R01AG08537-05	ESIRI, MARGARET M PLAQUE AND TANGLE PATHOGENESIS IN ALZHEIMERS DISEASE	01-01-95	12-31-95	UNIVERSITY OF OXFORD	81,948
2 R01AG08538-04	BLUM, MARIANN GROWTH FACTORS IN THE ADULT AND AGING BRAIN	08-20-95	04-30-96	MOUNT SINAI SCHOOL OF MEDICINE OF CU	189,336
5 R01AG08545-08	DALE, GEORGE L ERYTHROCYTE SENESCENCE	07-01-95	06-30-96	UNIVERSITY OF OKLAHOMA HLTH SCIENCES	147,202
5 R37AG08557-05	HAUG, MARIE R STRESSES, STRAINS AND ELDERLY PHYSICAL HEALTH	03-01-95	02-29-96	CASE WESTERN RESERVE UNIVERSITY	131,043
3 R37AG08557-05S1	HAUG, MARIE R STRESSES, STRAINS AND ELDERLY PHYSICAL HEALTH	06-23-95	02-29-96	CASE WESTERN RESERVE UNIVERSITY	3,729
2 R01AG08567-03A2	DAVANIPOUR, ZOREH ALZHEIMER DISEASE AMONG SEVENTH-DAY ADVENTISTS	12-01-94		LOMA LINDA UNIVERSITY	
7 R01AG08572-07	KIRSCHNER, DANIEL A ABNORMAL FIBROUS ASSEMBLIES OF ALZHEIMERS DISEASE	09-30-95	06-30-96	UNIVERSITY OF MASSACHUSETTS LOWELL	51,156
2 R01AG08572-08	KIRSCHNER, DANIEL A ABNORMAL FIBROUS ASSEMBLIES OF ALZHEIMER'S DISEASE	08-01-95		UNIVERSITY OF MASSACHUSETTS LOWELL	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 R01AG08573-13	BANDMAN, EVERETT IMMUNOBIOCHEMICAL STUDY OF MUSCLE MYOSIN ISOFORMS	07-10-95/06-30-96	UNIVERSITY OF CALIFORNIA DAVIS	211,493
5 R01AG08617-05	BRENNAN, PATRICIA F SUPPORTING HOME CARE VIA A COMMUNITY COMPUTER NETWORK	04-01-95/03-31-97	CASE WESTERN RESERVE UNIVERSITY	165,809
2 P50AG08664-06A1	APPEL, STANLEY H ALZHEIMERS DISEASE RESEARCH CENTER	06-01-95/05-31-96	BAYLOR COLLEGE OF MEDICINE	894,125
2 P30AG08665-06	COLEMAN, PAUL D ALZHEIMERS DISEASE CENTER	05-20-95/04-30-96	UNIVERSITY OF ROCHESTER	892,748
5 P50AG08671-07	GILMAN, SID MICHIGAN ALZHEIMERS DISEASE RESEARCH CENTER	06-01-95/05-31-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	1,805,001
2 R01AG08675-09A1	COHEN-MANSFIELD, JISKA MENTAL HEALTH AGITATION IN ELDERLY PERSONS	07-01-95/	HEBREW HOME OF GREATER WASHINGTON	
4 R37AG08678-06	OUSLANDER, JOSEPH G TREATMENT OF INCONTINENCE IN NURSING HOMES	01-01-95/12-31-95	UNIVERSITY OF CALIFORNIA LOS ANGELES	287,230
3 R37AG08678-06S1	OUSLANDER, JOSEPH G TREATMENT OF INCONTINENCE IN NURSING HOMES	05-01-95/12-31-95	UNIVERSITY OF CALIFORNIA LOS ANGELES	5,000
5 P50AG08702-07	SHELANSKI, MICHAEL L ALZHEIMERS DISEASE RESEARCH CENTER	06-01-95/05-31-96	COLUMBIA UNIVERSITY NEW YORK	1,282,502
2 R01AG08708-06	GOLDSTEIN, SAMUEL INHIBITORS OF DNA SYNTHESIS IN SENESCENT FIBROBLASTS	12-01-94/	UNIVERSITY OF ARKANSAS MED SCIS LTL	
2 R01AG08710-06	ROBERTS, EUGENE L, JR AGE RELATED CHANGES IN BRAIN METABOLIC NEUROPHYSIOLOGY	08-01-95/07-31-96	UNIVERSITY OF MIAMI	101,423
5 R01AG08714-05	OKEN, BARRY S AGE RELATED CHANGES IN ALERTNESS AND VISUAL PROCESSING	05-01-95/09-30-96	OREGON HEALTH SCIENCES UNIVERSITY	105,070
2 R01AG08721-06	FRANGIONE, BLAS AMYLOID ANGIOPATHY EARLY PLAQUES AND AGING	09-01-95/08-31-96	NEW YORK UNIVERSITY	234,831
5 R01AG08724-06	GATZ, MARGARET J DEMENTIA IN SWEDISH TWINS	08-01-95/07-31-96	UNIVERSITY OF SOUTHERN CALIFORNIA	312,352
5 P01AG08761-06	VAUPEL, JAMES W OLDEST-OLD MORTALITY--DEMOGRAPHIC MODELS AND ANALYSIS	03-25-95/12-31-95	DUKE UNIVERSITY	784,938

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
3 P01AG08761-06S1	VAUPEL, JAMES W TRAJECTORIES OF MORTALITY IN CAENORHABDITIS ELEGANS	09-15-95/12-31-95	DUKE UNIVERSITY	150,042
2 R01AG08762-04A1	NISSINEN, MIRJA A PREDICTORS OF DISABILITY AND HEALTH IN ELDERLY MEN	06-01-95/	UNIVERSITY OF KUOPIO	
2 R01AG08768-06A1	SELTZER, MARSHA M AGING MOTHERS OF RETARDED ADULTS--IMPACTS OF CAREGIVING	09-01-95/08-31-96	UNIVERSITY OF WISCONSIN MADISON	310,841
3 R01AG08768-06A1S1	SELTZER, MARSHA M AGING MOTHERS OF RETARDED ADULTS--IMPACTS OF CAREGIVING	09-25-95/08-31-96	UNIVERSITY OF WISCONSIN MADISON	31,831
5 P01AG08777-05	MANN, KENNETH G REGULATION OF BONE FORMATION	06-01-95/05-31-97	UNIVERSITY OF VERMONT & ST AGRIC COL	466,266
3 P01AG08777-05S1	MANN, KENNETH G REGULATION OF BONE FORMATION	09-15-95/05-31-97	UNIVERSITY OF VERMONT & ST AGRIC COL	75,750
3 R01AG08796-05S2	DISTERHOFT, JOHN F MECHANISMS OF NIMODIPINE LEARNING ENHANCEMENT IN AGING	09-10-95/07-31-96	NORTHWESTERN UNIVERSITY	110,004
5 P60AG08808-07	HALTER, JEFFREY B CLAUDE D PEPPER OLDER AMERICANS INDEPENDENCE CENTER	09-30-95/08-31-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	1,111,298
2 P60AG08812-06	WEI, JEANNE Y HARVARD OLDER AMERICANS INDEPENDENCE CENTER	03-15-95/02-28-96	HARVARD UNIVERSITY	839,048
3 P60AG08812-06S1	WEI, JEANNE Y HARVARD OLDER AMERICANS INDEPENDENCE CENTER	10-01-95/	HARVARD UNIVERSITY	
2 R01AG08816-05	CARSTENSEN, LAURA L SOCIAL INTERACTION IN OLD AGE	03-01-95/12-31-95	STANFORD UNIVERSITY	186,850
5 R01AG08825-05	FRIEDMAN, HOWARD S PREDICTORS OF HEALTH AND LONGEVITY	07-01-95/06-30-96	UNIVERSITY OF CALIFORNIA RIVERSIDE	127,358
5 R01AG08834-02	ARKING, ROBERT MUTATIONAL ANALYSIS OF LONGEVITY ASSURANCE GENES	05-01-95/04-30-96	WAYNE STATE UNIVERSITY	190,680
5 R01AG08835-06	BURKE, DEBORAH M MEMORY AND LANGUAGE IN OLD AGE	12-01-94/11-30-95	POMONA COLLEGE	135,208
5 R29AG08843-05	ANDERSON, KEVIN J EXCITATORY AMINO ACID SYSTEMS IN THE AGED BRAIN	02-01-95/01-31-97	UNIVERSITY OF FLORIDA	89,309

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 R01AG08849-05	DALTON, ARTHUR J DEMENTIA IN DOWN SYNDROME--LONGITUDINAL EVALUATION	02-01-95/01-31-96	NEW YORK STATE OFFICE OF MENTAL HEAL	85,059
5 R37AG08861-06	MC CLEARN, GERALD E ORIGINS OF VARIANCE IN THE OLD-OLD--OCTOGENARIAN TWINS	09-01-95/08-31-96	PENNSYLVANIA STATE UNIVERSITY-UNIV P	332,221
2 R01AG08885-06	MILLER, JOSEF M MECHANISMS OF AGE-RELATED AUDITORY SENSORY DEFICITS	04-01-95/	UNIVERSITY OF MICHIGAN AT ANN ARBOR	
2 R44AG08910-02A2	PARKER, MARY H DEVELOPMENT OF IN-HOME CARE QUALITY ASSURANCE PROCESS	03-01-95/	SENIOR HOUSING RESEARCH GROUP	
5 R37AG08937-05	HEYMAN, ALBERT DIFFERENCES IN PREVALENCE AND INCIDENCE OF DEMENTIA	02-20-95/01-31-96	DUKE UNIVERSITY	189,285
3 P01AG08938-10S1	EPSTEIN, CHARLES J BIOLOGY OF DOWN SYNDROME	05-05-95/07-31-95	UNIVERSITY OF CALIFORNIA SAN FRANCIS	26,325
5 P01AG08938-11	EPSTEIN, CHARLES J BIOLOGY OF DOWN SYNDROME	08-10-95/07-31-96	UNIVERSITY OF CALIFORNIA SAN FRANCIS	969,911
5 R01AG08947-02	ROGERS, JOAN C ASSESSING ELDERS ADL/IADL--EQUALITY OF METHODS AND COSTS	07-01-95/06-30-96	UNIVERSITY OF PITTSBURGH AT PITTSBUR	264,794
5 R01AG08948-05	TERESI, JEANNE A IMPACT OF SPECIAL CARE UNITS IN NURSING HOMES	09-15-95/08-31-97	HEBREW HOME FOR THE AGED AT RIVERDAL	269,732
5 R01AG08958-05	JERGER, JAMES F AUDITORY REHABILITATION OF THE ELDERLY	04-01-95/03-31-96	BAYLOR COLLEGE OF MEDICINE	137,385
5 R29AG08959-05	BELL, THEODORE S RECEPTIVE COMMUNICATION PROBLEMS OF THE ELDERLY	03-01-95/02-28-97	UNIVERSITY OF CALIFORNIA LOS ANGELES	134,583
5 R35AG08967-06	PRUSINER, STANLEY B LEADERSHIP AND EXCELLENCE IN ALZHEIMERS DISEASE	07-10-95/04-30-96	UNIVERSITY OF CALIFORNIA SAN FRANCIS	808,143
5 R35AG08974-05	PETTEGREW, JAY W MOLECULAR STUDIES IN ALZHEIMERS DISEASE	04-01-95/03-31-96	UNIVERSITY OF PITTSBURGH AT PITTSBUR	659,400
5 R01AG08979-04	RYFF, CAROL D COMMUNITY RELOCATION AND HEALTH--PSYCHOSOCIAL LINKAGES	04-01-95/03-31-97	UNIVERSITY OF WISCONSIN MADISON	288,343
5 R35AG08992-05	GAMBETTI, PIERLUIGI CELLULAR AND MOLECULAR PATHOLOGY OF ALZHEIMER DISEASE	07-01-95/06-30-96	CASE WESTERN RESERVE UNIVERSITY	734,614

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
2 R01AG09000-04A2	ENOKA, ROGER M AGING AND TRAINING EFFECTS ON MOTOR UNITS	09-05-95/06-30-96	CLEVELAND CLINIC FOUNDATION	211,310
2 R01AG09006-05A1	SIPE, JEAN D CELLULAR METABOLISM OF AMYLOID PROTEINS IN AGING	01-05-95/12-31-95	BOSTON UNIVERSITY	202,140
5 R01AG09009-07	COLE, GREGORY M AMYLOID PRECURSOR IN ALZHEIMER'S DISEASE BRAIN	05-25-95/04-30-97	UNIVERSITY OF CALIFORNIA LOS ANGELES	111,038
5 R35AG09014-05	BLASS, JOHN P CELL BIOLOGICAL STUDIES IN ALZHEIMERS DISEASE	05-01-95/04-30-96	WINIFRED MASTERSON BURKE MED RES INS	499,770
5 R35AG09016-06	COLEMAN, PAUL D LEADERSHIP AND EXCELLENCE IN ALZHEIMERS DISEASE	05-01-95/04-30-96	UNIVERSITY OF ROCHESTER	578,005
5 R01AG09029-05	FARRER, LINDSAY A GENETIC EPIDEMIOLOGICAL STUDIES OF ALZHEIMERS DISEASE	05-01-95/04-30-96	BOSTON UNIVERSITY	316,036
2 R01AG09055-06	SHIMAMURA, ARTHUR P AGING & MEMORY-A NEUROPSYCHOLOGICAL ANALYSIS	05-01-95/	UNIVERSITY OF CALIFORNIA BERKELEY	
2 R01AG09063-04A3	CONNOR, JAMES R IRON MISMANAGEMENT IN NEURODEGENERATIVE DISORDERS	07-01-95/	PENNSYLVANIA STATE UNIV HERSHEY MED	
2 U01AG09095-04A1	BUCHNER, DAVID M THE ACTIIVE STUDY (SEATTLE SITE)	07-01-95/	UNIVERSITY OF WASHINGTON	
2 U01AG09098-04A1	MILLER, J PHILIP ACTIIVE-COORDINATING CENTER	07-01-95/	WASHINGTON UNIVERSITY	
2 R01AG09140-04A2	MEYDANI, SIMIN N VITAMIN E AND THE AGING IMMUNE RESPONSE	06-01-95/05-31-96	TUFTS UNIVERSITY BOSTON	81,716
2 R44AG09159-02A4	LYNCH, TIMOTHY J COMPUTERIZED QUALITATIVE DATA COLLECTION DEVICE	11-01-94/	PSYCHSOFT INCORPORATED	
5 R01AG09186-05	MALMGREN, LESLIE T AGING LARYNGEAL PROTECTIVE MECHANISM	08-10-95/07-31-98	HEALTH SCIENCE CENTER AT SYRACUSE	155,205
2 R01AG09188-04A1	BURKE, WILLIAM J DEGENERATION OF EPINERPHRINE NEURONS IN ALZHEIMER'S DISE	07-01-95/	ST. LOUIS UNIVERSITY	
5 R01AG09191-05	GORDON-SALANT, SANDRA M AUDITORY TEMPORAL PROCESSES, SPEECH PERCEPTION AND AGING	03-15-95/02-28-97	UNIVERSITY OF MARYLAND COLLEGE PK CA	164,338

NATIONAL INSTITUTE ON AGING - ACTIVE GRANT FOR FY 1995-1996

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
2 R01AG09202-04A1	GANGULI, MARY INDO-US CROSS NATIONAL DEMENTIA EPIDEMIOLOGY STUDY	04-20-95/01-31-96	UNIVERSITY OF PITTSBURGH AT PITTSBUR	602,403
5 R01AG09203-05	LABOUVIE-VIEF, GISELA COGNITIVE EMOTIONAL MATURITY IN ADULTHOOD AND AGING	07-01-95/06-30-97	WAYNE STATE UNIVERSITY	189,437
5 R29AG09208-05	ZABRUCKY, KAREN M AGING AND EVALUATION AND REGULATION OF UNDERSTANDING	07-01-95/06-30-96	GEORGIA STATE UNIVERSITY	90,290
2 P01AG09215-06	TROJANOWSKI, JOHN Q MOLECULAR SUBSTRATES OF AGING AND NEURON DEATH	05-15-95/04-30-96	UNIVERSITY OF PENNSYLVANIA	1,160,859
5 R01AG09216-06	CRAIN, BARBARA J PATHOLOGY OF FASCIA DENTATA IN ALZHEIMERS DISEASE	07-10-95/06-30-97	JOHNS HOPKINS UNIVERSITY	113,054
2 R01AG09219-05	BARNES, CAROL A TRANSCRIPTION FACTOR GENES, NEURONAL PLASTICITY & AGING	06-01-95/05-31-96	UNIVERSITY OF ARIZONA	278,327
2 R01AG09235-06	NEBERT, DANIEL W OXIDATIVE STRESS, CELL DEATH AND THE (AH) GENE BATTERY	09-01-95/07-31-96	UNIVERSITY OF CINCINNATI	279,743
5 R01AG09253-05	JOHNSON, MARCIA K AGING EFFECTS ON MEMORY FOR SOURCE OF INFORMATION	09-01-95/08-31-96	PRINCETON UNIVERSITY	243,759
5 R01AG09278-05	WANG, EUGENIA FIBROBLAST AGING AND PROGRAMMED CELL DEATH	09-01-95/08-31-96	MC GILL UNIVERSITY	127,705
3 R01AG09278-05S1	WANG, EUGENIA FIBROBLAST AGING AND PROGRAMMED CELL DEATH	09-15-95/08-31-96	MC GILL UNIVERSITY	48,170
5 R29AG09282-05	ALLEN, PHILIP A ADULT AGE DIFFERENCES IN COGNITIVE NOISE	08-01-95/03-31-97	CLEVELAND STATE UNIVERSITY	91,812
5 R01AG09291-05	SCHULTZ, RICHARD INTERVENTIONS TO CHANGE CAREGIVING AND AD PATIENT OUTCOM	09-05-95/03-31-97	UNIVERSITY OF PITTSBURGH AT PITTSBUR	157,431
5 R01AG09297-05	TUREK, FRED W AGE EFFECTS ON CIRCADIAN CLOCKS	05-01-95/04-30-97	NORTHWESTERN UNIVERSITY	154,698
5 R01AG09300-05	FELSON, DAVID T LONGITUDINAL OSTEOARTHRITIS STUDY IN AN ELDERLY COHORT	05-01-95/01-31-97	BOSTON UNIVERSITY	279,717
2 R01AG09301-04A1	SATLIN, ANDREW SENILE CHANGES IN CIRCADIAN RHYTHMS AND BEHAVIOR	01-25-95/12-31-95	MC LEAN HOSPITAL (BELMONT, MA)	251,676

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
2 R01AG09304-04	WINCHURCH, RICHARD A NUTRITIONAL REQUIREMENTS FOR IMMUNITY IN THE AGED	07-01-94/	JOHNS HOPKINS UNIVERSITY	
2 R01AG09321-05	FLOOD, JAMES F MODEL OF DEMENTIA: SENESCENCE ACCELERATED	07-01-95/	ST. LOUIS UNIVERSITY	
5 R01AG09345-02	CAVANAGH, PETER R POSTURE IN THE NEUROPATHIC DIABETIC ELDERLY	09-01-95/08-31-96	PENNSYLVANIA STATE UNIVERSITY-UNIV P	202,868
3 R01AG09345-02S1	CAVANAGH, PETER R POSTURE IN THE NEUROPATHIC DIABETIC ELDERLY	09-30-95/08-31-96	PENNSYLVANIA STATE UNIVERSITY-UNIV P	59,978
5 R01AG09383-05	GREIDER, CAROL W STRUCTURE AND FUNCTION OF TELOMERES IN MAMMALIAN AGING	08-01-95/07-31-96	COLD SPRING HARBOR LABORATORY	269,308
5 R01AG09388-03	SELTZER, MARSHA M CAREGIVING IMPACT--DURATION AND RELATIONSHIP EFFECTS	03-01-95/02-29-96	UNIVERSITY OF WISCONSIN MADISON	211,569
5 R01AG09389-04	TAGER, IRA B EPIDEMIOLOGY OF AGING AND PHYSICAL PERFORMANCE	07-01-95/06-30-96	UNIVERSITY OF CALIFORNIA BERKELEY	607,587
5 R01AG09399-05	GROSSMAN, MURRAY CONGNITIVE PROFILES IN ALZHEIMERS DISEASE AND AGING	03-01-95/02-29-96	UNIVERSITY OF PENNSYLVANIA	257,699
5 R01AG09400-04	SCHUPF, NICOLE DOWN SYNDROME & ALZHEIMER DISEASE--FAMILIAL AGGREGATION	06-01-95/05-31-96	INSTITUTE FOR BASIC RES IN DEV DISAB	351,062
5 R01AG09411-05	POWELL, HENRY C PAIRED HELICAL FILAMENTS AND PLAQUE AMYLOID PROTEINS	05-15-95/04-30-97	UNIVERSITY OF CALIFORNIA SAN DIEGO	160,281
5 R01AG09413-05	SHMOOKLER-REIS, ROBERT J POLYMORPHIC GENES MODULATING LIFESPAN IN C ELEGANS	08-01-95/12-14-96	UNIVERSITY OF ARKANSAS MED SCIS LTL	161,502
5 R29AG09425-04	MASTERS, JEFFREY N NEUROENDOCRINE MECHANISMS OF BRAIN AGING	06-01-95/05-31-96	OHIO STATE UNIVERSITY	94,774
5 R29AG09433-05	HUMMERT, MARY L STEREOTYPES OF THE ELDERLY AND COMMUNICATION	08-01-95/07-31-97	UNIVERSITY OF KANSAS LAWRENCE	105,359
5 R01AG09439-05	SILVERMAN, WAYNE P AGING AND MENTAL RETARDATION--CHANGES IN PROCESSING RATE	03-01-95/08-31-97	NEW YORK STATE OFFICE OF MENTAL HEAL	206,811
5 R01AG09453-05	VLASSARA, HELEN AGING AND VASCULAR DISEASE--ROLE OF GLYCATION	01-15-95/12-31-95	PICOWER INSTITUTE FOR MEDICAL RESEAR	224,869

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 R01AG09458-05	LIPSCHITZ, DAVID A NEUTROPHIL FUNCTION AND AGING	09-05-95/08-31-96	UNIVERSITY OF ARKANSAS MED SCIS LTL	192,615
5 R01AG09461-04	PRINEAS, RONALD J EPIDEMIOLOGY OF ALZHEIMERS DISEASE	06-01-95/05-31-97	UNIVERSITY OF MIAMI	429,293
5 R29AG09462-05	LEVIN, JEFFREY S RELIGION, HEALTH & PSYCHOLOGICAL WELL-BEING IN THE AGED	01-01-95/12-31-95	EASTERN VIRGINIA MED SCH/MED COL HAM	109,627
5 P01AG09464-05	GREENGARD, PAUL SIGNAL TRANSDUCTION AND ALZHEIMERS DISEASE	02-01-95/06-30-96	ROCKEFELLER UNIVERSITY	1,196,973
5 P01AG09466-05	DETOLEDO-MORRELL, LEYLA ANATOMIC, PHYSIOLOGIC AND COGNITIVE PATHOLOGY OF AD	05-15-95/06-30-96	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	438,894
5 P01AG09480-05	LLINAS, RODOLFO R AGING AND NEURONAL DEATH--ROLE OF CYTOSOLIC CALCUIM	02-05-95/01-31-97	NEW YORK UNIVERSITY	655,130
5 R29AG09486-05	CHAPMAN, SANDRA B COGNITIVE DISCOURSE PROCESSING IN ELDERLY POPULATIONS	09-01-95/08-31-97	UNIVERSITY OF TEXAS DALLAS	99,775
2 R01AG09488-04A1	MEANEY, MICHAEL J GLUCOCORTICOIDS, STRESS, AND HIPPOCAMPAL AGING	09-30-95/08-31-96	MC GILL UNIVERSITY	114,204
2 R37AG09521-09	BLAU, HELEN M ACTIVATORS OF HUMAN MUSCLE GENES	04-01-95/03-31-96	STANFORD UNIVERSITY	352,903
5 P01AG09524-04	FRISINA, D ROBERT AGING AUDITORY SYSTEM--PRESBYCUSIS AND ITS NEURAL BASES	08-10-95/03-31-96	ROCHESTER INSTITUTE OF TECHNOLOGY	831,224
5 P01AG09525-04	BLUSZTAJN, JAN K AGING OF BRAIN--EFFECTS OF PERINATAL CHOLINE EXPOSURE	12-10-94/11-30-95	BOSTON UNIVERSITY	876,563
3 P01AG09525-04S1	BLUSZTAJN, JAN K AGING OF BRAIN--EFFECTS OF PERINATAL CHOLINE EXPOSURE	09-14-95/11-30-95	BOSTON UNIVERSITY	22,110
5 R01AG09531-04	NAIR, SREEKUMARAN K MECHANISM OF MUSCLE WASTING IN AGING MAN	04-10-95/03-31-96	MAYO FOUNDATION	259,540
5 R01AG09538-04	LIPSITZ, LEWIS A DRUG-RELATED HYPOTENSION IN THE AGED WITH HEART DISEASE	07-01-95/06-30-97	HEBREW REHABILITATION CENTER FOR AGE	170,289
5 R01AG09542-04	SZILAGYI, JULIANNA E AGING AND CARDIOVASCULAR FUNCTION	07-01-95/06-30-98	UNIVERSITY OF HOUSTON-UNIVERSITY PAR	100,904

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
7 R01AG09550-06	SCHWARTZ, JANICE B REGULATION OF CARDIAC RHYTHM AND CONDUCTION WITH AGING	11-10-95/10-31-97	NORTHWESTERN UNIVERSITY	239,227
2 R01AG09557-06A1	STRONG, RANDY MODULATION OF TH GENE EXPRESSION BY RESERPINE AND AGE	07-01-95/06-30-96	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	110,509
5 R01AG09574-05	RUBIN, ROBERT L NEUTROPHIL MEDIATED DRUG TOXICITY IN THE ELDERLY	02-20-95/01-31-97	SCRIPPS RESEARCH INSTITUTE	242,075
2 R01AG09597-05	HOFFMAN, BRIAN B MOLECULAR PHARMACOLOGY OF ADRENERGIC RECEPTORS IN AGING	02-01-95/	STANFORD UNIVERSITY	
7 R01AG09632-06	GRAVENSTEIN, STEFAN AMANTADINE IN THE NURSING HOME	08-01-96/07-31-98	EASTERN VIRGINIA MED SCH/MED COL HAM	
3 P20AG09646-05S2	HAYWARD, MARK D EXPLORATORY CENTER ON AGING AND HEALTH IN RURAL AMERICA	09-01-94/08-31-97	PENNSYLVANIA STATE UNIVERSITY-UNIV P	279,535
3 P20AG09648-05S1	DEFRIESE, GORDON H HEALTH RESEARCH FOR THE OLDER RURAL POPULATION	09-10-94/08-31-97	UNIVERSITY OF NORTH CAROLINA CHAPEL	249,926
5 P20AG09649-05	COWARD, RAYMOND T FLORIDA EXPLORATORY CENTER ON THE HEALTH OF RURAL ELDERS	06-01-95/05-31-98	UNIVERSITY OF FLORIDA	249,865
5 R01AG09657-05	LANDEFELD, C SETH ANTICOAGULANT THERAPY IN OLDER PATIENTS	07-01-95/06-30-97	CASE WESTERN RESERVE UNIVERSITY	122,397
1 R01AG09660-01A4	ZEMLAN, FRANK P ALZHEIMER'S PHF-ASSOCIATED LIPIDS	07-01-95/	UNIVERSITY OF CINCINNATI	
5 R01AG09661-04	CAPLAN, DAVID N PROCESSING RESOURCES AND SENTENCE COMPREHENSION	05-01-95/04-30-96	MASSACHUSETTS GENERAL HOSPITAL	222,899
2 R01AG09662-04	KAMEN, GARY P CONTROL PROPERTIES OF AGED HUMAN MOTOR UNITS	12-01-94/	BOSTON UNIVERSITY	
5 R01AG09663-05	REVES, JOSEPH G AGING AND COGNITION AFTER CARDIAC SURGERY	02-01-95/01-31-96	DUKE UNIVERSITY	346,472
5 R01AG09665-10	POTTER, HUNTINGTON EXPRESSION STUDIES ON ALZHIEMERS DISEASE RELATED GENES	07-01-95/06-30-96	HARVARD UNIVERSITY	152,150
5 U01AG09675-05	WOLFSON, LESLIE I TRAINING PHYSICAL PERFORMANCE TO IMPROVE FUNCTION	09-01-95/08-31-96	UNIVERSITY OF CONNECTICUT HEALTH CEN	505,324

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
3 U01AG09675-05S1	WOLFSON, LESLIE I TRAINING PHYSICAL PERFORMANCE TO IMPROVE FUNCTION	09-25-95/08-31-96	UNIVERSITY OF CONNECTICUT HEALTH CEN	67,019
2 U01AG09675-08	WOLFSON, LESLIE I ACTIIVE-FARMINGTON	07-01-95/	UNIVERSITY OF CONNECTICUT HEALTH CEN	
2 P20AG09682-04	WALLACE, ROBERT B CENTER FOR RESEARCH ON OLDER RURAL POPULATIONS	12-01-94/	UNIVERSITY OF IOWA	
5 R01AG09686-05	BAKER, HARRIET D PLASTICITY IN THE AGING OLFACTORY SYSTEM	02-01-95/08-31-96	WINIFRED MASTERSON BURKE MED RES INS	194,740
5 R01AG09690-05	FLOYD, ROBERT A AGE INFLUENCE ON ISCHEMIA REPERFUSION IN BRAIN	05-01-95/11-30-96	OKLAHOMA MEDICAL RESEARCH FOUNDATION	158,618
3 R37AG09692-06S1	WOLINSKY, FREDRIC D PANEL ANALYSIS OF HEALTH SERVICES USE IN THE AGED	06-15-95/05-31-96	INDIANA UNIV-PURDUE UNIV AT INDIANAP	1,459
5 R01AG09693-05	BALOH, ROBERT W DIZZINESS IN OLDER PEOPLE	04-01-95/03-31-96	UNIVERSITY OF CALIFORNIA LOS ANGELES	446,590
5 R44AG09712-03	SYED, DANIEL ADVISOR FOR CAREGIVERS TO ALZHEIMERS PATIENTS	03-01-95/11-30-95	ATLANTIC MICROSYSTEMS INC.	242,398
5 R44AG09720-03	TENNSTEDT, SHARON L VIDEOTAPE TO TRAIN INTERVIEWERS IN SURVEYS OF OLD PEOPLE	03-01-95/08-31-96	NEW ENGLAND RESEARCH INSTITUTES, INC	195,777
5 R44AG09727-04	ROENKER, DANIEL L PERCEPTUAL ASSESSMENT IMPROVEMENT OF THE OLDER DRIVER	09-11-95/08-31-96	VISUAL RESOURCES, INC.	122,980
2 R01AG09735-14	BRADSHAW, RALPH A STRUCTURE AND FUNCTION OF NERVE GROWTH FACTOR	09-01-95/08-31-96	UNIVERSITY OF CALIFORNIA IRVINE	201,055
3 U01AG09740-05S6	JUSTER, F THOMAS HEALTH AND RETIREMENT STUDY	03-15-95/06-30-95	UNIVERSITY OF MICHIGAN AT ANN ARBOR	1,383,874
2 U01AG09740-06	JUSTER, F THOMAS HEALTH AND RETIREMENT STUDY	07-01-95/12-31-95	UNIVERSITY OF MICHIGAN AT ANN ARBOR	2,246,207
3 U01AG09740-06S1	JUSTER, F THOMAS HEALTH AND RETIREMENT STUDY	09-30-95/12-31-95	UNIVERSITY OF MICHIGAN AT ANN ARBOR	230,000
3 P01AG09743-04S1	BURKHAUSER, RICHARD V WELL-BEING OF THE ELDERLY IN A COMPARATIVE CONTEXT	12-01-94/	SYRACUSE UNIVERSITY AT SYRACUSE	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
3 P01AG09743-04S2	BURKHAUSER, RICHARD V WELL-BEING OF THE ELDERLY IN A COMPARATIVE CONTEXT (8)	12-01-94/	SYRACUSE UNIVERSITY AT SYRACUSE	
5 P01AG09743-05	BURKHAUSER, RICHARD V WELLBEING OF THE ELDERLY IN A COMPARATIVE CONTEXT	06-01-95/09-29-96	SYRACUSE UNIVERSITY AT SYRACUSE	306,480
3 P01AG09743-05S1	BURKHAUSER, RICHARD V WELL BEING OF THE ELDERLY IN A COMPARATIVE CONTEXT (9)	09-30-95/09-29-96	SYRACUSE UNIVERSITY AT SYRACUSE	54,000
5 R01AG09755-05	MACKAY, DON G ORIGIN OF COGNITIVE PROCESSES IN OLD AGE	05-01-95/04-30-96	UNIVERSITY OF CALIFORNIA LOS ANGELES	154,494
3 R01AG09755-05S1	MACKAY, DON G ORIGIN OF COGNITIVE PROCESSES IN OLD AGE	09-25-95/04-30-96	UNIVERSITY OF CALIFORNIA LOS ANGELES	44,895
5 R01AG09769-05	LARSON, ERIC B EPIDEMIOLOGY OF DEMENTIA	05-05-95/04-30-96	UNIVERSITY OF WASHINGTON	897,991
5 R01AG09771-04	APPLEGATE, WILLIAM B DIETARY INTERVENTIONS IN THE ELDERLY TRIAL	04-01-95/03-31-96	UNIVERSITY OF TENNESSEE AT MEMPHIS	413,870
5 R01AG09773-05	ESPELAND, MARK A DIETARY INTERVENTION IN THE ELDERLY TRIAL (DIET)	09-30-95/02-27-97	WAKE FOREST UNIVERSITY	221,987
2 R01AG09775-04A1	HAUSER, ROBERT M WISCONSIN LONGITUDINAL STUDY	09-30-95/02-29-96	UNIVERSITY OF WISCONSIN MADISON	195,800
3 R01AG09775-04A1S1	HAUSER, ROBERT M WISCONSIN LONGITUDINAL STUDY	09-30-95/02-29-96	UNIVERSITY OF WISCONSIN MADISON	24,400
5 R29AG09777-04	WALLSTEN, SHARON M ELDERLY CAREGIVERS, CARE RECEIVERS AND THEIR INTERACTION	08-01-95/07-31-96	DUKE UNIVERSITY	119,564
5 R01AG09779-08	LANG, PETER J EMOTION AND AGING--COGNITIVE PSYCHOPHYSIOLOGY	02-01-95/01-31-98	UNIVERSITY OF FLORIDA	52,599
5 R01AG09781-04	WACHTER, KENNETH W PROJECTING KINSHIP RESOURCES FOR THE ELDERLY	09-01-95/08-31-98	UNIVERSITY OF CALIFORNIA BERKELEY	95,040
5 R29AG09785-05	HAAN, MARY N EPIDEMIOLOGY OF SURVIVAL IN OLDER BLACKS AND WHITES	08-01-95/07-31-97	KAISER FOUNDATION RESEARCH INSTITUTE	69,284
5 R13AG09787-05	SCHAIE, K WARNER CONFERENCE--STRUCTURE AND AGING	04-01-95/03-31-96	PENNSYLVANIA STATE UNIVERSITY-UNIV P	23,794

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 R01AG09791-04	YOUNG, ROSALIE F CULTURAL IMPACT ON CAREGIVING OUTCOME--ALZHEIMER'S PTS	06-01-95/05-31-98	WAYNE STATE UNIVERSITY	165,164
3 R01AG09791-04S1A1	YOUNG, ROSALIE F ALZHEIMER'S CAREGIVING LOSS--CULTURAL FACTORS RESPONSE	09-30-95/05-31-98	WAYNE STATE UNIVERSITY	24,236
5 P01AG09793-05	HEFTI, FRANZ F DOPAMINERGIC AND BASAL PLASTICITY IN AGING	06-01-95/06-30-96	UNIVERSITY OF SOUTHERN CALIFORNIA	807,000
5 R01AG09799-04	ETTINGER, WALTER H, JR DIETARY INTERVENTIONS IN THE ELDERLY TRIAL	05-01-95/04-30-96	WAKE FOREST UNIVERSITY	485,558
4 R37AG09801-06	MILLER, RICHARD A ACTIVATION DEFECTS IN AGING T CELLS	08-01-95/07-31-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	251,778
5 R01AG09822-04	HOBBS, MONTE V CYTOKINE GENE EXPRESSION BY CD4+ CELLS IN AGING MICE	01-01-95/05-31-96	SCRIPPS RESEARCH INSTITUTE	222,207
5 R01AG09825-04	LACROIX, ANDREA Z THIAZIDE DIURETICS AND RATE OF BONE LOSS IN THE ELDERLY	08-01-95/06-30-96	CENTER FOR HEALTH STUDIES	306,668
3 R01AG09825-04S1	LACROIX, ANDREA Z THIAZIDE DIURETICS AND RATE OF BONE LOSS IN THE ELDERLY	09-25-95/06-30-96	CENTER FOR HEALTH STUDIES	21,130
5 R01AG09834-05	STABLER, SALLY P PREVALENCE AND SPECTRUM OF B12 DEFICIENCY IN THE AGED	06-01-95/05-31-96	UNIVERSITY OF COLORADO HLTH SCIENCES	210,284
5 R29AG09837-04	KINOSIAN, BRUCE ASSESSMENT OF MALNUTRITION IN THE HOSPITALIZED ELDERLY	09-01-95/08-31-96	UNIVERSITY OF PENNSYLVANIA	60,861
5 R01AG09857-04	GERBER, JOHN G AGE RELATED CHANGES IN ADRENERGIC CLINICAL PHARMACOLOGY	08-15-95/07-31-96	UNIVERSITY OF COLORADO HLTH SCIENCES	221,821
7 R01AG09868-05	PARK, DENISE C AGING, ARTHRITIS AND MEDICATION ADHERENCE	09-01-95/01-31-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	191,714
2 R01AG09869-04A1	VAUGHAN, DEBORAH W AGE, AXON INJURY AND MOTOR NEURON SYNAPTOLOGY	04-01-95/	BOSTON UNIVERSITY	
5 R01AG09872-04	NADEL, ETHAN R BODY FLUID REGULATION IN AGING ADULTS WITH EXERCISE	06-01-95/05-31-96	JOHN B. PIERCE LABORATORY, INC.	335,251
2 R01AG09873-04	LONGO, FRANK M NOVEL LAR ISOFORMS--A NEW CLASS OF NEUTROPHIC AGENTS	04-01-95/03-31-96	NORTHERN CALIFORNIA INSTITUTE RES &	157,632

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 R01AG09884-05	WOLFE, BARRY B AGING AND CENTRAL CHOLINERGIC SYSTEMS	07-01-95/05-31-98	GEORGETOWN UNIVERSITY	181,969
5 R01AG09892-04	PELCHAT, MARCIA L FOOD PREFERENCES AND AVERSIONS IN THE ELDERLY	06-01-95/05-31-97	MONELL CHEMICAL SENSES CENTER	109,204
5 R01AG09900-05	EBERWINE, JAMES H GENE EXPRESSION IN SINGLE AGING NEURONS AND GLIA	06-01-95/04-30-97	UNIVERSITY OF PENNSYLVANIA	186,434
5 R37AG09901-04	MAGAZINER, JAY S DETERMINANTS OF RECOVERY FROM HIP FRACTURE (BONE/MUSCLE)	07-21-95/06-30-96	UNIVERSITY OF MARYLAND BALT PROF SCH	442,749
3 R37AG09901-04S1	MAGAZINER, JAY S DETERMINANTS OF RECOVERY FROM HIP FRACTURE (BONE/MUSCLE)	08-01-95/09-29-97	UNIVERSITY OF MARYLAND BALT PROF SCH	5,000
2 R01AG09905-04A1	ABRAHAM, CARMELA R AMYLOIDOGENESIS ROLE OF REACTIVE ASTROCYTES	02-05-95/11-30-95	BOSTON UNIVERSITY	220,497
5 R44AG09907-04	LERNER, NEIL D INTEGRATED CLIMBING/REACHING PRODUCT FOR THE ELDERLY	05-12-95/09-30-97	COMSIS CORPORATION	133,433
2 R37AG09909-06	CAMPISI, JUDITH CELLULAR SENESCENCE AND CONTROL OF GENE EXPRESSION	09-05-95/08-31-96	UNIVERSITY OF CALIF-LAWRENC BERKELEY	288,340
2 R01AG09931-04A1	STEWART, ANITA INCREASING PHYSICAL ACTIVITY OF ELDERS IN THE COMMUNITY	02-01-95/01-31-96	UNIVERSITY OF CALIFORNIA SAN FRANCIS	330,000
3 R01AG09931-04A1S1	STEWART, ANITA INCREASING PHYSICAL ACTIVITY OF ELDERS IN THE COMMUNITY	09-22-95/01-31-96	UNIVERSITY OF CALIFORNIA SAN FRANCIS	55,709
5 R01AG09936-05	HORN, JOHN L CAUSES IN ADULT DEVELOPMENT OF DIFFERENCES IN ABILITIES	09-05-95/08-31-98	UNIVERSITY OF SOUTHERN CALIFORNIA	137,861
5 R01AG09945-03	STERN, JUDITH S AGING IN MALE AND FEMALE OBESE RATS	01-01-95/12-31-95	UNIVERSITY OF CALIFORNIA DAVIS	104,056
3 R01AG09945-03S1	STERN, JUDITH S AGING IN MALE AND FEMALE OBESE RATS	09-15-95/12-31-95	UNIVERSITY OF CALIFORNIA DAVIS	48,030
5 R01AG09952-02	KEMPER, SUSAN SPEECH ACCOMMODATIONS BY AND TO OLDER ADULTS	12-01-94/11-30-95	UNIVERSITY OF KANSAS LAWRENCE	199,739
5 R01AG09957-02	MEYER, BONNIE J F MINIMIZING AGE DIFFERENCES IN READING--HOW AND WHY	01-01-95/12-31-95	PENNSYLVANIA STATE UNIVERSITY-UNIV P	164,674

NATIONAL INSTITUTE ON AGING - ACTIVE GRANT FOR FY 1995-1996

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 R01AG09966-05	EVANS, DENIS A EPIDEMIOLOGIC STUDY OF PERSONS WITH ALZHEIMERS DISEASE	09-01-95/08-31-97	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	248,323
5 P01AG09970-04	ROSE, MICHAEL R POSTONED AGING IN DROSOPHILA	07-10-95/06-30-96	UNIVERSITY OF CALIFORNIA IRVINE	456,065
3 P01AG09973-04S1	GALLAGHER, MICHELA COGNITION AND HIPPOCAMPAL/CORTICAL SYSTEMS IN AGING	02-05-95/07-31-95	UNIVERSITY OF NORTH CAROLINA CHAPEL	30,721
5 P01AG09973-05	GALLAGHER, MICHELA COGNITION AND HIPPOCAMPAL/CORTICAL SYSTEMS IN AGING	08-10-95/07-31-96	UNIVERSITY OF NORTH CAROLINA CHAPEL	1,038,534
5 P01AG09975-05	CZEISLER, CHARLES A SLEEP, AGING, AND CIRCADIAN RHYTHM DISORDERS	08-01-95/07-31-98	BRIGHAM AND WOMEN'S HOSPITAL	791,668
5 R29AG09976-05	JOHNSON, MITZI M AGE DIFFERENCES IN DECISION MAKING PERFORMANCE	09-01-95/08-31-96	UNIVERSITY OF KENTUCKY	88,957
5 R29AG09986-04	MEANS, KEVIN M FUNCTIONAL PERFORMANCE-BASED REHABILITATION OF FALLERS	09-20-95/06-30-96	UNIVERSITY OF ARKANSAS MED SCIS LTL	99,772
2 R01AG09988-04A1	FRIEDMAN, DAVID AGE-RELATED ERP MEASURES IN ALZHEIMERS DISEASE	08-01-95/07-31-96	NEW YORK STATE PSYCHIATRIC INSTITUTE	255,848
5 R01AG09989-13	COWAN, NICHOLAS J MAMMALIAN TUBULIN ISOTYPES & THEIR INTERACTION WITH MAPS	05-20-95/04-30-97	NEW YORK UNIVERSITY	287,338
5 R01AG09997-04	WELSH, KATHLEEN A NEUROPSYCHOLOGICAL STUDY OF ALZHEIMERS DISEASE	07-01-95/06-30-96	DUKE UNIVERSITY	131,484
2 R01AG10002-04A1	FASMAN, GERALD D 'STUDIES ON SYNTHETIC MODELS OF ALZHEIMER PROTEINS'	07-01-95/	BRANDEIS UNIVERSITY	
2 R01AG10003-04	POIRIER, JUDES SYNAPTIC PLASTICITY DURING AGING AND IN ALZHEIMER DISEAS	09-01-95/	MC GILL UNIVERSITY	
5 R01AG10004-08	CAMPISI, JUDITH GROWTH REGULATION IN NORMAL AND TRANSFORMED CELLS	08-01-95/07-31-97	UNIVERSITY OF CALIF-LAWRENC BERKELEY	221,928
5 R01AG10009-05	FURMAN, JOSEPH M VESTIBULO/OCULAR FUNCTION IN THE ELDERLY	08-10-95/03-31-97	UNIVERSITY OF PITTSBURGH AT PITTSBUR	100,786
2 R01AG10015-04	MARKOWSKA, ALICJA L AGING, MEMORY AND BASAL FOREBRAIN CHOLINERGIC SYSTEM	07-01-95/	JOHNS HOPKINS UNIVERSITY	

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 R29AG10025-04	HOUMARD, JOSEPH A GLUCOSE TRANSPORTERS AND THE INSULIN RESISTANCE OF AGING	06-01-95/05-31-96	EAST CAROLINA UNIVERSITY	83,796
5 R29AG10026-04	CARTEE, GREGORY D AGE EFFECTS ON EXERCISE STIMULATION OF GLUCOSE TRANSPORT	05-01-95/04-30-96	UNIVERSITY OF WISCONSIN MADISON	94,263
7 N03AG10042-005	 PROFESSIONAL AND MEDICAL SUPPORT SERVICES	10-12-94/09-30-95	CHESAPEAKE PHYSICIANS PROFESSIONAL A	93,668
3 N03AG10046-006	 PROVIDE UNARMED GUARD SERVICES	10-12-94/09-30-95	SSC SMALL BUSINESS MARYLAND	145,488
3 N03AG10046-007	 PROVIDE UNARMED GUARD SERVICES	02-13-95/09-30-95	SSC SMALL BUSINESS MARYLAND	
5 R29AG10047-05	MUTTER, SHARON A JUDGMENT AND DECISION MAKING ACROSS THE LIFE SPAN	03-01-95/08-28-96	WESTERN KENTUCKY UNIVERSITY	99,235
7 N03AG10050-012	 PROVIDE CLEARINGHOUSE SERVICES	01-11-95/01-10-96	SSC SMALL BUSINESS INDIANA	737,799
3 N03AG10050-013	 PROVIDE CLEARINGHOUSE SERVICES	03-07-95/01-10-96	SSC SMALL BUSINESS INDIANA	
2 N03AG10050-014	 PROVIDE CLEARINGHOUSE SERVICES	09-28-95/01-10-96	SSC SMALL BUSINESS INDIANA	39,830
5 R29AG10059-04	CRISP, TERRIANN AGE RELATED CHANGES IN SPINAL OPIATE INDUCED ANALGESIA	06-01-95/05-31-96	NORTHEASTERN OHIO UNIVERSITIES COLL	109,026
3 N03AG10069-006	 ADP AND TECHNICAL SUPPORT SERVICES FOR NIA	07-08-95/07-07-96	ROW SCIENCES, INC.	
3 N03AG10069-007	 ADP AND TECHNICAL SUPPORT SERVICES FOR NIA	08-03-95/07-07-96	ROW SCIENCES, INC.	3,343
5 R01AG10070-04	BAKER, JOHN R CARTILAGE MATRIX PROTEIN INTERACTIONS--CHANGES WITH AGE	05-05-95/04-30-96	UNIVERSITY OF ALABAMA AT BIRMINGHAM	207,769
1 R01AG10075-01A1	JESSOP, DOROTHY J DECADES OF CAREGIVING: FAMILY TASKS AND SUPPORTS	04-01-95/	MEDICAL AND HEALTH RESEARCH ASSOCIAT	
2 R44AG10083-02A1	THOMAS, II JACK R 'METHOD AND APPARATUS FOR PLANNING GERIATRIC NUTRITION'	02-01-95/	BASIC FORE, INC.	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 R01AG10101-05	LOCKSHIN, RICHARD A CELL DEATH IN A HIGH CONNECTIVITY INVERTEBRATE MODEL	06-01-95/11-30-96	ST. JOHN'S UNIVERSITY	188,781
5 R01AG10102-05	GORELICK, PHILIP B DEMENTIA IN AGED BLACKS--AD AND MID	07-01-95/06-30-96	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	386,027
5 R01AG10106-04	KATZMAN, ROBERT INCIDENCE AND COURSE OF DEMENTIA IN SHANGHAI	09-01-95/08-31-97	UNIVERSITY OF CALIFORNIA SAN DIEGO	236,793
5 R01AG10113-02	NAM, CHARLES B SOCIODEMOGRAPHY OF SMOKING AND ADULT MORTALITY	01-01-95/09-30-96	FLORIDA STATE UNIVERSITY	130,746
5 P01AG10120-04	FOGEL, ROBERT W EARLY INDICATORS OF LATER WORK LEVELS, DISEASE AND DEATH	12-01-94/11-30-95	NATIONAL BUREAU OF ECONOMIC RESEARCH	764,893
3 P01AG10120-04S1	FOGEL, ROBERT W EARLY INDICATORS OF LATER WORK LEVELS, DISEASE AND DEATH	09-30-95/11-30-95	NATIONAL BUREAU OF ECONOMIC RESEARCH	320,622
5 P30AG10123-05	CUMMINGS, JEFFREY L UCLA ALZHEIMERS DISEASE CENTER	07-01-95/06-30-96	UNIVERSITY OF CALIFORNIA LOS ANGELES	768,731
3 P30AG10123-05S1	CUMMINGS, JEFFREY L UCLA ALZHEIMERS DISEASE CENTER	07-20-95/06-30-96	UNIVERSITY OF CALIFORNIA LOS ANGELES	65,007
5 P30AG10124-05	TROJANOWSKI, JOHN Q ALZHEIMERS DISEASE CENTER CORE	07-01-95/06-30-96	UNIVERSITY OF PENNSYLVANIA	833,162
5 P30AG10129-05	JAGUST, WILLIAM J UC DAVIS ALZHEIMERS DISEASE CENTER CORE	07-01-95/06-30-96	UNIVERSITY OF CALIFORNIA DAVIS	844,188
5 P30AG10130-05	MIRRA, SUZANNE S ALZHEIMERS DISEASE CENTER CORE	07-01-95/06-30-96	EMORY UNIVERSITY	823,089
5 R01AG10131-03	KAYSER-JONES, VIRGENE S BEHAVIORAL CONTEXT OF EATING AND NUTRITIONAL SUPPORT	06-01-95/05-31-96	UNIVERSITY OF CALIFORNIA SAN FRANCIS	208,109
5 P30AG10133-05	GHETTI, BERNARDINO ALZHEIMER DISEASE CENTER	07-01-95/06-30-96	INDIANA UNIV-PURDUE UNIV AT INDIANAP	617,593
2 R01AG10135-04	TAYLOR, ROBERT J RELIGION, STRESS AND PHYSICAL MENTAL HEALTH IN BLACKS	09-10-95/08-31-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	183,818
5 R01AG10143-13	CLARK, RICHARD A FIBRONECTIN AND CELL RECRUITMENT	05-01-95/09-25-96	STATE UNIVERSITY NEW YORK STONY BROO	190,774

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 R01AG10147-02	KOEPSELL, THOMAS D CASE CONTROL STUDY OF OLDER PEDESTRIAN INJURY SITES	08-01-95/07-31-96	UNIVERSITY OF WASHINGTON	243,544
3 R01AG10149-02S1	BAUMGARTNER, RICHARD N BODY COMPOSITION CHANGES IN THE ELDERLY	06-01-95/07-31-95	UNIVERSITY OF NEW MEXICO ALBUQUERQUE	5,158
5 R01AG10149-03	BAUMGARTNER, RICHARD N BODY COMPOSITION CHANGES IN THE ELDERLY	08-15-95/07-31-96	UNIVERSITY OF NEW MEXICO ALBUQUERQUE	255,248
2 R01AG10154-07A2	GREENOUGH, WILLIAM T PHYSICAL EXERCISE, MENTAL ACTIVITY, AND BRAIN PLASTICITY	08-25-95/06-30-96	UNIVERSITY OF ILLINOIS URBANA-CHAMPA	90,030
5 R29AG10160-04	BALIN, BRIAN J NEURONAL CYTOSKELETON IN AGING AND ALZHEIMERS DISEASE	04-01-95/03-31-96	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	104,965
5 P30AG10161-05	EVANS, DENIS A RUSH ALZHEIMERS DISEASE CENTER CORE	07-01-95/06-30-96	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	928,099
3 P30AG10161-05S1	EVANS, DENIS A SUPPLEMENT TO RUSH ALZHEIMERS DISEASE CENTER CORE	07-01-95/06-30-96	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	152,635
5 P30AG10163-05	HARRELL, LINDY E ALZHEIMERS DISEASE CENTER CORE	07-01-95/06-30-98	UNIVERSITY OF ALABAMA AT BIRMINGHAM	625,661
5 R37AG10168-04	PRESTON, SAMUEL H AFRICAN-AMERICAN MORTALITY, 1930-1990	02-01-95/01-31-96	UNIVERSITY OF PENNSYLVANIA	221,001
3 R37AG10168-04S1	PRESTON, SAMUEL H AFRICAN AMERICAN MORTALITY, 1930-1990	04-05-95/01-31-96	UNIVERSITY OF PENNSYLVANIA	5,000
5 R01AG10172-04	COHEN-MANSFIELD, JISKA TREATMENT OF AGITATION IN THE NURSING HOME	08-01-95/07-31-97	HEBREW HOME OF GREATER WASHINGTON	166,239
2 R01AG10173-04A1	SARTER, MARTIN F AGING, ATTENTION AND BENZODIAZEPINE RECEPTOR LIGANDS	04-12-95/03-31-96	OHIO STATE UNIVERSITY	162,521
5 R01AG10175-04	PEDERSEN, NANCY L GENETIC & ENVIRONMENTAL INFLUENCES--BIOBEHAVIORAL AGING	09-05-95/08-31-98	PENNSYLVANIA STATE UNIVERSITY-UNIV P	141,856
3 P01AG10179-02S4	JUSTER, F THOMAS WEALTH, SAVINGS AND FINANCIAL SECURITY AMONG OLDER HOUSE	01-01-95/	UNIVERSITY OF MICHIGAN AT ANN ARBOR	
5 P30AG10182-05	DECARLI, CHARLES ALZHEIMERS DISEASE CENTER CORE GRANT	07-15-95/06-30-98	UNIVERSITY OF KANSAS MEDICAL CENTER	745,007

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
3 P01AG10184-02S1A2	WEST, SHEILA K SERUM ANTIOXIDANTS AND CATARACT IN A LONGITUDINAL STUDY	08-01-95/	JOHNS HOPKINS UNIVERSITY	
5 P01AG10184-04	WEST, SHEILA K VISUAL IMPAIRMENT AND FUNCTIONAL STATUS IN OLDER PERSONS	08-25-95/07-31-96	JOHNS HOPKINS UNIVERSITY	1,802,661
3 N03AG10186-004	JANITORIAL SERVICES FOR GRC IN BALTIMORE	10-01-94/09-12-95	SSC SMALL BUSINESS MARYLAND	
7 N03AG10186-005	JANITORIAL SERVICES FOR GRC IN BALTIMORE	09-13-95/09-12-96	SSC SMALL BUSINESS MARYLAND	359,011
7 N03AG10188-006	SUMMER INSTITUTES IN RESEARCH ON AGING	07-03-95/07-02-96	AIRLIE FOUNDATION-AIRLIE CONFERENCE	51,805
2 R01AG10197-04	HALE, SANDRA S AGING & COGNITIVE SLOWING: THE INFORMATION-LOSS MODEL	07-01-95/	WASHINGTON UNIVERSITY	
5 R29AG10199-05	DONAHUE, HENRY J AGE RELATED CHANGES IN BONE CELL SIGNAL TRANSDUCTION	01-01-95/12-31-95	PENNSYLVANIA STATE UNIV HERSHEY MED	98,074
3 N03AG10200-004	LEASE TO OWNERSHIP--MASS SPECTROMETER	09-15-95/09-18-96	SSC SMALL BUSINESS COLORADO	33,581
5 P01AG10207-04	KELSOE, GARNETT MECHANISMS OF IMMUNOSENESENCE	05-01-95/09-29-96	UNIVERSITY OF MARYLAND BALT PROF SCH	590,076
5 P01AG10208-04	AZMITIA, EFRAIN C S-100B--NEURONAL GLIAL LINK TO ALZHEIMERS DISEASE	05-15-95/04-30-96	NEW YORK UNIVERSITY	854,738
5 R01AG10210-04	LEE, VIRGINIA M BIOLOGY OF ALZHEIMER PAIRED HELICAL FILAMENTS	06-01-95/05-31-96	UNIVERSITY OF PENNSYLVANIA	169,772
5 R01AG10213-04	CULP, LLOYD A MATRIX ADHESION OF AGING DERMAL FIBROBLASTS	06-10-95/05-31-97	CASE WESTERN RESERVE UNIVERSITY	158,009
5 R29AG10215-04	YEOWELL, HEATHER N LYSYL HYDROXYLASE--STRUCTURE AND REGULATORY STUDIES	09-05-95/08-31-96	DUKE UNIVERSITY	113,118
3 N03AG10235-005	PROVIDE PARKING SERVICES	07-26-95/09-28-96	SSC LARGE BUSINESS-DISTRICT OF COLUM	191,100
5 R29AG10250-03	LA VEIST, THOMAS A NATIONAL AFRICAN-AMERICAN MORTALITY ANALYSIS	05-01-95/04-30-96	JOHNS HOPKINS UNIVERSITY	112,436

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 R01AG10251-03	KLINE, JENNIE K EPIDEMIOLOGY OF TRISOMY AND AGING	01-01-95/12-31-95	NEW YORK STATE PSYCHIATRIC INSTITUTE	236,955
3 R01AG10251-03S1	KLINE, JENNIE K EPIDEMIOLOGY OF TRISOMY AND AGING	03-01-95/12-31-95	NEW YORK STATE PSYCHIATRIC INSTITUTE	36,626
2 R01AG10257-04A2	BARBER, B J AGE RELATED CHANGES IN PROTEIN AND WATER DISTRIBUTION	07-01-95/	UNIVERSITY OF KENTUCKY	
2 R01AG10263-04	HIRAMOTO, RAYMOND N THE CNS IN AGING OF THE IMMUNE SYSTEM	04-01-95/	UNIVERSITY OF ALABAMA AT BIRMINGHAM	
5 R29AG10264-02	GLICKSMAN, ALLEN CULTURAL AND SOCIAL SOURCES OF WELL-BEING IN NORMAL AGED	01-01-95/12-31-95	PHILADELPHIA GERIATRIC CTR-FRIEDMAN	154,182
3 R29AG10264-02S1	GLICKSMAN, ALLEN CULTURAL AND SOCIAL SOURCES OF WELL-BEING IN NORMAL AGED	04-25-95/12-31-95	PHILADELPHIA GERIATRIC CTR-FRIEDMAN	15,000
5 R01AG10266-04	BUMPASS, LARRY L AGING AND THE FAMILY OVER THE LIFE COURSE	12-01-94/11-30-95	UNIVERSITY OF WISCONSIN MADISON	460,443
5 R29AG10267-04	CRESS, MARIE E PHYSICAL FUNCTION PERFORMANCE AND EXERCISING IN AGING	05-01-95/04-30-96	UNIVERSITY OF WASHINGTON	108,838
5 R01AG10269-04	HEISTAD, DONALD D AGING EFFECTS ON CEREBRAL BLOOD VESSELS	06-01-95/05-31-96	UNIVERSITY OF IOWA	169,305
5 R01AG10279-04	VORBRODT, ANDRZEJ W TRANSPORT OF MODIFIED ALBUMIN ACROSS BLOOD-BRAIN BARRIER	05-01-95/04-30-96	INSTITUTE FOR BASIC RES IN DEV DISAB	147,371
5 R29AG10282-04	GEULA, CHANGIZ CHOLINERGIC SYSTEM IN ALZHEIMERS DISEASE	07-01-95/06-30-96	BETH ISRAEL DEACONESS MEDICAL CENTER	116,714
7 N03AG10286-008	PROVIDE DRIVER MESSENGER SERVICE	09-19-95/09-28-96	SSC LARGE BUSINESS-DISTRICT OF COLUM	82,797
5 R01AG10292-03	ROBERTS, JAMES A MODULATING URINARY TRACT INFECTION IN ELDERLY FEMALES	03-01-95/09-30-96	TULANE UNIVERSITY OF LOUISIANA	166,639
5 R01AG10295-04	STEVENS, JOSEPH C CUTANEOUS SENSITIVITY AND AGING	07-15-95/06-30-97	JOHN B. PIERCE LABORATORY, INC.	149,461
5 R01AG10299-04	SCHMIDT, ROBERT E NEUROPATHOLOGY OF THE AGING SYMPATHETIC NERVOUS SYSTEM	05-01-95/04-30-96	WASHINGTON UNIVERSITY	233,295

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 U01AG10315-04	EVANS, DENIS A LONGITUDINAL STUDY OF 4 TYPES OF AD SPECIAL CARE UNITS	04-30-95/03-31-97	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	241,459
3 U01AG10317-05S2	LEON, JOEL NATIONAL EVALUATION OF SPECIAL CARE UNITS	02-20-95/06-30-98	PEOPLE-TO-PEOPLE HEALTH FOUNDATION,	50,000
3 U01AG10317-05S3	LEON, JOEL NATIONAL EVALUATION OF SPECIAL CARE UNITS	09-15-95/06-30-98	PEOPLE-TO-PEOPLE HEALTH FOUNDATION,	50,000
2 R01AG10321-04	BECK, CORNELIA K AFFECT CHANGES AS OUTCOMES OF BEHAVIORAL INTERVENTIONS	06-01-95/05-31-96	UNIVERSITY OF ARKANSAS MED SCIS LTL	123,011
5 R44AG10350-04	BYRD, CECILIA A ELDER ACCEPTANCE OF HEALTH EDUCATION PRODUCTS	09-25-95/12-31-96	ELDER SOURCE, INC.	154,100
3 U01AG10353-04S3	DAWSON-HUGHES, BESS CALCIUM AND VITAMIN D EFFECT ON BONE LOSS FROM THE HIP	05-05-95/08-31-95	TUFTS UNIVERSITY BOSTON	88,370
5 U01AG10353-05	DAWSON-HUGHES, BESS CALCIUM AND VITAMIN D EFFECT ON BONE LOSS FROM HIP	09-01-95/08-31-96	TUFTS UNIVERSITY BOSTON	346,944
5 R01AG10358-05	GALLAGHER, J CHRISTOPHER PATHOPHYSIOLOGY OF SENILE TYPE 11 OSTEOPOROSIS	09-01-95/08-31-97	CREIGHTON UNIVERSITY	177,406
3 U01AG10373-04S1	GALLAGHER, J CHRISTOPHER TREATMENT FOR OSTEOPOROSIS OF THE HIP AG1	12-01-94/08-31-95	CREIGHTON UNIVERSITY	
3 U01AG10373-04S2	GALLAGHER, J CHRISTOPHER TREATMENT FOR OSTEOPOROSIS OF THE HIP	12-01-94/08-31-95	CREIGHTON UNIVERSITY	68,258
3 U01AG10373-04S3	GALLAGHER, J CHRISTOPHER TREATMENT FOR OSTEOPOROSIS OF THE HIP	03-15-95/08-31-95	CREIGHTON UNIVERSITY	189,543
3 U01AG10373-04S4	GALLAGHER, J CHRISTOPHER TREATMENT FOR OSTEOPOROSIS OF THE HIP-SUPPLEMENT AG10373	05-25-95/08-31-95	CREIGHTON UNIVERSITY	70,988
5 U01AG10373-05	GALLAGHER, J CHRISTOPHER TREATMENT FOR OSTEOPOROSIS OF THE HIP	09-01-95/08-31-96	CREIGHTON UNIVERSITY	674,688
5 R01AG10374-05	CODY, DIANNA D PROXIMAL FEMUR ARCHITECTURE IN OLDER WOMEN	09-30-95/08-31-98	CASE WESTERN RESERVE UNIV-HENRY FORD	78,622
5 R01AG10381-05	PARFITT, A MICHAEL ERT AND FOCAL BALANCE BETWEEN RESORPTION AND FORMATION	09-05-95/02-28-97	CASE WESTERN RESERVE UNIV-HENRY FORD	155,273

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
3 U01AG10382-03S2	DALSKY, GAIL P EFFECT OF EXERCISE ON FEMORAL BONE MASS IN OLDER ADULTS	12-01-94/	UNIVERSITY OF CONNECTICUT HEALTH CEN	
3 U01AG10382-04S1	DALSKY, GAIL P EFFECT OF EXERCISE ON FEMORAL BONE MASS IN OLDER ADULTS	04-01-95/08-31-95	UNIVERSITY OF CONNECTICUT HEALTH CEN	
3 U01AG10382-04S2	DALSKY, GAIL P EFFECT OF EXERCISE ON FEMORAL BONE MASS IN OLDER ADULTS	04-01-95/08-31-95	UNIVERSITY OF CONNECTICUT HEALTH CEN	
5 U01AG10382-05	DALSKY, GAIL P EXERCISE EFFECT ON FEMORAL BONE MASS IN OLDER ADULTS	09-01-95/08-31-98	UNIVERSITY OF CONNECTICUT HEALTH CEN	450,211
5 R01AG10412-05	ROSS, PHILIP D FALLS AND FRACTURES AMONG ELDERLY JAPANESE AMERICANS	09-25-95/05-31-97	STAUB PACIFIC HLTH FDN-HEALTH RES IN	222,455
5 P60AG10415-05	REUBEN, DAVID B UCLA OLDER AMERICANS INDEPENDENCE CENTER	11-10-95/06-30-96	UNIVERSITY OF CALIFORNIA LOS ANGELES	836,180
5 P60AG10418-03	KOWAL, JEROME CLAUDE D PEPPER OLDER AMERICANS INDEPENDENCE CENTER	12-01-94/11-30-95	CASE WESTERN RESERVE UNIVERSITY	907,345
3 P60AG10418-04S1	KOWAL, JEROME CLAUDE D. PEPPER OLDER AMERICANS INDEPENDENCE CENTER	12-01-95/	CASE WESTERN RESERVE UNIVERSITY	
3 R01AG10430-04S1	MILES, TONI P BLACK ELDERLY TWIN STUDY (BETS)	02-01-95/06-30-95	PENNSYLVANIA STATE UNIVERSITY-UNIV P	
3 R01AG10430-04S2	MILES, TONI P BLACK ELDERLY TWIN STUDY	02-05-95/06-30-95	PENNSYLVANIA STATE UNIVERSITY-UNIV P	22,153
5 R01AG10430-05	MILES, TONI P BLACK ELDERLY TWIN STUDY	08-05-95/06-30-97	PENNSYLVANIA STATE UNIVERSITY-UNIV P	171,750
5 P01AG10435-06	GAGE, FRED H GENE THERAPY FOR ALZHEIMERS DISEASE	08-14-95/03-31-97	SALK INSTITUTE FOR BIOLOGICAL STUDIE	754,960
3 R01AG10436-04S1	MILLER, DOUGLAS K COMPETING SUPPLEMENT TO PHYSICAL FRAILTY IN AF-AM, #AG10	07-01-94/	ST. LOUIS UNIVERSITY	
5 R01AG10436-05	MILLER, DOUGLAS K PHYSICAL FRAILTY IN URBAN AFRICAN AMERICANS	08-01-95/06-30-97	ST. LOUIS UNIVERSITY	230,665
5 R01AG10444-05	HAZUDA, HELEN P SAN ANTONIO LONGITUDINAL STUDY OF AGING	07-01-95/06-30-96	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	140,231

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
3 R01AG10454-04S1	KELSEY, JENNIFER L OSTEOPOROSIS AND FALLS IN MEXICAN AMERICAN ELDERS	02-20-95/08-31-95	STANFORD UNIVERSITY	38,070
5 R01AG10454-05	NELSON, LORENE M OSTEOPOROSIS AND FALLS IN MEXICAN AMERICAN ELDERS	09-14-95/08-31-97	STANFORD UNIVERSITY	296,522
5 P60AG10463-05	ABRAHAM, GEORGE N ROCHESTER AREA PEPPER CENTER	07-01-95/06-30-96	UNIVERSITY OF ROCHESTER	1,751,792
5 P60AG10469-04	TINETTI, MARY E CLAUDE D PEPPER OLDER AMERICANS INDEPENDENCE CENTER	09-30-95/07-31-96	YALE UNIVERSITY	919,380
5 P01AG10480-05	KNUSEL, BEAT J THERAPEUTIC POTENTIAL OF NEUROTROPHINS IN ALZHEIMERS	09-01-95/07-31-96	UNIVERSITY OF SOUTHERN CALIFORNIA	369,064
5 P01AG10481-06	KRAFFT, GRANT A NEURAL PROTEASES--NEW ALZHEIMERS DISEASE DRUG TARGETS	08-15-95/07-31-96	NORTHWESTERN UNIVERSITY	610,731
5 U01AG10483-05	THAL, LEON J ALZHEIMERS DISEASE COOPERATIVE STUDY UNIT	07-01-95/06-30-96	UNIVERSITY OF CALIFORNIA SAN DIEGO	4,116,137
5 P60AG10484-05	ETTINGER, WALTER H, JR CLAUDE D PEPPER OLDER AMERICANS INDEPENDENCE CENTER	07-01-95/06-30-97	WAKE FOREST UNIVERSITY	840,818
5 P01AG10485-05	SIMPKINS, JAMES W DISCOVERY OF NOVEL DRUGS FOR ALZHEIMERS DISEASE	08-01-95/07-31-96	UNIVERSITY OF FLORIDA	868,056
5 R01AG10486-03	ROY, ARUN K AGING AND ANDROGEN RECEPTOR GENE REGULATION	01-01-95/12-31-95	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	174,241
3 R01AG10486-03S1	ROY, ARUN K AGING AND ANDROGEN RECEPTOR GENE REGULATION	01-01-95/12-31-95	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	48,334
5 R01AG10489-05	LANTIGUA, RAFAEL ACTIVE LIFE EXPECTANCY AMONG URBAN MINORITY ELDERLY	07-21-95/06-30-97	COLUMBIA UNIVERSITY NEW YORK	228,417
5 P01AG10491-05	GREENGARD, PAUL INTERDISCIPLINARY APPROACH TO ALZHEIMER DRUG DISCOVERY	08-01-95/07-31-96	ROCKEFELLER UNIVERSITY	470,531
5 R01AG10496-04	ZURIF, EDGAR B COGNITIVE AGING--REAL TIME LANGUAGE PROCESSING	05-01-95/04-30-96	BRANDEIS UNIVERSITY	153,634
5 P01AG10514-04	PAPACONSTANTINOU, JOHN AGING EFFECTS ON MOLECULAR RESPONSES TO STRESS	06-10-95/05-31-96	UNIVERSITY OF TEXAS MEDICAL BR GALVE	826,041

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 R01AG10520-01A2	GORDON, JON W AGE RELATED NEURODEGENERATION AND TRANSGENIC MOUSE	01-01-95/12-31-95	MOUNT SINAI SCHOOL OF MEDICINE OF CU	212,832
5 R29AG10523-04	PETERSON, CHARLOTTE A ENOLASE GENE REGULATION IN DIFFERENTIATION AND AGING	06-01-95/05-31-96	UNIVERSITY OF ARKANSAS MED SCIS LTL	84,128
5 R01AG10528-02	VATASSERY, GOVIND N NEURONAL MEMBRANE LIPID OXIDATION IN PARKINSONS DISEASE	08-01-95/07-31-96	UNIVERSITY OF MINNESOTA TWIN CITIES	142,787
5 R01AG10530-03	HADJICONSTANTINOU-NEFF, MARIA GM1 GANGLIOSIDE CORRECTS RAT BRAIN CHOLINERGIC DEFICITS	05-01-95/04-30-96	OHIO STATE UNIVERSITY	161,254
5 R01AG10531-03	FERNANDES, GABRIEL AGING, FOOD RESTRICTION AND T-CELL SUBSET FUNCTION	09-15-95/08-31-96	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	174,995
5 R01AG10536-04	WEINDRUCH, RICHARD H CALORIES, FAT, AND SPONTANEOUS PROSTATE CANCER	05-01-95/04-30-96	UNIVERSITY OF WISCONSIN MADISON	149,752
5 P01AG10542-03	SCHULTZ, ALBERT B FUNDAMENTAL ASPECTS OF MOBILITY IN OLD ADULTS	04-01-95/03-31-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	824,591
5 R01AG10546-02	WENK, GARY L AGING VULNERABILITY TO EXCITATORY AMINO ACIDS	04-01-95/03-31-96	UNIVERSITY OF ARIZONA	131,060
1 R01AG10547-01A4	TREVISAN, MAURIZIO M PHYICAL ACTIVITY AND MORTALITY IN WOMEN AND MEN	12-01-94/	STATE UNIVERSITY OF NEW YORK AT BUFF	
1 R01AG10557-01A3	GRABINER, MARK D BIOMECHANICS OF STEPPING RESPONSES--EFFECTS OF AGING	09-30-95/08-31-96	CLEVELAND CLINIC FOUNDATION	129,302
2 R01AG10559-04A1	JI, TAE H THE LH/CG RECEPTOR GENE	12-01-94/	UNIVERSITY OF WYOMING	
5 R01AG10566-03	GRIFFIN, MARIE R ACUTE RENAL INSUFFICIENCY AND NSAIDS	08-20-95/07-31-97	VANDERBILT UNIVERSITY	208,564
5 R01AG10569-03	ZELINSKI, ELIZABETH M LONGITUDINAL ASSESSMENT OF COGNITION IN ADULTS	09-01-95/08-31-96	UNIVERSITY OF SOUTHERN CALIFORNIA	147,471
1 R01AG10579-01A4	RINEHART, CLIFFORD A CONTROL OF LIFESPAN IN HUMAN ENDOMETRIAL STROMAL CELLS	04-01-95/	UNIVERSITY OF NORTH CAROLINA CHAPEL	
5 R29AG10593-04	HARTMAN, MARILYN D AGE DIFFERENCE IN ATTENTION--CONSEQUENCES FOR MEMORY	07-01-95/06-30-96	UNIVERSITY OF NORTH CAROLINA CHAPEL	104,484

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 R01AG10598-13	CUNNINGHAM, DENNIS D REGULATION OF PROTEASE NEXIN 1 ACTIVITY AND SECRETION	09-01-95/08-31-97	UNIVERSITY OF CALIFORNIA IRVINE	211,830
5 R01AG10599-05	COOPERMAN, BARRY S ANTICHYMOTRYPSIN INTERACTION WITH SERINE PROTEASES	09-01-95/08-31-96	UNIVERSITY OF PENNSYLVANIA	213,665
5 R01AG10604-05	POLICH, JOHN M ASSESSMENT OF ALZHEIMERS DISEASE WITH P300	09-01-95/08-31-97	SCRIPPS RESEARCH INSTITUTE	137,707
5 R01AG10606-04	RAPP, PETER R COGNITIVE FUNCTION IN THE AGED	08-01-95/07-31-96	STATE UNIVERSITY NEW YORK STONY BROO	140,148
5 R29AG10607-04	MAGNUSSON, KATHY R AGING EFFECTS ON THE NMDA RECEPTOR COMPLEX	05-01-95/04-30-96	COLORADO STATE UNIVERSITY	105,032
5 R01AG10608-04	BENSON, MERRILL D AMYLOID PRECURSOR PROTEIN (APP) AND ALZHEIMER'S DISEASE	07-10-95/06-30-96	INDIANA UNIV-PURDUE UNIV AT INDIANAP	227,260
2 R01AG10624-04	FROST, J JAMES PARTIAL VOLUME CORRECTED PET IMAGING IN AGING BRAIN	07-01-95/	JOHNS HOPKINS UNIVERSITY	
5 R01AG10634-05	SANES, JEROME N NEURAL CONTROL OF VOLUNTARY MOVEMENTS	09-01-95/03-31-97	BROWN UNIVERSITY	177,114
5 R01AG10637-04	MABRY, TOM J PLANT TOXINS AND DEMENTIA	05-01-95/04-30-96	UNIVERSITY OF TEXAS AUSTIN	94,617
3 R01AG10643-04S1	BLIWISE, DONALD L SUNDOWN SYNDROME IN A SKILLED NURSING FACILITY	08-15-95/06-30-96	EMORY UNIVERSITY	31,400
2 R44AG10650-02	SCHAFER, MARK E ULTRASOUND/COLLAGEN TREATMENT OF FULL THICKNESS WOUNDS	04-14-95/03-31-96	SONIC TECHNOLOGIES	267,138
5 R01AG10664-05	MARKESBERY, WILLIAM R ALZHEIMERS DISEASE, DENTAL AMALGAMS AND MERCURY	07-10-95/06-30-97	UNIVERSITY OF KENTUCKY	156,574
5 R01AG10667-05	MOISES, HYLAN C NGF AND CHOLINERGIC FUNCTION IN ADULT AND AGING BRAIN	07-01-95/06-30-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	170,216
5 R01AG10669-05	MARSH, RICHARD F PRION PROTEIN IN MINK ENCEPHALOPATHY	07-10-95/06-30-96	UNIVERSITY OF WISCONSIN MADISON	143,805
5 R01AG10670-05	OTVOS, LASZLO CONFORMATION OF PHOSPHORYLATED BRAIN PEPTIDES	07-01-95/06-30-96	WISTAR INSTITUTE OF ANATOMY AND BIOL	135,735

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FY: 95				
5 R01AG10672-05	MOBLEY, WILLIAM C NEUROTROPHIC FACTOR THERAPY FOR ALZHEIMERS DISEASE	07-12-95/06-30-97	UNIVERSITY OF CALIFORNIA SAN FRANCIS	207,672
2 R01AG10673-04A1	JOHNSON, STEVEN A COMPLEMENT EXPRESSION IN ALZHEIMER'S DISEASE BRAIN	12-01-94/	UNIVERSITY OF SOUTHERN CALIFORNIA	
5 R01AG10675-06	MALTER, JAMES S APP MRNA DYSREGULATION AND ALZHEIMER'S DISEASE	07-01-95/06-30-97	UNIVERSITY OF WISCONSIN MADISON	123,638
5 R01AG10676-05	SALTON, STEPHEN R REGULATION OF VGF BY NEUROTROPHIC GROWTH FACTORS	07-15-95/06-30-96	MOUNT SINAI SCHOOL OF MEDICINE OF CU	181,743
5 R01AG10677-05	BOSKA, MICHAEL D SPECTROSCOPY OF ALZHEIMERS DISEASE & VASCULAR DEMENTIA	07-01-95/12-31-96	CASE WESTERN RESERVE UNIV-HENRY FORD	183,747
2 R01AG10679-04	GONZALEZ, GILBERTO R NEUROIMAGING IN THE DIAGNOSIS OF ALZHEIMER'S DISEASE	04-01-95/	MASSACHUSETTS GENERAL HOSPITAL	
5 R01AG10681-05	CARLSON, GEORGE A TRANSGENIC MODELS FOR ALZHEIMERS DISEASE	07-01-95/06-30-98	MC LAUGHLIN RESEARCH INS FOR BIOMED	165,624
5 R01AG10682-05	STOPA, EDWARD G HEPARIN-BINDING GROWTH FACTORS IN AGING AND ALZHEIMER'S	12-01-94/11-30-95	RHODE ISLAND HOSPITAL (PROVIDENCE, R	203,088
5 R01AG10684-05	SIMONS, ELIZABETH R PLATELET-ENDOTHELIAL CELL INTERACTIONS IN ALZHEIMERS	07-01-95/06-30-96	BOSTON UNIVERSITY	304,465
2 R01AG10685-05A1	FRAUTSCHY, SALLY A B PROTEIN DEPOSITION AND TOXICITY IN THE BRAIN	04-10-95/03-31-96	UNIVERSITY OF CALIFORNIA LOS ANGELES	99,922
5 R01AG10738-04	STANGE, KURT C BUFFERS OF IMPAIRMENT-DISABILITY CASCADE AMONG THE OLD	06-01-95/05-31-97	CASE WESTERN RESERVE UNIVERSITY	185,476
2 R01AG10746-04	KELNER, MICHAEL J GENETIC INSIGHT INTO DNA DAMAGE IN AGING	01-01-95/	UNIVERSITY OF CALIFORNIA SAN DIEGO	
2 R44AG10750-02A2	LETZT, ALAN M MEDICATION COMPLIANCE ASSISTANCE SYSTEM	06-15-95/05-31-96	INNOVATIVE ENTERPRISES INTERNATIONAL	375,000
5 R01AG10755-05	ROSE, GREGORY M CHOLINERGIC CIRCUITS AND HIPPOCAMPAL FUNCTION IN AGING	07-12-95/06-30-97	UNIVERSITY OF COLORADO HLTH SCIENCES	88,564
5 R29AG10756-05	WRIGLEY, J MICHAEL DEMOGRAPHIC STUDY OF DEMENTIA AMONG THE ELDERLY	09-01-95/08-31-96	UNIVERSITY OF ALABAMA AT BIRMINGHAM	108,580

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 R01AG10765-04	FLEMING, SHARON E NUTRIENT UTILIZATION BY INTESTINAL CELLS OF AGED ANIMALS	06-01-95/05-31-97	UNIVERSITY OF CALIFORNIA BERKELEY	112,050
5 P01AG10770-03	PRUSINER, STANLEY B MOLECULAR PATHOGENESIS OF AGE-DEPENDENT CNS DEGENERATION	04-01-95/03-31-96	UNIVERSITY OF CALIFORNIA SAN FRANCIS	1,001,486
3 P01AG10770-03S1	PRUSINER, STANLEY B MOLECULAR PATHOGENESIS OF AGE DEPENDENT CNS DEGENERATION	04-10-95/03-31-96	UNIVERSITY OF CALIFORNIA SAN FRANCIS	278,049
5 R01AG10785-03	STEWART, WALTER F AGE, LEAD EXPOSURE AND NEUROBEHAVIORAL DECLINE	09-01-95/08-31-96	JOHNS HOPKINS UNIVERSITY	585,285
7 R01AG10791-02	STOLLER, ELEANOR P ETHNICITY IN HELPING NETWORKS--STUDY OF RETIRED MIGRANTS	09-01-95/08-31-96	UNIVERSITY OF FLORIDA	234,333
5 P01AG10794-04	SACK, ROBERT L SLEEP, MELATONIN AND THE AGING CIRCADIAN CLOCK	07-01-95/06-30-96	OREGON HEALTH SCIENCES UNIVERSITY	855,777
5 R29AG10801-04	FREDMAN, LISA CAREGIVERS TO THE ELDERLY--RISKS AND OUTCOMES OF STRESS	07-01-95/06-30-96	UNIVERSITY OF MARYLAND BALT PROF SCH	80,830
5 R29AG10816-03	CEFALU, WILLIAM T CALORIC RESTRICTION, AGING AND CARDIOVASCULAR DISEASE	09-15-95/08-31-96	WAKE FOREST UNIVERSITY	105,638
3 R29AG10816-03S1	CEFALU, WILLIAM T CALORIC RESTRICTION, AGING AND CARDIOVASCULAR DISEASE	09-20-95/08-31-96	WAKE FOREST UNIVERSITY	49,960
5 R29AG10818-03	MUSCHKIN, CLARA G LIVING ARRANGEMENTS OF THE ELDERLY IN THE CARIBBEAN	09-01-95/08-31-97	DUKE UNIVERSITY	89,166
3 R01AG10819-03S1	SAGER, RUTH MOLECULAR BASIS OF SENESCENCE IN BREAST EPITHELIAL CELLS	07-01-95/05-31-96	DANA-FARBER CANCER INSTITUTE	42,625
2 R01AG10819-04	SAGER, RUTH MOLECULAR BASIS OF SENESCENCE IN BREAST EPITHELIAL CELLS	07-01-95/	DANA-FARBER CANCER INSTITUTE	
5 P01AG10821-03	CARLSON, BRUCE M AGE-RELATED INFLUENCES ON MUSCLE AND NERVE REGENERATION	02-01-95/12-31-95	UNIVERSITY OF MICHIGAN AT ANN ARBOR	675,518
2 R01AG10827-04	GELLER, ALFRED I HSV VECTOR SYSTEMS FOR GENE THERAPY OF AGING DISORDERS	08-01-95/	CHILDREN'S HOSPITAL (BOSTON)	
3 P01AG10829-02S1A1	WEI, JEANNE Y BASIC MECHANISMS OF AGING-SUPPLEMENTAL APPLICATION	02-01-95/	BETH ISRAEL DEACONESS MEDICAL CENTER	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 P01AG10829-03	WEI, JEANNE Y BASIC MECHANISMS OF AGING AND AGE-RELATED DISEASES	07-20-95/06-30-96	BETH ISRAEL DEACONESS MEDICAL CENTER	823,194
3 P01AG10836-03S1	LANDFIELD, PHILIP W HORMONAL REGULATION OF CALCIUM CURRENTS IN AGING	12-30-94/07-31-95	UNIVERSITY OF KENTUCKY	117,068
5 P01AG10836-04	LANDFIELD, PHILIP W CALICUM REGULATION IN BRAIN AGING AND ALZHEIMERS DISEASE	08-01-95/07-31-96	UNIVERSITY OF KENTUCKY	989,036
5 R01AG10837-04	ELBLE, RODGER J GAIT DISTURBANCES IN THE ELDERLY--INITIATION OF GAIT	07-10-95/06-30-96	SOUTHERN ILLINOIS UNIVERSITY SCH OF	117,599
5 R01AG10838-04	HARRISON, DAVID E HDL CHOLESTEROL LEVELS EFFECTS ON AGING	09-01-95/08-31-96	JACKSON LABORATORY	310,015
5 R01AG10845-03	TERI, LINDA AGING AND DEMENTIA--REDUCING DISABILITY IN ALZHEIMER'S	07-01-95/06-30-96	UNIVERSITY OF WASHINGTON	318,226
5 R29AG10848-04	OBER, BETH A SEMANTIC & REPETITION PRIMING IN NORMAL & ABNORMAL AGING	08-01-95/07-31-96	UNIVERSITY OF CALIFORNIA DAVIS	94,334
5 R01AG10851-03	COLLIER, TIMOTHY J REGNERATION IN THE AGED AND INJURED DOPAMINE SYSTEM	12-23-94/11-30-95	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	204,756
5 R01AG10853-04	CONLEY, KEVIN E AGE AND EXERCISE--MUSCLE FUNCTION BY NMR AND PERFORMANCE	08-01-95/07-31-96	UNIVERSITY OF WASHINGTON	226,855
7 R01AG10868-03	SAHU, ABHIRAM HYPOTHALAMIC NEUROPEPTIDE Y AND REPRODUCTIVE AGING	09-25-95/02-29-96	UNIVERSITY OF PITTSBURGH AT PITTSBUR	156,854
7 R29AG10869-04	UDOM, CELESTINE E NEURONAL AGING AND NEURODEGENERATIVE DISEASES	07-15-95/06-30-96	UNIVERSITY OF NORTH CAROLINA CHARLOT	97,695
5 R01AG10870-04	TUREK, FRED W AGING AND CIRCADIAN RHYTHMS	08-01-95/07-31-97	NORTHWESTERN UNIVERSITY	159,704
7 R29AG10871-02	ALWAY, STEPHEN E MECHANISMS FOR NEW FIBER FORMATION IN AGING MUSCLE	08-10-95/06-30-96	UNIVERSITY OF SOUTH FLORIDA	95,532
5 R01AG10875-03	RUBINSTEIN, ROBERT L CHILDREN'S PERSPECTIVES ON DEATH OF AN ELDERLY PARENT	03-01-95/02-29-96	PHILADELPHIA GERIATRIC CTR-FRIEDMAN	182,671
3 R29AG10879-03S1	SANO, MARY MAINTAINING FUNCTIONS IN AGED COMMUNITY RESIDENTS	02-05-95/06-30-95	COLUMBIA UNIVERSITY NEW YORK	27,506

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FY: 95				
5 R29AG10879-04	SANO, MARY MAINTAINING FUNCTIONS IN AGED COMMUNITY RESIDENTS	07-01-95/06-30-96	COLUMBIA UNIVERSITY NEW YORK	157,429
2 R01AG10880-03A1	CRAFT, SUZANNE GLUCOSE REGULATION AND MEMORY IN ALZHEIMERS DISEASE	04-01-95/03-31-96	UNIVERSITY OF WASHINGTON	103,328
5 R29AG10885-04	EVERS, BERNARD M SURGICAL STUDIES OF ONTOGENY, AGING AND THE GUT	06-10-95/05-31-96	UNIVERSITY OF TEXAS MEDICAL BR GALVE	119,001
5 R01AG10886-02	DE BEER, FREDERICK C SERUM AMYLOID A PROTEIN--ROLE IN ATHEROGENESIS	08-01-95/07-31-96	UNIVERSITY OF KENTUCKY	170,980
5 R29AG10887-03	HURWICZ, MARGO L DECISIONS ABOUT HMO SERVICE USE FOR LATE LIFE ILLNESS	08-10-95/07-31-96	UNIVERSITY OF MISSOURI-ST. LOUIS	94,704
5 R01AG10897-12	WEINER, MICHAEL W 1H AND 31P MRSI OF AGING BRAIN AND SENILE DEMENTIA	08-01-95/07-31-97	UNIVERSITY OF CALIFORNIA SAN FRANCIS	346,437
1 R43AG10902-01A3	WHELAN, EDWARD T EVALUATE THE EFFICACY OF A MODIFIED HYDRA/COMMODE LIFT	09-30-95/03-30-96	HEALTH AND COMMUNITY LIVING, INC.	85,411
5 R35AG10916-04	NIXON, RALPH A PROTEOLYSIS IN ALZHEIMERS DISEASE PATHOGENESIS	07-01-95/06-30-96	MC LEAN HOSPITAL (BELMONT, MA)	631,187
5 R35AG10917-04	MARTIN, GEORGE M LEADERSHIP AND EXCELLANCE IN ALZHEIMERS DISEASE AWARD	06-01-95/05-31-96	UNIVERSITY OF WASHINGTON	567,689
5 R01AG10939-04	MARKIDES, KYRIAKOS S LONGITUDINAL STUDY OF MEXICAN AMERICAN ELDERLY HEALTH	07-01-95/06-30-96	UNIVERSITY OF TEXAS MEDICAL BR GALVE	712,013
5 R01AG10940-04	HAMMAN, RICHARD F HISPANIC HEALTH AND AGING IN SAN LUIS VALLEY, CO	07-01-95/06-30-96	UNIVERSITY OF COLORADO HLTH SCIENCES	475,260
3 R01AG10941-03S2	LINDEMAN, ROBERT D NEW MEXICO SURVEY OF HEALTH IN ELDERLY HISPANICS	09-30-95/03-31-96	UNIVERSITY OF NEW MEXICO ALBUQUERQUE	138,257
5 R01AG10942-04	MACLEAN, DAVID B GROWTH HORMONE AND/OR EXERCISE FOR THE FRAIL ELDERLY	08-15-95/06-30-98	RHODE ISLAND HOSPITAL (PROVIDENCE, R	388,965
5 R01AG10943-04	SCHWARTZ, ROBERT S GROWTH FACTORS AND EXERCISE IN OLDER WOMEN	07-10-95/06-30-96	UNIVERSITY OF WASHINGTON	360,408
5 R35AG10953-04	FRANGIONE, BLAS ALZHEIMERS DISEASE AND AMYLOID PROTEINS	09-25-95/08-31-96	NEW YORK UNIVERSITY	662,377

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FY: 95				
1 R01AG10955-01A2	PRASAD, ANANDA S EFFECT OF ZINC ON IMMUNITY AND INFECTIONS IN ELDERLY	12-01-94/	WAYNE STATE UNIVERSITY	
5 R35AG10963-04	MAYEUX, RICHARD P GENE-ENVIRONMENT INTERACTIONS IN ALZHEIMERS DISEASE	06-05-95/05-31-96	COLUMBIA UNIVERSITY NEW YORK	657,196
5 R01AG10975-04	TENOVER, JOYCE S TESTOSTERONE THERAPY IN THE HYPOGONADAL AGING MALE	09-25-95/06-30-98	EMORY UNIVERSITY	268,867
2 R01AG10979-04	YEN, SAMUEL S BENEFICIAL EFFECTS OF GHRH AND EXERCISE IN AGING	07-01-95/	UNIVERSITY OF CALIFORNIA SAN DIEGO	
5 R01AG10997-04	HARTMAN, MARK L GROWTH HORMONE AND PHYSICAL TRAINING IN OLDER PERSONS	09-30-95/06-30-96	UNIVERSITY OF VIRGINIA CHARLOTTESVIL	286,079
3 R01AG10998-03S1	FALANGA, VINCENT STANOZOLOL IN THE ELDERLY WITH VENOUS ULCERS	09-30-95/06-30-97	UNIVERSITY OF MIAMI	60,847
3 R01AG11002-03S1	BLACKMAN, MARC R GROWTH HORMONE AND SEX STEROID EFFECTS ON SKELETAL MUSCL	12-01-94/	JOHNS HOPKINS UNIVERSITY	
5 R01AG11002-04	BLACKMAN, MARC R GROWTH HORMONE & SEX STEROID EFFECTS ON SKELETAL MUSCLE	07-15-95/06-30-96	JOHNS HOPKINS UNIVERSITY	292,950
1 R01AG11020-01A3	MEYDANI, MOHSEN VITAMIN E REQUIREMENT OF ELDERLY W/HIGH (N-3) PUFA INTAK	09-01-95/08-31-96	TUFTS UNIVERSITY BOSTON	124,658
5 R01AG11023-03	OOI, WEE L EPIDEMIOLOGY OF ORTHOSTATIC HYPOTENSION IN OLD AGE	08-05-95/07-31-96	HEBREW REHABILITATION CENTER FOR AGE	129,713
5 R01AG11026-17	MC CORMICK, J JUSTIN CARCINOGEN INDUCTION OF INFINITE LIFESPAN IN CELLS	04-01-95/06-30-96	MICHIGAN STATE UNIVERSITY	248,366
1 R29AG11031-01A2	LAUZON, ROBERT J THE MOLECULAR BASIS OF ORGANISMAL DEATH	12-01-94/	ALBANY MEDICAL COLLEGE OF UNION UNIV	
5 R01AG11032-02	WILLIS, SHERRY L ALZHEIMERS DISEASE AND EVERYDAY COMPETENCE	05-01-95/04-30-96	PENNSYLVANIA STATE UNIVERSITY-UNIV P	270,715
5 R01AG11037-03	BOOKSTEIN, FRED L STATISTICAL ANALYSIS OF BIOMARKERS OF AGING	04-01-95/03-31-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	147,958
7 R01AG11041-02	PRUCHNO, RACHEL A PSYCHOLOGICAL WELL BEING OF CORESIDENT GRANDPARENTS	05-24-96/12-31-96	BRADLEY UNIVERSITY	311,662

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
7 R01AG11042-03	BERKMAN, LISA F PHYSICAL AND COGNITIVE FUNCTIONING IN OLDEST OLD	09-05-95/07-31-98	HARVARD UNIVERSITY	284,165
5 R01AG11047-03	BOULT, CHARLES E TRIAL OF OUTPATIENT GERIATRIC EVALUATION AND MANAGEMENT	09-01-95/08-31-96	UNIVERSITY OF MINNESOTA TWIN CITIES	503,598
5 R29AG11053-03	PERKINS, SHERRIE L VITAMIN D AND CSF-1 REGULATION OF OSTEOCLASTOGENESIS	01-01-95/12-31-95	UNIVERSITY OF UTAH	103,454
5 R01AG11054-03	RUBEN, GEORGE C TAU STRUCTURES IN ALZHEIMER TANGLES AND ON MICROTUBULES	03-01-95/02-28-98	DARTMOUTH COLLEGE	191,205
5 R01AG11056-03	WOOD, W GIBSON AGING, BRAIN MEMBRANE CHOLESTEROL DOMAINS AND CALCIUM	09-01-95/08-31-96	UNIVERSITY OF MINNESOTA TWIN CITIES	255,467
5 R01AG11060-03	ROBERTS, JAY AGING BIOMARKER--CARDIAC NOREPINEPHRINE	04-01-95/03-31-96	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	185,963
2 R01AG11066-04	SMITH, JAMES R SENESCENT CELL DERIVED INHIBITORS OF DNA SYNTHESIS	08-01-95/	BAYLOR COLLEGE OF MEDICINE	
5 R01AG11067-03	MILLER, RICHARD A IMMUNE AND MUSCLE FUNCTION ASSAYS AS BIOMARKERS OF AGING	04-01-95/03-31-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	246,416
5 R01AG11079-04	WITTEN, MATTHEW STATISTICAL ANALYSIS OF BIOMARKERS OF AGING	04-01-95/03-31-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	147,346
5 R01AG11080-03	SELL, DAVID R PENTOSIDINE AS A BIOMARKER OF AGING	04-01-95/03-31-96	CASE WESTERN RESERVE UNIVERSITY	122,953
5 P01AG11084-03	DEMENT, WILLIAM C CIRCADIAN AND HOMEOSTATIC DETERMINANTS OF SLEEP IN AGING	06-01-95/05-31-96	STANFORD UNIVERSITY	857,984
5 R01AG11085-03	ELLEDGE, STEPHEN J CELL CYCLE GENES AND CELLULAR SENESCENCE AND AGING	01-15-95/12-31-95	BAYLOR COLLEGE OF MEDICINE	133,530
5 R01AG11087-03	MC FADDEN, PHILIP N DETERMINANTS OF LONGEVITY IN NEURONAL CELLS	01-15-95/12-31-96	OREGON STATE UNIVERSITY	67,700
5 R01AG11093-10	JOHNSON, LARRY CONTROL OF SERTOLI CELL NUMBER AND TESTICULAR SIZE	12-01-94/11-30-98	TEXAS A&M UNIVERSITY HEALTH SCIENCE	124,131
5 R01AG11098-02	LIU, JAMES H PROGESTOGEN EFFECT ON BONE AND COGNITION IN MENOPAUSE	03-01-95/02-29-96	UNIVERSITY OF CINCINNATI	514,995

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
3 R01AG11098-02S1	LIU, JAMES H VITAMIN D RECEPTOR/APOLIPOPROTEIN E GENES IN MENOPAUSE	07-01-95/	UNIVERSITY OF CINCINNATI	
5 R01AG11099-03	CRUICKSHANKS, KAREN J EPIDEMIOLOGY OF AGE-RELATED HEARING LOSS	03-05-95/02-28-96	UNIVERSITY OF WISCONSIN MADISON	498,744
5 R01AG11101-03	EVANS, DENIS A RISK FACTORS FOR INCIDENT ALZHEIMERS DISEASE	04-01-95/02-29-96	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	1,297,601
3 R01AG11101-03S1	EVANS, DENIS A RISK FACTORS FOR INCIDENT AD IN A BIRACIAL COMMUNITY	04-10-95/02-29-96	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	86,626
1 R01AG11105-01A3	ANDERSON, JOHN P WELL-YEARS IN OLDER POPULATIONS	12-01-94/	UNIVERSITY OF CALIFORNIA SAN DIEGO	
5 R01AG11119-03	GUARENTE, LEONARD P CELL SENESCENCE IN SACCHAROMYCES CEREVISIAE	03-01-95/02-29-96	MASSACHUSETTS INSTITUTE OF TECHNOLOG	148,691
5 R01AG11121-03	GABRIELI, JOHN D DECOMPOSITION OF MEMORY FAILURE IN ALZHEIMER'S DISEASE	05-01-95/01-31-97	STANFORD UNIVERSITY	207,831
1 R01AG11122-01A3	GANIATS, THEODORE G PREDICTING HEALTHY AGING	07-01-94/	UNIVERSITY OF CALIFORNIA SAN DIEGO	
5 R01AG11123-15	WOOD, JOHN G FUNCTIONAL COMPARTMENTALIZATION OF NEURONS AND GLIA	06-01-95/05-31-96	EMORY UNIVERSITY	173,733
5 R01AG11124-03	RIGNEY, DAVID R BIOMATHEMATICS OF CYCLIN DURING CELL SENESCENCE	01-01-95/12-31-95	BETH ISRAEL DEACONESS MEDICAL CENTER	100,709
5 R01AG11125-04	COLE, GREGORY M A NEW APPROACH TO ALZHEIMER PROTEIN BIOCHEMISTRY	06-10-95/05-31-96	SEPULVEDA RESEARCH CORPORATION	101,977
5 R01AG11126-03	ZAROW, CHRIS MICROGLIAL BIOLOGY--AGE-RELATED RESPONSE TO LESIONS	07-01-95/06-30-97	UNIVERSITY OF SOUTHERN CALIFORNIA	163,106
5 R01AG11133-02	KANE, ROSALIE A FAMILY CARE OF THE OLDEST OLD--A 5-YEAR STUDY	07-01-95/06-30-97	UNIVERSITY OF MINNESOTA TWIN CITIES	138,159
1 R01AG11135-01A2	SMITH, EVERETT L WATER EXERCISE TRAINING FOR WOMEN WITH OSTEOPOROSIS	07-01-95/	UNIVERSITY OF WISCONSIN MADISON	
5 R01AG11143-04	MC CORMICK, WAYNE C LONG TERM CARE USE IN JAPANESE AMERICAN ELDERLY	07-01-95/09-14-96	UNIVERSITY OF WASHINGTON	237,673

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
3 R01AG11144-02S2	BECKER, GAYLENE CULTURAL RESPONSE TO ILLNESS IN THE MINORITY AGED	02-05-95/04-30-95	UNIVERSITY OF CALIFORNIA SAN FRANCIS	25,000
5 R01AG11144-03	BECKER, GAYLENE CULTURAL RESPONSES TO ILLNESS IN THE MINORITY AGED	09-30-95/08-31-96	UNIVERSITY OF CALIFORNIA SAN FRANCIS	283,450
5 R01AG11152-04	CHAPLESKI, ELIZABETH LONG-TERM CARE--SOCIAL NETWORKS AND AMERICAN INDIAN AGE	07-01-95/09-30-97	WAYNE STATE UNIVERSITY	254,669
5 R01AG11171-04	TENNSTEDT, SHARON L PREDICTORS OF LONG TERM CARE USE--ETHNICITY VS CLASS	07-01-95/06-30-97	NEW ENGLAND RESEARCH INSTITUTES, INC	348,721
1 R01AG11172-01A3	FERRARO, KENNETH F LONG-TERM CARE AMONG BLACK AND WHITE OLDER ADULTS	01-01-95/	INDIANA UNIV-PURDUE UNIV AT INDIANAP	
1 R01AG11179-01A2	ESPINO, DAVID V CAREGIVERS OF AGED MEXICAN AMERICANS SURVEY	12-01-92/	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	
3 R01AG11182-03S1	LUBBEN, JAMES E OLDER KOREAN AMERICANS--SOCIAL SUPPORT & LONG TERM CARE	12-30-94/06-30-95	UNIVERSITY OF CALIFORNIA LOS ANGELES	18,979
5 R01AG11182-04	LUBBEN, JAMES E OLDER KOREAN AMERICANS--SOCIAL SUPPORT & LONG TERM CARE	08-10-95/06-30-97	UNIVERSITY OF CALIFORNIA LOS ANGELES	236,833
5 R01AG11183-04	COWARD, RAYMOND T RACE AND RESIDENCE DIFFERENCES IN LONG TERM CARE	09-01-95/06-30-97	UNIVERSITY OF FLORIDA	214,868
3 R01AG11183-04S1	COWARD, RAYMOND T RACE AND RESIDENCE DIFFERENCES IN LONG TERM CARE	09-15-95/06-30-97	UNIVERSITY OF FLORIDA	41,524
2 R25AG11197-04	RANKIN, ERIC D THREE-TIERED ALZHEIMERS TRAINING FOR WV PROFESSIONALS	07-12-95/06-30-96	WEST VIRGINIA UNIVERSITY	107,985
2 R25AG11213-04	POTTER, JANE F REACHING RURAL COMMUNITIES WITH ALZHEIMERS EDUCATION	07-20-95/06-30-96	UNIVERSITY OF NEBRASKA MEDICAL CENTE	107,760
2 R25AG11216-04	LOMBARDO, NANCY E BOSTON MINORITY DEMENTIA OUTREACH AND EDUCATION PROGRAM	07-20-95/06-30-96	HEBREW REHABILITATION CENTER FOR AGE	104,608
2 R25AG11219-04	CONNELL, CATHLEEN M MICHIGAN ALZHEIMERS DISEASE COMMUNITY EDUCATION	07-20-95/06-30-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	103,380
7 R01AG11220-02	FIELD, DOROTHY RELATIONSHIP PRECURSORS OF WELL-BEING IN OLD AGE	01-01-96/08-31-96	PUBLIC HEALTH INSTITUTE	161,989

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FY: 95				
5 R29AG11223-02	CUTLER, DAVID M PUBLIC POLICY FOR AN AGING SOCIETY	02-01-95/01-31-96	NATIONAL BUREAU OF ECONOMIC RESEARCH	90,256
5 R01AG11227-03	NESTLER, JOHN E INSULIN REGULATION OF HUMAN ADRENAL ANDROGEN METABOLISM	01-01-95/12-31-97	VIRGINIA COMMONWEALTH UNIVERSITY	114,302
5 R01AG11230-03	RAZ, NAFTALI NEURAL CORRELATES OF AGE-RELATED DIFFERENCES IN MEMORY	08-01-95/06-30-96	UNIVERSITY OF MEMPHIS	169,223
5 R01AG11233-02	RUBINSTEIN, ROBERT L CHRONIC POVERTY AND THE SELF IN LATER LIFE	09-01-95/08-31-96	PHILADELPHIA GERIATRIC CTR-FRIEDMAN	215,397
5 R01AG11234-03	KATZ, IRA R DELIRUM RECONSIDERED--ACUTE COGNITIVE IN THE AGED	03-01-95/02-29-96	UNIVERSITY OF PENNSYLVANIA	275,717
5 R01AG11240-03	MC LAUGHLIN, DIANE K LIFE COURSE TRANSITIONS, GEORAPHY, ELDERLY POVERTY	03-01-95/02-28-97	PENNSYLVANIA STATE UNIVERSITY-UNIV P	112,889
7 R29AG11241-03	FISHER, JANE E CLASSIFICATION OF AGITATION IN ALZHEIMER'S DISEASE	09-01-95/08-31-96	UNIVERSITY OF NEVADA RENO	94,589
5 R29AG11248-04	MINTZER, JACOBO E CAREGIVING FOR ALZHEIMERS PATIENTS	06-01-95/05-31-96	MEDICAL UNIVERSITY OF SOUTH CAROLINA	105,537
5 R01AG11249-03	BURKE, DAVID T AGING-RELATED REACTIVATION OF X CHROMOSOME GENES	01-15-95/12-31-95	UNIVERSITY OF MICHIGAN AT ANN ARBOR	170,989
5 R01AG11255-02	KREBS, DAVID E VESTIBULAR REHAB & STABILITY MODELING FOR OLDER PATIENTS	09-01-95/08-31-96	MASSACHUSETTS GENERAL HOSPITAL	202,633
5 P60AG11268-04	COHEN, HARVEY J CLAUDE D PEPPER OLDER AMERICANS INDEPENDENCE CENTERS	07-01-95/06-30-96	DUKE UNIVERSITY	1,958,163
1 R01AG11275-01A3	FOSU, GABRIEL B AFRICAN-AMERICANS AND ALZHEIMER'S SERVICE USE	01-01-95/	UNIVERSITY OF MARYLAND BALT PROF SCH	
7 R01AG11285-04	MILLER, BAILA H MINORITY USE OF LONG TERM CARE--METHOD AND MEANING	07-01-95/06-30-97	CASE WESTERN RESERVE UNIVERSITY	223,468
5 R01AG11290-02	MEHTA, PANKAJ D CYTOKINES IN DOWN SYNDROME--LINK TO AD NEUROPATHOLOGY	09-01-95/08-31-96	INSTITUTE FOR BASIC RES IN DEV DISAB	192,151
5 R01AG11294-04	JOHN, KENNETH R NAVAJO NATION COMPRESHENSIVE LONGTERM CARE STUDY	07-01-95/06-30-96	UNIVERSITY OF NORTH TEXAS	174,217

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
2 R44AG11303-02	MOERDER, KARL E TRACKING & MONITORING TECHNOLOGIES FOR ELDER CARE	07-01-95/	TORREY SCIENCE CORPORATION	
5 R44AG11315-03	TORDELLA, STEPHEN J OLDER AMERICANS MARKET--FORCASTS FOR US COUNTIES	06-10-95/05-31-98	DECISION DEMOGRAPHICS	237,241
2 R25AG11325-04	CUMMINGS, JEFFREY L LOS ANGELES AREA ALZHEIMER'S OUTREACH PROGRAM (LAAAOP)	08-01-95/06-30-96	UNIVERSITY OF CALIFORNIA LOS ANGELES	107,857
5 R01AG11331-04	CAPLAN, ARNOLD I EXTRACELLULAR MATRIX AND AGING (SKIN)	06-10-95/05-31-96	CASE WESTERN RESERVE UNIVERSITY	344,804
5 P01AG11337-02	YOUNG, ANNE B METABOLIC & EXCITOTOXIC CASCADE IN AGING & ALZHEIMERS	04-05-95/03-31-96	MASSACHUSETTS GENERAL HOSPITAL	1,085,023
5 U01AG11343-04	FRENCH, FRANK S TRANSCRIPTION REGULATOR MUTATIONS IN PROSTATE CANCER	07-01-95/06-30-96	UNIVERSITY OF NORTH CAROLINA CHAPEL	264,947
1 P01AG11345-01A2	MURASKO, DONNA M TUMORS, RETROVIRUSES & IMMUNE RESPONSES OF AGED MICE	04-01-95/	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	
5 R01AG11350-03	RUSSELL, MICHAEL J ANIMAL MODEL OF ALZHEIMER'S DISEASE	08-01-95/05-31-96	UNIVERSITY OF CALIFORNIA DAVIS	157,297
5 R29AG11351-03	SKINNER, MICHAEL H COGNITIVE EFFECTS OF ANTIHYPERTENSIVE DRUGS IN AGED RATS	06-01-95/05-31-96	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	98,171
5 R01AG11354-04	ZARIT, STEVEN H MENTAL HEALTH OF CAREGIVERS OF THE ELDERLY	06-01-95/05-31-96	PENNSYLVANIA STATE UNIVERSITY-UNIV P	434,811
1 P01AG11355-01A1	OLNEY, JOHN W EXCITATORY TRANSMITTERS, MEMORY, AGING AND DEMENTIA	02-20-95/01-31-96	WASHINGTON UNIVERSITY	770,001
5 R29AG11357-02	BAKOUCHE, OUAHID ANTITUMORAL PROTERTIES OF AGED MONOCYTES	03-01-95/02-29-96	NORTHWESTERN UNIVERSITY	99,263
1 P01AG11370-01A1	SONNTAG, WILLIAM E GROWTH HORMONE & IGF-1 IN CNS & CEREBROVASCULAR AGING	04-01-95/03-31-96	WAKE FOREST UNIVERSITY	396,731
5 R37AG11375-03	KAPLAN, GEORGE A HEALTH AND FUNCTION OVER THREE DECADES IN ALAMEDA COUNTY	04-01-95/03-31-96	PUBLIC HEALTH INSTITUTE	440,159
3 R37AG11375-03S1	KAPLAN, GEORGE A HEALTH AND FUNCTION OVER THREE DECADES IN ALAMEDA COUNTY	07-05-95/03-31-96	PUBLIC HEALTH INSTITUTE	5,000

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FY: 95				
5 R01AG11378-03	JACK, CLIFFORD R MR HIPPOCAMPAL CHANGES IN ALZHEIMER'S DISEASE AND AGING	06-01-95/05-31-96	MAYO FOUNDATION	256,959
5 R01AG11379-02	AVIS, NANCY E AGE-RELATED DECLINE IN SEXUAL ACTIVITY	01-01-95/12-31-97	NEW ENGLAND RESEARCH INSTITUTES, INC	145,833
5 R01AG11380-02	BREITNER, JOHN C S EPIDEMIOLOGY OF ALZHEIMERS DEMENTIA IN CACHE COUNTY UT	09-05-95/08-31-96	DUKE UNIVERSITY	1,400,972
7 R01AG11382-04	POLLAK, CHARLES P DISRUPTIVE NOCTURNAL BEHAVIORS IN ELDER-CAREGIVER PAIRS	09-01-95/06-30-96	OHIO STATE UNIVERSITY	244,047
5 R01AG11398-04	GOODMAN, MYRON F DNA ENZYMES IN AGING IN DIVIDING AND NONDIVIDING CELLS	06-01-95/05-31-96	UNIVERSITY OF SOUTHERN CALIFORNIA	326,367
1 R01AG11401-01A2	MACERA, CAROLINE A CORRELATES OF BURDEN AMONG RURAL & MINORITY CAREGIVERS	12-01-94/	UNIVERSITY OF SOUTH CAROLINA AT COLU	
1 R01AG11402-01A1	HOULDIN, ARLENE D PSYCHOLOGICAL INTERVENTIONS--OLDER HIP FRACTURE PATIENTS	12-01-94/	UNIVERSITY OF PENNSYLVANIA	
5 R29AG11403-02	FERRARIS, RONALDO P DIETARY REGULATION OF NUTRIENT ABSORPTION IN AGING	03-01-95/02-29-96	UNIVERSITY OF MEDICINE & DENTISTRY O	98,418
3 R29AG11403-02S1	FERRARIS, RONALDO P DIETARY REGULATION OF NUTRIENT ABSORPTION IN AGING	09-15-95/02-29-96	UNIVERSITY OF MEDICINE & DENTISTRY O	99,888
5 R29AG11407-03	ZIMMERMAN, SHERYL I AGED WITH DEMENTIA--FACILITY EFFECTS ON HEALTH OUTCOMES	09-01-95/08-31-96	UNIVERSITY OF MARYLAND BALT PROF SCH	145,000
5 P01AG11412-02	VAN CAUTER, EVE Y ALTERATIONS OF CIRCADIAN TIMING IN AGING	09-01-95/01-31-97	UNIVERSITY OF CHICAGO	799,020
5 R01AG11427-03	PFEFFERBAUM, ADOLF MR SPECTROSCOPIC BRAIN IMAGING IN AGING AND DEMENTIA	07-15-95/06-30-96	STANFORD UNIVERSITY	193,491
5 R01AG11431-04	MC KINLAY, SONJA M TRANSMENOPAUSAL CHANGES IN SEX HORMONES AND LIPIDS	09-01-95/08-31-96	NEW ENGLAND RESEARCH INSTITUTES, INC	179,338
5 R01AG11432-04	MCKINLAY, SONJA M RISK FACTORS FOR TRANSMENOPAUSAL BONE LOSS	09-01-95/08-31-98	NEW ENGLAND RESEARCH INSTITUTES, INC	187,873
5 R01AG11441-03	WRONSKI, THOMAS J NOVEL HORMONE DELIVERY SYSTEM FOR TREATING OSTEOPENIA	08-25-95/07-31-96	UNIVERSITY OF FLORIDA	198,698

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 R01AG11451-03	HOYER, WILLIAM J AGING OF VISUAL-COGNITIVE MECHANISMS ON A NEURAL NETWORK	04-01-95/08-14-96	SYRACUSE UNIVERSITY AT SYRACUSE	112,221
5 R01AG11455-03	BURKHALTER, ANDREAS H AGED-RELATED CHANGES IN CORTICAL CIRCUITS IN HUMANS	07-01-95/12-31-96	WASHINGTON UNIVERSITY	89,640
5 R01AG11465-02	SCARPACE, PHILIP J BROWN FAT THERMOGENESIS RESPONSE TO COLD AND AGE	12-01-94/11-30-95	UNIVERSITY OF FLORIDA	117,616
5 R01AG11472-02	THORPE, SUZANNE R LIPOPROTEIN OXIDATION IN ATHEROSCLEROSIS AND AGING	01-01-95/12-31-95	UNIVERSITY OF SOUTH CAROLINA AT COLU	178,100
5 R01AG11475-03	DAYNES, RAYMOND A PDGF EFFECTS ON T-CELL BEHAVIOR IN AGING	04-01-95/03-31-96	UNIVERSITY OF UTAH	195,613
2 R01AG11481-04	LEVY, EFRAT BETAPP ASSOCIATED PROTEINS	07-01-95/	NEW YORK UNIVERSITY	
5 R01AG11486-04	LINDEMAN, DAVID A COSTS OF AD SPECIAL CARE UNITS	09-01-95/08-31-98	UNIVERSITY OF CALIFORNIA DAVIS	219,159
5 R01AG11491-03	DOBSON, JAMES G, JR MECHANISMS OF AGING--ENHANCED HEART ADENOSINE	05-01-95/04-30-96	UNIVERSITY OF MASSACHUSETTS MEDICAL	195,917
5 R01AG11492-03	ARNHEIM, NORMAN MITOCHONDRIAL DNA MUTATION AND AGING	05-01-95/04-30-96	UNIVERSITY OF SOUTHERN CALIFORNIA	168,081
1 R43AG11500-01A2	STERNS, RONNI S CARRIER LIFT TO ENHANCE DAILY ACTIVITIES	02-20-95/08-15-96	LIFESPAN ASSOCIATES	80,063
2 R44AG11507-02	CARD, JOSEFINA J ESTABLISHING THE GERONTOLOGY INSTRUMENT ARCHIVE (GINA)	11-01-94/	SOCIOMETRICS CORPORATION	
2 R01AG11508-04A1	GANDY, SAMUEL E MOLECULAR CELL BIOLOGY OF ALZHEIMER AMYLOIDOGENESIS	07-01-95/	CORNELL UNIVERSITY MEDICAL CENTER	
2 R55AG11508-04A1	GANDY, SAMUEL E MOLECULAR CELL BIOLOGY OF ALZHEIMER AMYLOIDOGENESIS	09-01-95/08-31-97	CORNELL UNIVERSITY MEDICAL CENTER	100,000
2 R44AG11517-02	MENKE, STEPHEN A HOMECARE SUITES--A HOMECARE ALTERNATIVE FOR ELDERS	02-20-95/01-31-96	MOBILE CARE, INC.	279,118
1 R43AG11518-01A2	FREUND, KATHERINE L TRANSPORTATION FOR THE ELDERLY: A FEASIBILITY STUDY	11-01-94/	KATHERINE FREUND ASSOCIATES	

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FY: 95				
5 R44AG11520-03	RAGER, ROBERT IMPROVING OLDER PERSONS MEMORY SKILLS WITH CD-I TV	04-01-95/03-31-96	COMPACT DISC, INC.	260,000
5 R01AG11526-04	DAVIES, THERESA A AMYLOID PRECURSOR PROTEIN IN NORMAL/DEMENTIA PLATELETS	07-01-95/06-30-96	BOSTON UNIVERSITY	266,426
1 R01AG11528-01A2	JOSEPH, RAJIV DEFINING DIFFERENTIALLY EXPRESSED GENES IN BRAIN AGING	12-01-94/	CASE WESTERN RESERVE UNIV-HENRY FORD	
5 R01AG11530-03	MC CALLUM, RODERICK E AGING AND TNF-GLUCOCORTICOID INTERACTIONS IN SEPSIS	08-01-95/07-31-96	TEXAS A&M UNIVERSITY HEALTH SCIENCE	160,859
5 P01AG11531-09	WISNIEWSKI, HENRY M CHANGES IN FUNCTION AMONG MENTALLY RETARDED ADULTS	07-01-95/06-30-96	NEW YORK ST OFF OF MR AND DEV DISAB	671,679
2 R44AG11533-02A1	TENNSTEDT, SHARON L OLDER PATIENTS AND PHYSICIANS AS PARTNERS	05-25-95/03-31-96	NEW ENGLAND RESEARCH INSTITUTES, INC	278,274
3 R01AG11534-03S1	AUSTAD, STEVEN N MANIPULATION OF AGING--DIETARY	07-01-94/12-31-95	UNIVERSITY OF IDAHO	28,666
5 R01AG11535-04	MUSCH, TIMOTHY I VASCULAR TRANSPORT CAPACITY OF MUSCLE IN HEART FAILURE	09-01-95/08-31-97	KANSAS STATE UNIVERSITY	114,438
5 R01AG11536-07	WEITZMAN, SIGMUND A OXYGEN RADICAL INDUCED MALIGNANT TRANSFORMATION	08-01-95/07-31-97	NORTHWESTERN UNIVERSITY	115,243
3 R01AG11536-07S1	WEITZMAN, SIGMUND A OXYGEN RADICAL INDUCED MALIGNANT TRANSFORMATION	09-15-95/07-31-97	NORTHWESTERN UNIVERSITY	49,288
1 R01AG11537-01A1	LAUER, JOAN B WEIGHT CYCLING, AGING AND LONGEVITY IN RATS	07-01-95/	INDIANA UNIV-PURDUE UNIV AT INDIANAP	
5 R01AG11538-03	KAUFMAN, SHARON R PHYSICIAN DILEMMAS IN GERIATRIC CARE	09-01-95/02-28-97	UNIVERSITY OF CALIFORNIA SAN FRANCIS	59,652
3 P01AG11542-02S1	LEE, VIRGINIA M IN VITRO AND IN VIVO MODELS OF ALZHEIMERS DISEASE	01-20-95/08-31-95	UNIVERSITY OF PENNSYLVANIA	107,145
5 P01AG11542-03	LEE, VIRGINIA M IN VITRO AND IN VIVO MODELS OF ALZHEIMER'S DISEASE	09-01-95/08-31-96	UNIVERSITY OF PENNSYLVANIA	891,159
5 R01AG11549-02	GILMORE, GROVER C CONTRAST ENHANCEMENT AND READING IN ALZHEIMERS DISEASE	07-01-95/06-30-96	CASE WESTERN RESERVE UNIVERSITY	160,037

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FY: 95				
5 R01AG11552-03	WILMOTH, JOHN R MEASUREMENT AND ANALYSIS OF OLDEST-OLD MORTALITY	07-01-95/09-29-96	UNIVERSITY OF CALIFORNIA BERKELEY	48,716
1 P01AG11555-01A1	SHULTS, CLIFFORD DEMENTIAS ASSOCIATED WITH LEWY BODIES	07-01-95/	UNIVERSITY OF CALIFORNIA SAN DIEGO	
5 R01AG11561-02	VOOGT, JAMES L AGING AND CHANGES IN DOPAMINE NEURONS	09-01-95/08-31-96	UNIVERSITY OF KANSAS MEDICAL CENTER	150,479
5 R29AG11564-02	PAVALKO, ELIZA K WORK AND HEALTH AMONG WOMEN IN MIDLIFE AND BEYOND	04-01-95/03-31-96	INDIANA UNIVERSITY BLOOMINGTON	96,234
1 R01AG11566-01A1	FIREBAUGH, GLENN ARE THERE DEEPENING DIVISIONS BETWEEN OLDER AND YOUNGER	06-01-95/	PENNSYLVANIA STATE UNIVERSITY-UNIV P	
5 R01AG11567-02	IDLER, ELLEN L EPIDEMIOLOGY OF SELF-RATED HEALTH AND FUNCTIONAL ABILITY	07-10-95/06-30-96	RUTGERS THE STATE UNIV NEW BRUNSWICK	90,606
5 R13AG11570-03	WISE, DAVID A SUMMER INSTITUTE WORKSHOP ON AGING AND HEALTH CARE	07-01-95/06-30-96	NATIONAL BUREAU OF ECONOMIC RESEARCH	30,000
1 R01AG11577-01A2	PERLMUTTER, DAVID H SEC RECEPTOR AND ALZHEIMERS DISEASE	02-05-95/11-30-95	WASHINGTON UNIVERSITY	155,721
1 R01AG11583-01A2	PERRY, HORACE M, III VITAMIN D AND FRAILTY IN THE AGED	12-01-94/	ST. LOUIS UNIVERSITY	
1 R01AG11583-01A3	PERRY, HORACE M, III VITAMIN D AND FRAILY IN THE AGED	07-01-95/	ST. LOUIS UNIVERSITY	
5 P01AG11585-02	GLASER, RONALD M STRESS, AGING, AND NEUROENDOCRINE/IMMUNE CHANGES	08-10-95/07-31-96	OHIO STATE UNIVERSITY	1,013,250
1 R01AG11586-01A1	BURR, JEFFREY A CONTEXTUAL MODELS OF ELDERLY LIVING ARRANGEMENTS	01-01-95/	STATE UNIVERSITY OF NEW YORK AT BUFF	
5 R01AG11595-02	GOLDSTEIN, IRIS B BLOOD PRESSURE, COGNITIVE FUNCTION, AND MRI	04-12-95/03-31-96	UNIVERSITY OF CALIFORNIA LOS ANGELES	388,470
1 R29AG11602-01A2	WU, GE AGE, SENSATION AND FALLS--BIOMECHANICS AND PREVENTION	08-01-95/07-31-96	PENNSYLVANIA STATE UNIVERSITY-UNIV P	110,071
1 R01AG11604-01A2	AIKEN, JUDD M DIETARY RESTRICTION, MT DNA ABNORMALITIES, AND AGING	07-10-95/06-30-96	UNIVERSITY OF WISCONSIN MADISON	140,620

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 R29AG11605-02	SHARPS, MATTHEW J AGING AND MEMORY FOR RELATIONAL AND IMAGERIC INFORMATION	07-01-95/06-30-96	CALIFORNIA STATE UNIVERSITY FRESNO	89,747
1 R01AG11611-01A1	HERLIHY, JEREMIAH T AGING, DIET AND SYMPATHETIC NERVOUS SYSTEM FUNCTION	12-01-94/	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	
5 R01AG11622-03	MADDEN, DAVID J NEUROIMAGING OF AGE-RELATED COGNITIVE CHANGES	09-01-95/08-31-96	DUKE UNIVERSITY	286,491
1 R01AG11623-01A2	YEUNG, CHO-YAU BRIAN SPECIFIC AMYLOID PLAQUE FORMATION	12-23-94/11-30-95	UNIVERSITY OF ILLINOIS AT CHICAGO	254,426
3 R37AG11624-01A1S1	MOR, VINCENT DO GOOD NURSING HOMES ACHIEVE GOOD OUTCOMES?	04-25-95/06-30-95	BROWN UNIVERSITY	5,000
5 R37AG11624-02	MOR, VINCENT DO GOOD NURSING HOMES ACHIEVE GOOD OUTCOMES?	07-01-95/06-30-96	BROWN UNIVERSITY	248,646
5 R01AG11628-02	SPEAR, PETER D NEURAL BASES OF VISUAL DEFICITS DURING AGING	05-01-95/04-30-96	UNIVERSITY OF WISCONSIN MADISON	248,691
5 R01AG11636-03	SCHULTZ, STEVE C THREE-DIMENSIONAL STRUCTURE OF THE ENDS OF CHROMOSOMES	09-01-95/08-31-96	UNIVERSITY OF COLORADO AT BOULDER	178,816
5 R29AG11638-03	SMITH, GLENN E PREDICTORS OF INSTITUTIONALIZATION IN DEMENTIA PATIENTS	09-01-95/08-31-96	MAYO FOUNDATION	108,595
5 R01AG11643-03	HARRISON, DAVID E SELECTING AND IDENTIFYING GENES IMPORTANT IN LONGEVITY	09-01-95/08-31-96	JACKSON LABORATORY	330,666
3 R01AG11643-03S1	HARRISON, DAVID E SELECTING AND IDENTIFYING GENES IMPORTANT IN LONGEVITY	09-20-95/08-31-96	JACKSON LABORATORY	45,177
5 R01AG11644-03	TOWER, JOHN G DROSOPHILA LONGEVITY ASSURANCE GENES	09-05-95/08-31-96	UNIVERSITY OF SOUTHERN CALIFORNIA	192,395
1 R01AG11648-01A2	HELFAND, STEPHEN L CONTROL OF GENE REGULATION DURING AGING	04-01-95/	UNIVERSITY OF CONNECTICUT HEALTH CEN	
5 R01AG11653-03	MOUNTZ, JOHN D CORRECTION OF T-CELL AGING IN TRANSGENIC MICE	08-01-95/07-31-96	UNIVERSITY OF ALABAMA AT BIRMINGHAM	175,527
1 R01AG11654-01A2	SHMOOKLER-REIS, ROBERT J ISOLATION & CHARACTERIZATION OF LIFESPAN EXTENDING GENES	12-01-94/	UNIVERSITY OF ARKANSAS MED SCIS LTL	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 R01AG11658-03	CAMPISI, JUDITH SENESCENCE AND LONGEVITY-MODULATING GENES	09-01-95/08-31-96	UNIVERSITY OF CALIFORNIA BERKELEY	266,115
5 R01AG11659-03	WARD, SAMUEL LIFESPAN ENHANCING MUTATIONS IN C ELEGANS	08-01-95/07-31-96	UNIVERSITY OF ARIZONA	189,340
5 R01AG11660-03	JAZWINSKI, S MICHAL YEAST--A SOURCE AND A TEST SYSTEM FOR MAMMALIAN LAGS	09-01-95/08-31-96	LOUISIANA STATE UNIV MED CTR NEW ORL	265,883
3 P50AG11684-02S1	BALL, KARLENE K ENHANCING MOBILITY IN THE ELDERLY	05-25-95/08-31-95	WESTERN KENTUCKY UNIVERSITY	71,081
7 P50AG11684-04	BALL, KARLENE K ENHANCING MOBILITY IN THE ELDERLY	05-30-96/08-31-96	UNIVERSITY OF ALABAMA AT BIRMINGHAM	210,128
5 R01AG11687-03	MILLER, RICHARD A GENETIC CONTROL OF LONGEVITY IN MICE	09-01-95/08-31-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	285,331
5 R01AG11703-02	FRIED, LINDA P RISK FACTORS FOR PHYSICAL DISABILITY IN AGING WOMEN	06-01-95/05-31-96	JOHNS HOPKINS UNIVERSITY	338,915
5 R01AG11705-02	FERRARO, KENNETH F AGING & HEALTH ASSESSMENTS AMONG BLACK & WHITE ADULTS	08-01-95/04-30-97	PURDUE UNIVERSITY WEST LAFAYETTE	106,111
5 R29AG11706-03	MC CLELLAN, MARK B HEALTH TECHNOLOGIES' COSTS AND OUTCOMES IN THE ELDERLY	06-01-95/05-31-96	NATIONAL BUREAU OF ECONOMIC RESEARCH	104,212
5 P50AG11711-03	PILLEMER, KARL A CORNELL CENTER ON APPLIED GERONTOLOGY	09-25-95/07-31-96	CORNELL UNIVERSITY ITHACA	457,961
7 P50AG11715-03	PARK, DENISE C SOUTHEASTERN CENTER FOR APPLIED COGNITIVE AGING RESEARCH	09-20-95/07-31-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	522,913
5 P50AG11719-03	MORRIS, JOHN N CENTER OF RESEARCH ON APPLIED GERONTOLOGY	09-20-95/08-31-96	HEBREW REHABILITATION CENTER FOR AGE	491,598
5 R01AG11722-03	CURTSINGER, JAMES W QTL-MAPPING OF LONGEVITY GENES IN DROSOPHILA	09-05-95/08-31-96	UNIVERSITY OF MINNESOTA TWIN CITIES	212,638
1 R01AG11725-01A1	BEHRMAN, JERE R INTRAFAMILY RESOURCE ALLOCATIONS AND THEIR CONSEQUENCES	09-05-95/08-31-96	UNIVERSITY OF PENNSYLVANIA	273,096
5 R01AG11728-03	LUNDBLAD, VICTORIA J TELOMERE REPLICATION AND SENESCENCE IN YEAST	09-01-95/08-31-96	BAYLOR COLLEGE OF MEDICINE	178,368

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FY: 95				
1 R01AG11745-01A2	SCREMIN, OSCAR U SYSTEMIC AND BRAIN CHOLINE DYNAMICS IN AGING RATS	04-01-95/	BACRA, INC.	
5 P50AG11748-03	CZAJA, SARA J MIAMI CENTER ON HUMAN FACTORS AND AGING RESEARCH	09-20-95/07-31-96	UNIVERSITY OF MIAMI CORAL GABLES	279,453
7 R01AG11755-03	GREENAMYRE, JOHN T ELECTRON TRANSPORT ENZYMES IN ALZHEIMERS DISEASE	09-25-95/04-30-96	EMORY UNIVERSITY	173,317
5 R01AG11759-04	FUTRELL, NANCY N CALICIFICATION AND LACUNE FORMATION IN AGED RAT BRAIN	02-20-95/01-31-96	MEDICAL COLLEGE OF OHIO AT TOLEDO	176,641
3 R01AG11759-04S1	FUTRELL, NANCY N CALICIFICATION AND LACUNE FORMATION IN AGED RAT BRAIN	05-07-95/01-31-96	MEDICAL COLLEGE OF OHIO AT TOLEDO	28,248
5 R37AG11761-02	LEE, RONALD D ECONOMIC DEMOGRAPHY OF INTER-AGE TRANSFER	04-01-95/03-31-96	UNIVERSITY OF CALIFORNIA BERKELEY	176,629
5 R01AG11762-02	SCHELLENBERG, GERARD D CLONING OF THE CHROMOSOME 14 ALZHEIMERS DISEASE GENE	05-15-95/04-30-96	UNIVERSITY OF WASHINGTON	215,356
1 R43AG11768-01A1	FREEMAN, JEFF E LIMIT ALARM FOR THE ALZHEIMER OR SIMILARLY HANDICAPPED	03-01-95/	MICRO CONTROLS COMPANY	
2 R44AG11771-02A1	LANE, STEPHEN S NONINTERACTIVE HOME MONITOR PHASE II	09-30-95/08-31-96	AMRON CORPORATION	302,499
5 R01AG11773-02	MACDONALD, MARYELLEN C SENTENCE PROCESSING IN NORMAL AGING AND DEMENTIA	09-01-95/08-31-96	UNIVERSITY OF SOUTHERN CALIFORNIA	240,203
2 R44AG11787-02	TENNSTEDT, SHARON L PHYSICAL VS MENTAL HEALTH OF OLDER PERSONS--A VIDEO	04-10-95/03-31-96	NEW ENGLAND RESEARCH INSTITUTES, INC	355,653
1 R43AG11793-01A1	NG, CHONG TECK RETIREMENT PLANNING EDUCATION USING ICON-BASED HYPERTEXT	07-01-95/	AMERICAN RESEARCH CORP OF VIRGINIA	
5 R29AG11805-03	BABB, TONY G NORMAL AGING AND VENTILATORY LIMITS TO PERFORMANCE	04-01-95/03-31-96	UNIVERSITY OF TEXAS SW MED CTR/DALLA	88,636
5 R01AG11810-02	CLARK, FLORENCE A EFFECTIVENESS OF TWO OT TREATMENTS FOR THE ELDERLY	03-15-95/01-31-96	UNIVERSITY OF SOUTHERN CALIFORNIA	266,206
3 R01AG11810-02S1	CLARK, FLORENCE A EFFECTIVENESS OF TWO OT TREATMENTS FOR THE ELDERLY	04-10-95/01-31-96	UNIVERSITY OF SOUTHERN CALIFORNIA	18,177

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
3 R01AG11811-03S2	EVANS, WILLIAM J PROTEIN, ENERGY & EXERCISE--EFFECTS ON SENESCENT MUSCLE	12-20-94/04-30-95	PENNSYLVANIA STATE UNIVERSITY-UNIV P	26,970
5 R01AG11811-04	EVANS, WILLIAM J PROTEIN, ENERGY & EXERCISE: EFFECTS ON SENESCENT MUSCLE	05-01-95/04-30-96	PENNSYLVANIA STATE UNIVERSITY-UNIV P	309,684
5 R01AG11812-03	FIATARONE, MARIA A EXERCISE TRAINING IN FUNCTIONALLY IMPAIRED OLDER WOMEN	05-01-95/04-30-96	TUFTS UNIVERSITY BOSTON	365,018
3 R01AG11812-03S1	FIATARONE, MARIA A EXERCISE TRAINING IN FUNCTIONALLY IMPAIRED OLDER WOMEN	09-30-95/04-30-96	TUFTS UNIVERSITY BOSTON	88,430
1 R01AG11813-01A2	LENNIHAN, LAURA AMPHETAMINE SAFETY DURING STROKE REHABILITATION	07-01-95/	HELEN HAYES HOSPITAL	
5 R01AG11814-02	FERAMISCO, JAMES R MECHANISMS OF HUMAN CELL SENESCENCE	09-01-95/08-31-96	UNIVERSITY OF CALIFORNIA SAN DIEGO	188,488
5 R01AG11815-02	WOLF, DOUGLAS A DYNAMIC MICROSIMULATION OF ELDERS' HEALTH AND WELL-BEING	07-01-95/06-30-96	SYRACUSE UNIVERSITY AT SYRACUSE	261,091
5 R01AG11816-02	KENYON, CYNTHIA J GENETIC ANALYSIS OF AGING IN C ELEGANS	04-01-95/03-31-96	UNIVERSITY OF CALIFORNIA SAN FRANCIS	184,112
5 R01AG11820-02	SHEA, DENNIS G URBAN/RURAL DIFFERENCES IN ELDERLY'S USE OF HEALTH CARE	08-01-95/07-31-96	PENNSYLVANIA STATE UNIVERSITY-UNIV P	112,938
1 R29AG11832-01A1	YANNARIELLO-BROWN, JUDITH I AGE-RELATED CHANGES IN HYALURONAN TURNOVER AND METABOLIS	12-01-94/	UNIVERSITY OF TEXAS MEDICAL BR GALVE	
5 R01AG11833-02	TOWER, JOHN G AGING-SPECIFIC GENE EXPRESSION IN DROSOPHILA	12-05-94/11-30-95	UNIVERSITY OF SOUTHERN CALIFORNIA	167,172
5 R01AG11836-02	GALE, WILLIAM G PUBLIC POLICIES EFFECTS ON SAVING FOR RETIREMENT	08-10-95/07-31-96	BROOKINGS INSTITUTION	99,606
1 R01AG11838-01A1	ZEC, RONALD F PROSPECTIVE DETECTION OF DAT WITH PSYCHOMETRIC TESTS	12-01-94/	SOUTHERN ILLINOIS UNIVERSITY SCH OF	
1 R01AG11840-01A1	HSIAO, KAREN K MOLECULAR PATHOPHYSIOLOGY OF PRP AND APP MUTANTS	09-30-95/08-31-96	UNIVERSITY OF MINNESOTA TWIN CITIES	155,322
1 R01AG11850-01A1	GREENWOOD, MICHAEL J ELDERLY US IMMIGRANTS	02-20-95/01-31-96	UNIVERSITY OF COLORADO AT BOULDER	220,640

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FY: 95				
1 R01AG11851-01A2	KIRSH, DAVID COMPUTATIONAL STUDY OF COMPENSATION	04-10-95/03-31-96	UNIVERSITY OF CALIFORNIA SAN DIEGO	145,659
5 R01AG11852-02	MANTYH, PATRICK W AGGREGATION/DEPOSITION OF B AMYLOID IN ALZHEIMER DISEASE	07-01-95/06-30-96	UNIVERSITY OF MINNESOTA TWIN CITIES	127,871
1 R01AG11853-01A1	LIU, ALICE Y C REDOX REGULATION, HEAT SHOCK RESPONSE, AND CELL AGING	04-01-95/	RUTGERS THE STATE UNIV NEW BRUNSWICK	
5 R01AG11854-02	GERON, SCOTT M SATISFACTION OF FRAIL ELDERLY WITH HOME BASED SERVICES	09-01-95/08-31-96	BOSTON UNIVERSITY	121,497
5 R01AG11859-02	PEARLSON, GODFREY D AGING, BRAIN IMAGING, AND COGNITION	07-01-95/06-30-96	JOHNS HOPKINS UNIVERSITY	422,963
1 R01AG11861-01A1	WINTER, LARAINE EGOCENTRISM AND INTERPERSONAL COMPETENCE IN THE ELDERLY	04-01-95/	PHILADELPHIA GERIATRIC CTR-FRIEDMAN	
5 R29AG11862-02	HEBERT, LIESI E EPIDEMIOLOGY OF A D IN WOMEN--RISK AND IMPACT	07-01-95/06-30-96	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	101,741
5 R01AG11871-03	HARDY, JOHN A GENETICS OF EARLY-ONSET ALZHEIMER'S DISEASE	07-01-95/06-30-96	UNIVERSITY OF SOUTH FLORIDA	296,080
5 R01AG11874-02	WISE, DAVID A FIRM HEALTH INSURANCE PLANS	07-01-95/06-30-96	NATIONAL BUREAU OF ECONOMIC RESEARCH	120,673
5 R01AG11875-02	LI, CHRISTINE BETA-AMYLOID PRECURSOR-LIKE GENE IN C. ELEGANS	09-01-95/08-31-96	BOSTON UNIVERSITY	123,990
1 R29AG11876-01A1	POWERS, DOUGLAS C AGE AND VACCINE MODULATION OF INFLUENZA IMMUNITY	04-01-95/03-31-96	ST. LOUIS UNIVERSITY	71,852
1 R01AG11882-01A1	SCHMUCKER, DOUGLAS L EFFECTS OF AGING AND FOOD RESTRICTION ON PIGR EXPRESSION	04-01-95/	NORTHERN CALIFORNIA INSTITUTE RES &	
5 R01AG11886-02	LITVIN, SANDRA GRANDDAUGHTERS' INVOLVEMENT IN FILIAL CAREGIVING	09-01-95/08-31-96	PHILADELPHIA GERIATRIC CTR-FRIEDMAN	203,270
5 R29AG11895-02	GRUBER, JONATHAN H HEALTH INSURANCE REFORM, OLDER WORKERS, AND RETIREMENT	08-01-95/07-31-96	NATIONAL BUREAU OF ECONOMIC RESEARCH	103,569
5 R01AG11899-02	WASCO, WILMA M APP-RELATED GENES AND ALZHEIMER'S DISEASE	01-01-95/12-31-95	MASSACHUSETTS GENERAL HOSPITAL	224,869

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FY: 95				
1 R01AG11900-01A1	ELLISON, PETER T CHANGING OVARIAN FUNCTION IN LATE REPRODUCTIVE LIFE	01-01-95/	HARVARD UNIVERSITY	
5 R01AG11903-02	CUELLO, A CLAUDIO TROPHIC FACTOR-INDUCED SYNAPTIC REGROWTH IN THE CNS	09-01-95/08-31-96	MC GILL UNIVERSITY	80,991
5 R01AG11906-03	STEPHENS, MARY A MULTIPLE ROLES OF MIDDLE GENERATION CAREGIVING WOMEN	09-01-95/08-31-96	KENT STATE UNIVERSITY AT KENT	217,442
3 R01AG11906-03S1	STEPHENS, MARY A MULTIPLE ROLES OF MIDDLE GENERATION CAREGIVING WOMEN	09-01-95/08-31-96	KENT STATE UNIVERSITY AT KENT	23,682
1 R01AG11913-01A2	KRISHNAN, K RANGA ALZHEIMERS DISEASE--ANTEMORTEM MARKERS	04-01-95/03-31-96	DUKE UNIVERSITY	236,477
5 P01AG11915-02	WEINDRUCH, RICHARD H DIETARY RESTRICTION AND AGING	03-01-95/02-29-96	UNIVERSITY OF WISCONSIN MADISON	701,381
7 R01AG11925-02	ROHER, ALEX E CHEMISTRY AND BIOLOGY OF ALZHEIMERS AMYLOID PROTEINS	09-30-95/11-30-95	SUN HEALTH RESEARCH INSTITUTE	54,130
5 R01AG11930-02	HUGHES, SUSAN L IMPACT OF TEAM MANAGED/HOSPITAL LINKED HOME CARE	04-01-95/03-31-96	NORTHWESTERN UNIVERSITY	285,364
5 R01AG11932-02	SINGH, TOOLSEE J PROLINE DIRECTED KINASES IN ALZHEIMERS DISEASE	08-01-95/07-31-96	INSTITUTE FOR BASIC RES IN DEV DISAB	169,493
1 U01AG11933-01A1	FIATARONE, MARIA A THE ACTIIVE STUDY (BOSTON SITE)	07-01-95/	TUFTS UNIVERSITY BOSTON	
1 U01AG11936-01A1	KING, ABBY C THE ACTIIVE STUDY-PALO ALTO SITE	07-10-95/	STANFORD UNIVERSITY	
5 P01AG11952-02	GERTLER, PAUL J DETERMINANTS OF HEALTHY AGING IN RURAL POPULATIONS	08-01-95/07-31-96	RAND CORPORATION	380,646
5 R25AG11953-03	JONES, JAMES M PREDOCTORAL RESEARCH SCIENTIST PROGRAM IN PSYCHOLOGY	09-15-95/08-31-96	AMERICAN PSYCHOLOGICAL ASSOCIATION	99,188
1 R01AG11954-01A2	FIELD, TIFFANY M DEPRESSED/FTT 'GRANDPARENTS' AS MASSAGE THERAPISTS	04-01-95/	UNIVERSITY OF MIAMI	
5 R01AG11957-02	DEATON, ANGUS S AGING AND SAVING IN DEVELOPED AND DEVELOPING COUNTRIES	08-01-95/07-31-96	NATIONAL BUREAU OF ECONOMIC RESEARCH	25,900

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FY: 95				
5 R01AG11958-02	MYSS, J MICHAEL MECHANISMS OF AGE RELATED PLASTICITY IN THE CORTEX	05-01-95/04-30-96	UNIVERSITY OF ALABAMA AT BIRMINGHAM	171,929
1 R01AG11960-01A1	GLICKMAN, BARRY W MUTAGENSIS & AGING IN MICE: THE ROLE OF FREE RADICALS	12-01-94/	UNIVERSITY OF VICTORIA	
1 R01AG11964-01A2	GROSSMAN, LAWRENCE SKIN CANCER: A CONSEQUENCE OF DNA REPAIR AND AGING	04-01-95/	JOHNS HOPKINS UNIVERSITY	
5 R01AG11965-02	BOX, HAROLD C MULTILESIONAL ASSAYS FOR OXIDATIVE DNA DAMAGE	12-01-94/11-30-95	ROSWELL PARK CANCER INSTITUTE	107,536
5 R29AG11966-04	SANDS, LAURA P DETECTING ACUTE COGNITIVE CHANGES IN ALZHEIMERS PATIENTS	09-01-95/08-31-96	MOUNT ZION INSTITUTE ON AGING	95,823
3 R01AG11967-03S1	CORTOPASSI, GINO A AGING, SOMATIC MUTATION, AND HEART DISEASE	06-01-95/09-30-95	UNIVERSITY OF SOUTHERN CALIFORNIA	24,661
7 R01AG11967-04	CORTOPASSI, GINO A AGING, SOMATIC MUTATION, AND HEART DISEASE	02-01-96/04-30-96	UNIVERSITY OF CALIFORNIA DAVIS	115,126
5 R01AG11971-02	LONGINO, CHARLES F, JR FUNCTIONAL HEALTH AND GEOGRAPHIC MOBILITY IN OLD AGE	08-15-95/07-31-96	WAKE FOREST UNIVERSITY	144,783
1 R01AG11980-01A1	OLESKE, DENISE M EPIDEMIOLOGY OF INJURY IN ALZHEIMER'S DISEASE	12-01-94/	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	
5 R29AG11985-03	MYERS, ELIZABETH R BIOMECHANICS OF VERTEBRAL FRACTURE RISK	09-15-95/07-31-96	BETH ISRAEL DEACONESS MEDICAL CENTER	113,530
1 R29AG11986-01A1	BAHR, BEN A PHYSICAL AND FUNCTIONAL PROPERTIES OF AMPA RECEPTORS	04-01-95/	UNIVERSITY OF CALIFORNIA IRVINE	
5 R01AG11994-02	LILLARD, LEE A HEALTH, MORTALITY, SOCIAL INSURANCE, AND SAVING	08-01-95/07-31-96	RAND CORPORATION	140,159
1 R01AG11995-01A1	LAWTON, M POWELL QUALITY OF LIFE, HEALTH, AND VALUATION OF LIFE BY ELDERS	01-25-95/12-31-95	PHILADELPHIA GERIATRIC CTR-FRIEDMAN	271,745
1 R01AG12016-01A2	ADAMS, DUNCAN D EXPLORATION OF A GENE WHICH DELAYS TIME OF DEATH	04-01-95/	UNIVERSITY OF OTAGO	
5 R01AG12019-02	SCHELLENBERG, GERARD D CLONING OF THE CHROMOSOME 8 WERNERS SYNDROME GENE	09-10-95/08-31-96	UNIVERSITY OF WASHINGTON	181,742

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FY: 95				
1 R01AG12024-01A1	LIANG, BRUCE T ATP AND REGULATION OF AGING CARDIAC MYOCYTE FUNCTION	04-01-95/	UNIVERSITY OF PENNSYLVANIA	
5 R01AG12025-02	GOLDSTEIN, MICHAEL G MEDICAL OFFICE-BASED ACTIVITY COUNSELING OF OLDER ADULTS	02-05-95/01-31-96	MIRIAM HOSPITAL	445,260
5 R01AG12028-02	HARDY, JOHN A APP TRANSFECTION TO STUDY ALPHA- AND BETA- SECRETASES	05-01-95/04-30-96	UNIVERSITY OF SOUTH FLORIDA	133,558
1 R01AG12034-01A1	SISKEN, JESSE E ALTERED SIGNAL TRANSDUCTION IN ALZHEIMER'S DISEASE	12-01-94/	UNIVERSITY OF KENTUCKY	
5 P20AG12042-03	PROHASKA, THOMAS MINORITY ELDERLY HEALTH PROMOTION CENTER	09-20-95/08-31-98	UNIVERSITY OF ILLINOIS AT CHICAGO	461,791
5 P20AG12044-03	HAZUDA, HELEN P HISPANIC HEALTHY AGING CENTER	09-20-95/08-31-98	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	428,280
5 P20AG12057-03	LEVKOFF, SUE E HEALTH PROMOTION FOR DEMENTED ETHNIC MINORITY ELDERS	09-30-96/08-31-98	HARVARD UNIVERSITY	509,620
3 P20AG12057-03S1	LEVKOFF, SUE E HEALTH PROMOTION FOR DEMENTED ETHNIC MINORITY ELDERS	09-30-95/08-31-98	HARVARD UNIVERSITY	75,468
3 P20AG12058-02S1	ANDERSON, NORMAN B EXPLORATORY CENTER FOR RESEARCH ON HEALTH PROMOTION	12-10-94/08-31-95	DUKE UNIVERSITY	54,793
5 P20AG12058-03	WILLIAMS, REDFORD B EXPLORATORY CENTER FOR RESEARCH ON HEALTH PROMOTION	07-12-96/08-31-98	DUKE UNIVERSITY	576,521
5 P20AG12059-03	ALLEN, WALTER R FAMILY AND THE HEALTH OF AFRICAN-AMERICAN ELDERLY	09-30-95/08-31-98	RAND CORPORATION	530,017
5 P20AG12072-03	LEVENTHAL, HOWARD PROMOTING HEALTH IN ELDERLY AFRICAN-AMERICANS	09-20-95/08-31-98	RUTGERS THE STATE UNIV NEW BRUNSWICK	465,287
2 R44AG12085-02	BRUNDEN, KURT R INHIBITION OF COMPLEMENT DAMAGE IN ALZHEIMER'S DISEASE	07-01-95/	GLIATECH, INC.	
1 R43AG12090-01A1	RAGER, ROBERT CD-IMPROVING OLDER PERSONS INTENTIONAL MEMORY SKILLS	03-10-95/09-09-95	COMPACT DISC, INC.	99,398
5 N01AG12101-006	MULIVOR, RICHARD A. GENETICALLY MARKED CELLS FOR AGING RESEARCH	03-01-95/01-31-96	CORIELL INSTITUTE FOR MEDICAL RESEAR	733,258

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 R01AG12101-03	DE LEON, MONY J PREDICTORS OF COGNITIVE DECLINE IN NORMAL AGING	09-01-95/08-31-96	NEW YORK UNIVERSITY	276,425
3 N01AG12102-007	BLAZER, DAN POPULATIONS FOR EPIDEMIOLOGIC STUDIES OF THE ELDERLY	11-22-94/02-28-95	DUKE UNIVERSITY	
3 N01AG12102-008	BLAZER, DAN POPULATIONS FOR EPIDEMIOLOGIC STUDIES OF THE ELDERLY	04-11-95/12-31-95	DUKE UNIVERSITY	578,544
5 R01AG12105-03	GROVES, ROBERT M SURVEY DESIGN ACKNOWLEDGING NONRESPONSE	09-01-95/08-31-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	147,239
5 R01AG12106-03	GLYNN, ROBERT J MISSING AND MISMEASURED DATA IN STUDIES OF THE ELDERLY	08-01-95/07-31-97	BRIGHAM AND WOMEN'S HOSPITAL	116,541
1 R01AG12108-01A2	BECKETT, LAUREL A LONGITUDINAL DATA ANALYSIS IN COMPLEX SAMPLES	07-01-95/	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	
3 N01AG12112-008	FRIED, LINDA P WOMEN'S HEALTH AND AGING	11-22-94/11-30-96	JOHNS HOPKINS UNIVERSITY	
1 R01AG12112-01A1	CAMPBELL, SCOTT S HOMEOSTATIC FACTORS IN AGE RELATED SLEEP DISTURBANCE	02-01-95/11-30-95	CORNELL UNIVERSITY MEDICAL CENTER	176,674
1 R01AG12113-01A2	MC AULEY, EDWARD EXERCISE, AGING, AND PSYCHOLOGICAL FUNCTION	09-30-95/08-31-96	UNIVERSITY OF ILLINOIS URBANA-CHAMPA	291,492
1 R01AG12115-01A1	COLVIN, PERRY L, JR FAILURE TO THRIVE IN OLDER PERSONS AFTER ACUTE ILLNESS	12-01-94/	WAKE FOREST UNIVERSITY	
5 R01AG12117-02	ATTARDI, GIUSEPPE MITOCHONDRIAL DNA MUTATIONS AND AGING	05-01-95/04-30-96	CALIFORNIA INSTITUTE OF TECHNOLOGY	207,538
5 R01AG12122-02	GRANHOLM, ANN-CHARLOTTE E AGED FOREBRAIN CHOLINERGIC NEURONS AND NGF DELIVERY	04-01-95/03-31-96	UNIVERSITY OF COLORADO HLTH SCIENCES	142,675
1 R01AG12127-01A1	MILEWICH, LEON AGING, DHEA, AND THE CELL CYCLE	12-01-94/	UNIVERSITY OF TEXAS SW MED CTR/DALLA	
1 R01AG12128-01A1	CHIU, TED H OXYGEN RADICAL AND ANTIOXIDANT ENZYMES IN CNS AGING	12-01-94/	MEDICAL COLLEGE OF OHIO AT TOLEDO	
5 R01AG12131-02	SCHON, ERIC A MITOCHONDRIAL DNA MUTATIONS AND HUMAN AGING	06-25-95/05-31-96	COLUMBIA UNIVERSITY NEW YORK	234,268

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 R01AG12135-01A1	FRIEDMAN, RHONDA B SEMANTIC MEMORY DEFICITS IN DEMENTIA	04-01-95/	HEBREW HOME OF GREATER WASHINGTON	
1 R01AG12136-01A1	LICHSTEIN, KENNETH L BIOBEHAVIORAL APPROACH TO INSOMNIA TREATMENT	05-20-95/04-30-96	UNIVERSITY OF MEMPHIS	201,618
1 R01AG12137-01A1	SCHWEITZER, STUART O AGING, HEALTH BEHAVIORS AND FUNCTIONAL DECLINE	08-01-95/	UNIVERSITY OF CALIFORNIA LOS ANGELES	
1 R37AG12138-01A1	SCHEFF, STEPHEN W AGE-RELATED CHANGES IN SYNAPTIC DENSITY	01-25-95/12-31-95	UNIVERSITY OF KENTUCKY	155,305
3 R37AG12138-01A1S1	SCHEFF, STEPHEN W AGE RELATED CHANGES IN SYNAPTIC DENSITY	05-07-95/12-31-95	UNIVERSITY OF KENTUCKY	5,000
5 R29AG12141-02	ANDERSEN, JULIE MODELS FOR EXPLORING FREE RADICAL DAMAGE	04-01-95/03-31-96	UNIVERSITY OF SOUTHERN CALIFORNIA	111,656
1 R01AG12142-01A1	PARKER, CHARLES R, JR ADRENAL ANDROGEN PRODUCTION IN AGING	05-01-95/04-30-96	UNIVERSITY OF ALABAMA AT BIRMINGHAM	165,517
1 R01AG12144-01A2	BADIA, PIETRO CIRCADIAN RHYTHMS & SLEEP-REVERSING AGE RELATED CHANGES	05-01-95/	ST. VINCENT MEDICAL CENTER	
1 R01AG12146-01A2	STERN, YAAKOV MEASURING COGNITIVE RESERVE IN ALZHEIMER'S DISEASE	07-01-95/	COLUMBIA UNIVERSITY NEW YORK	
1 R29AG12155-01A2	TUMER, NIHAL TYROSINE HYDROXYLASE INDUCTIONS: COLD, EXERCISE & AGING	07-01-95/	UNIVERSITY OF FLORIDA	
1 R01AG12158-01A1	DAVIS, LISA M ISOLATION & CHARACTERIZATION OF GENES INVOLVED IN AGING	12-01-94/	FLORIDA INSTITUTE OF TECHNOLOGY	
1 R01AG12159-01A2	MORRISON, DAVID C MACROPHAGES, CYTOKINES AND IMMUNOLOGIC SENESCENCE	07-01-95/	UNIVERSITY OF KANSAS MEDICAL CENTER	
1 R29AG12160-01A1	GOTTSCHALL, PAUL E PROTEASES, AGING, AND NEURODEGENERATIVE DISEASES	05-05-95/04-30-96	UNIVERSITY OF SOUTH FLORIDA	101,186
5 R29AG12161-02	SHAPSES, SUE A NUTRITIONAL REGULATION OF BONE TURNOVER	09-20-95/08-31-96	RUTGERS THE STATE UNIV NEW BRUNSWICK	112,275
5 R01AG12163-03	MORROW, DANIEL DESIGNING REMINDER MESSAGES FOR OLDER ADULTS	09-05-95/08-31-96	UNIVERSITY OF NEW HAMPSHIRE	118,047

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 R01AG12167-01A1	HENDERSON, VICTOR W ESTROGEN, GENDER AND RISK FACTORS FOR ALZHEIMER DISEASE	04-01-95/	UNIVERSITY OF CALIFORNIA LOS ANGELES	
1 R01AG12170-01A2	WILLIAMS-RUSSO, PAMELA G FUNCTIONAL DISABILITY IN SPINAL STENOSIS	07-01-95/	HOSPITAL FOR SPECIAL SURGERY	
5 R01AG12171-02	BARKER, WILLIAM H HIP FRACTURE AND STROKE TRENDS IN AN AGING POPULATION	09-01-95/08-31-96	KAISER FOUNDATION RESEARCH INSTITUTE	338,415
1 R01AG12179-01A1	BAVISTER, BARRY D MATERNAL AGE-RELATED OOCYTE/EMBRYO DEFECTS	02-01-95/01-31-96	UNIVERSITY OF WISCONSIN MADISON	192,052
3 R01AG12179-01A1S1	BAVISTER, BARRY D MATERNAL AGE-RELATED OOCYTE/EMBRYO DEFECTS	09-15-95/01-31-96	UNIVERSITY OF WISCONSIN MADISON	49,987
1 R01AG12200-01A1	DUSENBERY, RUTH L ROLE OF OXIDATIVE DNA DAMAGE IN GENOTOXICITY AND AGING	04-01-95/	WAYNE STATE UNIVERSITY	
5 R01AG12203-02	KRAMER, ARTHUR F COGNITIVE PLASTICITY & AGING--DUAL-TASK TRAINING EFFECTS	04-05-95/03-31-96	UNIVERSITY OF ILLINOIS URBANA-CHAMPA	142,979
5 R01AG12210-03	DUTHIE, EDMUND H, JR CAUSES OF LEAN BODY MASS ATROPHY IN AGING MEN	09-01-95/08-31-96	MEDICAL COLLEGE OF WISCONSIN	267,942
1 R15AG12212-01	YACK, H JOHN ASSESSING BALANCE IN THE ELDERLY USING ACCELEROMETRY	06-01-95/	STATE UNIVERSITY OF NEW YORK AT BUFF	
5 R01AG12222-02	SANTORO, NANETTE F REPRODUCTIVE PHYSIOLOGY OF OVARIAN FAILURE	09-15-95/07-31-96	UNIVERSITY OF MEDICINE & DENTISTRY O	252,893
1 R01AG12227-01A1	SINOWAY, LAWRENCE I LIMB CONGESTION AND EXERCISE REFLEXES IN HEART FAILURE	01-01-95/12-30-95	PENNSYLVANIA STATE UNIV HERSHEY MED	153,418
1 R15AG12232-01A1	JOLICOEUR, PAMELA M INFORMAL CARE OF HISPANIC ELDERLY	02-01-95/	CALIFORNIA LUTHERAN UNIVERSITY	
1 R01AG12233-01A1	EBERLING, JAMIE L PET STUDIES OF AGING IN NON-HUMAN PRIMATES	12-01-94/	UNIVERSITY OF CALIF-LAWRENC BERKELEY	
1 R01AG12235-01A2	SPINA, ROBERT J EXERCISE, ESTROGEN AND AGING--CARDIAC FUNCTION IN WOMEN	09-25-95/08-31-96	WASHINGTON UNIVERSITY	191,150
1 R01AG12238-01A1	ALGER, JEFFRY R IMAGING NEUROCHEMISTRY IN AGING	04-01-95/	UNIVERSITY OF CALIFORNIA LOS ANGELES	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 R01AG12249-02	KASS, DAVID A VENTRICULAR VASCULAR STIFFENING IN ELDERLY HUMANS	07-01-95/06-30-96	JOHNS HOPKINS UNIVERSITY	195,249
1 R01AG12253-01A1	GOODMAN, MARCENE CULTURE, AGE, AND SELF-WORTH IN WOMEN	12-01-94/	PHILADELPHIA GERIATRIC CTR-FRIEDMAN	
1 R01AG12254-01A1	SEDDON, JOHANNA M STUDY OF TRANSMISSION OF AMD	12-01-94/	MASSACHUSETTS EYE AND EAR INFIRMARY	
5 R01AG12257-02	KITZMAN, DALANE W EXERCISE TRAINING EFFECT ON DIASTOLIC DYSFUNCTION	07-01-95/06-30-96	WAKE FOREST UNIVERSITY	147,599
1 R01AG12261-01A1	MC CARTY, RICHARD C STRESS, MEMORY AND AGING	04-01-95/	UNIVERSITY OF VIRGINIA CHARLOTTESVIL	
1 R01AG12262-01A1	TOSTESON, ANNA N EVALUATION OF OSTEOPOROSIS PREVENTION IN ELDERLY WOMEN	01-05-95/12-31-95	DARTMOUTH COLLEGE	285,360
1 R01AG12264-01A1	SIDNEY, STEPHEN LOW CHOLESTEROL AND DISEASE IN A LARGE AGING COHORT	01-05-95/12-31-95	KAISER FOUNDATION RESEARCH INSTITUTE	274,503
1 R01AG12268-01A1	DILWORTH-ANDERSON, PEGGYE STRUCTURE AND OUTCOMES OF CAREGIVING TO BLACK ELDERLY	05-01-95/04-30-96	UNIVERSITY OF NORTH CAROLINA GREENSB	379,810
5 R01AG12271-02	GLOWACKI, JULIANNE MARROW BIOLOGY AND BONE MASS--EFFECTS OF AGE AND HORMONE	09-01-95/08-31-96	BRIGHAM AND WOMEN'S HOSPITAL	334,834
5 R01AG12275-02	BIGELOW, DIANA J OXIDATION AND AGING IN CARDIAC AND SKELETAL MUSCLE	06-01-95/05-31-96	UNIVERSITY OF KANSAS LAWRENCE	146,035
7 R01AG12279-02	TILLY, JONATHAN L APOPTOSIS AND REPRODUCTIVE AGING OF THE FEMALE	09-15-95/12-31-95	MASSACHUSETTS GENERAL HOSPITAL	100,296
3 R01AG12279-02S1	TILLY, JONATHAN L APOPTOSIS AND REPRODUCTIVE AGING OF THE FEMALE	09-20-95/12-31-95	MASSACHUSETTS GENERAL HOSPITAL	47,484
7 R01AG12282-02	BREDESEN, DALE E MECHANISM OF INHIBITION OF NEURODEGENERATION AND AGING	05-15-95/04-30-96	BURNHAM INSTITUTE	211,537
1 R29AG12284-01A1	SALKIND, ALAN R T CELL APOPTOSIS AND HUMAN AGING	12-01-94/	UNIVERSITY OF MISSISSIPPI MEDICAL CE	
1 R01AG12285-01A1	MCDONALD, ROGER B HETEROGENEITY AND RESISTANCE TO AGING: THE B CELL MODEL	12-01-94/	UNIVERSITY OF CALIFORNIA DAVIS	

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FY: 95				
5 R01AG12287-02	HORNSBY, PETER J TYPE II 3BETA HSD GENE REGULATION OF DHEAS SYNTHESIS	09-01-95/08-31-96	BAYLOR COLLEGE OF MEDICINE	152,299
5 R01AG12288-02	SIMON, MELVIN I ANIMAL MODELS OF AGING IN RETINAL DEGENERATION	01-01-95/12-31-95	CALIFORNIA INSTITUTE OF TECHNOLOGY	343,456
5 R01AG12289-02	BENZER, SEYMOUR GENES MAINTAINING NERVOUS SYSTEM INTEGRITY DURING AGING	01-01-95/12-31-95	CALIFORNIA INSTITUTE OF TECHNOLOGY	213,252
5 R01AG12291-02	FREY, WILLIAM H MIGRATION AND REDISTRIBUTION OF THE US ELDERLY	08-01-95/07-31-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	138,503
1 R01AG12293-01A1	HEINECKE, JAY W MYELOPEROXIDASE-MEDIATED VASCULAR INJURY	01-01-95/12-31-95	WASHINGTON UNIVERSITY	226,225
1 R01AG12297-01A1	MORRISON-BOGORAD, MARCELLE STRESS AND THE NEUROPATHOLOGY OF ALZHEIMERS DISEASE	01-25-95/12-31-95	UNIVERSITY OF TEXAS SW MED CTR/DALLA	198,217
5 P30AG12300-02	ROSENBERG, ROGER N NEUROBIOLOGY OF ALZHIMERS DISEASE AND AGING	04-15-95/03-31-96	UNIVERSITY OF TEXAS SW MED CTR/DALLA	1,104,330
1 R43AG12303-01A3	DUNN, JEANETTE M IMPACT OF HIV ON OLDER WOMEN: A BASIS FOR ACTION	03-01-95/	ASSOCIATED MEDICAL PUBLISHING	
1 R43AG12307-01A1	STERN, GAIL L VIDEOTAPE SERIES FOR INFORMAL CAREGIVERS OF THE ELDERLY	11-01-94/	GAIL STERN AND ASSOCIATES	
2 R44AG12309-02	BARNEY, HAROLD L CONTINUING CARE RETIREMENT COMMUNITY EXPERIENCE DATA	08-20-95/05-31-96	ACTUARIAL FORECASTING AND RESEARCH	400,438
5 R01AG12316-03	ROSENTHAL, NADIA A TRANSGENIC MOUSE MODELS OF LONGEVITY	09-01-95/08-31-96	MASSACHUSETTS GENERAL HOSPITAL	247,867
1 R43AG12331-01A1	JILLSON, IRENE A AUTO-ID MEDICATION COMPLIANCE FOR ELDERLY & OTHERS	11-01-94/	POLICY RESEARCH, INC.	
1 R43AG12333-01A1	JOHNSON, GINGER S ANTEMORTEM DIAGNOSIS OF ALZHEIMER'S	11-01-94/	MOLECULAR GERIATRICS CORPORATION	
1 R43AG12339-01A1	GRIFFITHS, MICHAEL C DENTAL ASSESSMENT FOR PREVENTIVE CARE IN NURSING HOMES	03-01-95/	INSTITUTIONAL DENTAL CARE	
1 R43AG12340-01A1	COTRELL, VICTORIA C AN AUTOMATED MEDICATION MANAGEMENT DEVICE	11-01-94/	COTRELL GILMORE ENTERPRISES	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 R43AG12341-01A1	AVIS, NANCY E MEDIA TRAINING ON MENOPAUSE FOR HEALTH PROFESSIONALS	02-05-95/11-30-95	NEW ENGLAND RESEARCH INSTITUTES, INC	99,068
2 R44AG12343-02	ZEISEL, JOHN R DESIGN CRITERIA FOR ALZHEIMERS SPECIAL CARE PROGRAMS	07-20-95/06-30-96	HEARTHSTONE ALZHEIMER CARE, LTD	380,808
5 R01AG12345-03	FISHER, ANNE G DEVELOPMENT OF A PERFORMANCE EVALUATION FOR GERONTOLOGY	09-01-95/08-31-96	COLORADO STATE UNIVERSITY	235,170
5 R29AG12348-03	FOX, KATHLEEN M EPIDEMIOLOGY OF BONE DENSITY IN MOTHERS AND DAUGHTERS	09-25-95/09-30-95	UNIVERSITY OF MARYLAND BALT PROF SCH	13,858
5 R01AG12349-03	HAYES, WILSON C DXA-BASED BONE GEOMETRY AND OSTEOPOROTIC FRACTURE RISK	07-10-95/06-30-96	BETH ISRAEL DEACONESS MEDICAL CENTER	192,913
5 R29AG12350-03	KREGEL, KEVIN C SYMPATHETIC NERVOUS SYSTEM ACTIVITY AND AGING IN THE RAT	09-01-95/08-31-96	UNIVERSITY OF IOWA	107,513
1 R01AG12358-01A1	KING, ABBY C EXERCISE, FUNCTIONING, AND STRESS IN WOMEN CAREGIVERS	07-01-95/06-30-96	STANFORD UNIVERSITY	210,662
5 R01AG12364-02	KRIPKE, DANIEL F ILLUMINATION IN HUMAN AGING--SLEEP AND MOOD EFFECTS	07-01-95/06-30-96	UNIVERSITY OF CALIFORNIA SAN DIEGO	268,413
5 R01AG12366-02	STEEVES, RICHARD H BEREAVEMENT IN AFRICAN AMERICAN AND APPALACHIAN ELDERS	08-01-95/07-31-96	UNIVERSITY OF VIRGINIA CHARLOTTESVIL	142,126
1 R01AG12370-01A1	CHANG, FWU-RANG UNCERTAIN LIFETIMES, PREVENTIVE CARE AND RETIREMENT	06-01-95/	INDIANA UNIVERSITY BLOOMINGTON	
1 R01AG12375-01	LILLARD, LEE A HEALTH, MORTALITY, SOCIAL INSURANCE, AND SAVING	01-01-95/	RAND CORPORATION	
5 R01AG12381-02	TAYLOR, THOMAS R PHYSICIANS POLICIES IN PREVENTIVE HORMONE THERAPY	09-01-95/08-31-96	UNIVERSITY OF WASHINGTON	231,930
1 R01AG12385-01A1	MITTENESS, LINDA S THE LIFE COURSE AND FATIGUE IN CHRONIC ILLNESS	04-01-95/	UNIVERSITY OF CALIFORNIA SAN FRANCIS	
5 R01AG12387-02	GREENWOOD, PAMELA M SPATIALLY CUED VISUAL PROCESSING OVER THE ADULT LIFESPAN	07-10-95/06-30-96	CATHOLIC UNIVERSITY OF AMERICA	112,212
3 R01AG12388-01S1	LASSITER, DONALD L EXPERTISE AND AGE EFFECTS ON PILOT MENTAL WORKLOAD	04-20-95/09-29-96	METHODIST COLLEGE	7,500

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FY: 95				
1 R01AG12390-01A1	BOONE, KYLE B COGNITION, VASCULAR STATUS, AND ADAPTIVE FUNCTIONING	04-01-95/	HARBOR-UCLA RESEARCH & EDUC INST	
5 R01AG12393-02	MIROWSKY, JOHN AGING, STATUS, AND THE SENSE OF CONTROL	01-01-95/12-31-95	OHIO STATE UNIVERSITY	144,930
1 R37AG12394-01A1	SMITH, JAMES P WEALTH DISPARITITES AMONG MATURE & OLDER ADULTS	04-05-95/03-31-96	RAND CORPORATION	115,865
3 R37AG12394-01A1S1	SMITH, JAMES P WEALTH DISPARITITES AMONG MATURE AND OLDER ADULTS	09-30-95/03-31-96	RAND CORPORATION	30,000
5 R01AG12396-02	JOHNSON, GAIL V CALCIUM EFFECTS ON TAU PROTEOLYSIS AND CROSSLINKING	09-01-95/08-31-96	UNIVERSITY OF ALABAMA AT BIRMINGHAM	141,233
1 R01AG12398-01A1	LORD, ROBERT G COGNITIVE/AFFECTIVE SUPPRESSION EFFICIENCY AND AGING	07-01-95/	UNIVERSITY OF AKRON	
1 R29AG12401-01A1	DE LACALLE, SONSOLES CHOLINERGIC DENERVATION AND REINNERVATION IN AGING	08-01-95/06-30-96	BETH ISRAEL DEACONESS MEDICAL CENTER	114,691
5 R01AG12406-02	HYMAN, BRADLEY T APOLIPOPROTEIN E AND ALZHEIMERS DISEASE	07-01-95/06-30-96	MASSACHUSETTS GENERAL HOSPITAL	232,971
1 R01AG12410-01A1	VERDERY, ROY B EARLY NUTRITION TO PREVENT FAILURE TO THRIVE IN OLD AGE	07-01-95/	UNIVERSITY OF ARIZONA	
5 R01AG12412-02	MULLAN, MICHAEL J APOE LOCUS AND RISK FOR ALZHEIMERS DISEASE	07-01-95/06-30-96	UNIVERSITY OF SOUTH FLORIDA	180,611
1 R01AG12420-01A1	LILLARD, LEE A ELDERLY HEALTH AND HEALTH CARE UTILIZATION	04-05-95/03-31-96	RAND CORPORATION	160,577
1 R01AG12429-01A1	ZAUSZNIEWSKI, JACLENE A MEASUREMENT OF LEARNED RESOURCEFULNESS IN OLDER ADULTS	04-01-95/	CASE WESTERN RESERVE UNIVERSITY	
5 P01AG12435-02	CHUI, HELENA CHANG AGING BRAIN--VASCULATURE, ISCHEMIA AND BEHAVIOR	09-10-95/08-31-96	UNIVERSITY OF SOUTHERN CALIFORNIA	1,056,452
1 R01AG12437-01A1	MC KINLAY, JOHN B VARIABILITY IN MEDICAL DECISIONS WITH OLDER PATIENTS	07-25-95/06-30-96	NEW ENGLAND RESEARCH INSTITUTES, INC	360,971
1 R01AG12440-01A1	FARRER, LINDSAY A BIOLOGICAL RISK FACTORS FOR ALZHEIMER'S DISEASE	04-01-95/	BOSTON UNIVERSITY	

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FY: 95				
1 R01AG12442-01A1	WILSON, GLENN L AGING EFFECTS ON DNA REPAIR	04-01-95/02-29-96	UNIVERSITY OF SOUTH ALABAMA	198,193
1 R29AG12444-01A1	LEE, DAVID J SENSORY IMPAIRMENT, FUNCTIONAL STATUS AND AGING	04-12-95/03-31-96	UNIVERSITY OF MIAMI	104,702
5 R01AG12447-02	LESNEFSKY, EDWARD J AGING, CARDIAC MITOCHONDRIA, AND ISCHEMIC INJURY	08-01-95/07-31-96	CASE WESTERN RESERVE UNIVERSITY	79,079
5 R29AG12448-02	SLIWINSKI, MARTIN J AGE-ASSOCIATED CHANGES IN THE SPEED OF COGNITIVE PROCESS	07-10-95/06-30-96	YESHIVA UNIVERSITY	114,323
5 R29AG12449-02	ALLEN, SUSAN MARITAL GENDER ROLES AND DYNAMICS OF SPOUSAL CARE	09-01-95/08-31-96	BROWN UNIVERSITY	105,749
1 R01AG12451-01A1	DELL'ORCO, ROBERT T PROHIBITIN: SENESCENCE AND IMMORTALIZATION	07-01-95/	OKLAHOMA MEDICAL RESEARCH FOUNDATION	
1 R01AG12456-01A1	WILCOX, VICTORIA SOCIAL SUPPORT AND DISABILITY AFTER HIP FRACTURE	04-01-95/	BROWN UNIVERSITY	
1 R55AG12456-01A1	WILCOX, VICTORIA SOCIAL SUPPORT AND DISABILITY AFTER HIP FRACTURE	09-20-95/08-31-97	BROWN UNIVERSITY	100,000
1 R01AG12457-01A1	STILES, NANCY J TRIAL OF OCCUPATIONAL THERAPY FOR ELDERS IN PRIMARY CARE	07-01-95/	UNIVERSITY OF KENTUCKY	
1 R01AG12458-01A1	SIEGLER, ILENE C MODELS OF PERSONALITY, HEALTH, AND DISEASE IN ADULTHOOD	08-01-95/07-31-96	DUKE UNIVERSITY	209,383
5 R01AG12461-02	FISHER, DONALD L MODELS OF AGING--THE MICROSTRUCTURE OF COGNITION	07-10-95/06-30-96	UNIVERSITY OF MASSACHUSETTS AMHERST	70,944
1 R29AG12462-01A2	PERLS, THOMAS T NEW ENGLAND CENTENARIAN STUDY	07-01-95/	BETH ISRAEL DEACONESS MEDICAL CENTER	
1 R01AG12466-01A1	ABRAMS, JOHN M MOLECULAR AND GENETIC CONTROL OF PROGRAMMED CELL DEATH	05-15-95/04-30-96	UNIVERSITY OF TEXAS SW MED CTR/DALLA	172,607
1 R29AG12467-01A1	OBEID, LINA M CERAMIDE AND CELL SENESCENCE	05-10-95/04-30-96	DUKE UNIVERSITY	107,567
1 R29AG12479-01A1	BUCHHOLZ, JOHN N MODULATION OF NOREPINEPHRINE RELEASE: EFFECT OF AGE	07-01-95/	LOMA LINDA UNIVERSITY	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 U01AG12495-02	MIDGLEY, A REES, JR MENOPAUSE AND HEALTH IN AGING WOMEN	08-14-95/06-30-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	401,658
5 U01AG12505-02	POWELL, LYNDA H POPULATION STUDY OF MENOPAUSE IN AFRICAN AMERICAN WOMEN	09-30-95/06-30-96	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	479,411
1 R01AG12527-01A1	SMITH, DOUGLAS H BRAIN INJURY EFFECTS--AGE RELATED COGNITIVE DYSFUNCTION	05-15-95/04-30-96	UNIVERSITY OF PENNSYLVANIA	212,928
5 U01AG12531-02	NEER, ROBERT M MENOPAUSAL TRANSITION IN BLACK AND WHITE WOMEN	08-15-95/06-30-96	MASSACHUSETTS GENERAL HOSPITAL	416,572
5 R01AG12532-02	STRITTMATTER, WARREN J APOLIPOPROTEIN E/TAU INTERACTIONS IN ALZHEIMERS DISEASE	07-01-95/06-30-96	DUKE UNIVERSITY	187,059
5 U01AG12535-02	WEISS, GERSON GYNECOLOGIC IMPACT OF THE MENOPAUSAL TRANSITION	09-30-95/06-30-96	UNIVERSITY OF MEDICINE & DENTISTRY O	568,095
5 U01AG12539-02	GREENDALE, GAIL A EPIDEMIOLOGY AND BIOLOGY OF THE MENOPAUSAL TRANSITION	08-14-95/06-30-96	UNIVERSITY OF CALIFORNIA LOS ANGELES	424,779
1 R01AG12544-01A2	RUDKIN, LAURA L SOCIAL CHANGE AND INTERGENERATIONAL EXCHANGE	09-30-95/08-31-96	UNIVERSITY OF TEXAS MEDICAL BR GALVE	77,482
5 U01AG12546-02	MATTHEWS, KAREN A MENOPAUSAL TRANSITION IN BLACK/WHITE WOMEN	09-30-95/06-30-96	UNIVERSITY OF PITTSBURGH AT PITTSBUR	515,792
1 R01AG12551-01A1	INOUYE, SHARON K INTERVENTION TRIAL TO PREVENT DELIRIUM IN THE ELDERLY	08-10-95/06-30-96	YALE UNIVERSITY	402,035
5 U01AG12553-02	MC KINLAY, SONJA M MENOPAUSE AND HEALTH IN AGING WOMEN	09-30-95/06-30-96	NEW ENGLAND RESEARCH INSTITUTES, INC	411,641
5 U01AG12554-02	GOLD, ELLEN B LIFESTYLE AND OVARIAN FUNCTION IN MID-LIFE WOMEN	08-14-95/06-30-96	UNIVERSITY OF CALIFORNIA DAVIS	574,841
1 R29AG12556-01A1	RAAB-CULLEN, DIANE M IN VIVO SKELETAL RESPONSE TO MECHANICAL STIMULATION	04-01-95/03-31-96	CREIGHTON UNIVERSITY	107,352
1 R01AG12557-01A1	COLE, KELLY J AGING EFFECTS ON GRASP FORCE CONTROL	05-15-95/04-30-96	UNIVERSITY OF IOWA	127,628
1 R29AG12558-01A1	HAWKINS, DAVID A INJURY THRESHOLD OF A MUSCLE-TENDON-BONE COMPLEX	07-01-95/	UNIVERSITY OF CALIFORNIA DAVIS	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 R01AG12561-02	KREBS, DAVID E DOES EXERCISE IMPROVE LOCOMOTION IN DISABLED ELDERS?	07-10-95/06-30-96	MASSACHUSETTS GENERAL HOSPITAL	115,144
1 R41AG12570-01A1	BAUDRY, MICHEL SOD/CATALASE--MIMICS IN NEURODEGENERATIVE DISEASES	09-25-95/08-31-96	EUKARION, INC.	84,000
1 R41AG12572-01A1	CAMPBELL, THOMAS A DETECTION OF ALZHEIMER SPECIFIC PROTEINS IN CSF	08-01-95/07-31-96	ISOLAB, INC.	82,365
5 R01AG12575-02	HUDSON, MARGARET F ELDER ABUSE--ITS MEANING TO MIDDLE AGED AND OLDER ADULTS	04-01-95/03-31-97	UNIVERSITY OF NORTH CAROLINA CHAPEL	89,135
5 P60AG12583-02	GOLDBERG, ANDREW P CLAUDE D PEPPER OLDER AMERICANS INDEPENDENCE CENTER	07-10-95/06-30-96	UNIVERSITY OF MARYLAND BALT PROF SCH	1,050,825
5 R01AG12587-02	ARMBRECHT, HARVEY J INTESTINAL CALCIUM ABSORPTION--EFFECT OF AGE	09-15-95/08-31-96	ST. LOUIS UNIVERSITY	168,049
1 R01AG12589-01A1	CANADA, ANDREW T MECHANISM FOR YOUNG-OLD DISPARITY IN O2 LETHALITY	07-01-95/	DUKE UNIVERSITY	
1 R01AG12590-01A1	MCDONALD, ROGER B DAMAGE AND DEFENSE: OXIDATIVE LIFE SPAN & DIETARY SUGARS	07-01-95/	UNIVERSITY OF CALIFORNIA DAVIS	
1 R01AG12591-01A1	LEVINE, DANIEL S NEURAL NETWORK MODELING OF MEMORY IN ALZHEIMER'S DISEASE	07-01-95/	UNIVERSITY OF TEXAS ARLINGTON	
2 R44AG12595-02	PANZER, VICTORIA P REALITY BASED MULTISYSTEM BALANCE ASSESSMENT IN THE AGED	09-30-95/06-30-96	BROOKSIDE RESEARCH & DEVELOPMENT COM	452,531
1 R43AG12596-01A1	BUIJS, RUDOLF J ASSESSMENT OF IMPAIRED BALANCE BY DIFFUSION ANALYSIS	08-01-95/	DELSYS, INC.	
5 R01AG12609-02	BARNES, CAROL A CELL ASSEMBLIES, PATTERN COMPLETION, AND THE AGING BRAIN	05-01-95/03-31-96	UNIVERSITY OF ARIZONA	145,080
3 R01AG12609-02S1	BARNES, CAROL A CELL ASSEMBLIES, PATTERN COMPLETION, AND THE AGING BRAIN	06-01-95/03-31-96	UNIVERSITY OF ARIZONA	37,845
3 R01AG12611-01S2	JANOWSKY, JERI S SEX HORMONES ON COGNITION	02-05-95/03-31-95	OREGON HEALTH SCIENCES UNIVERSITY	16,962
5 R01AG12611-02	JANOWSKY, JERI S SEX HORMONES ON COGNITION	04-05-95/03-31-96	OREGON HEALTH SCIENCES UNIVERSITY	143,016

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FY: 95				
1 R43AG12617-01A1	GOLDENSTEIN, IGOR DYNAMIC BALANCE AND GAIT ASSESSMENT	07-01-95/	BIOMECHANICAL TECHNOLOGIES	
1 R43AG12622-01A1	ALLEN, R WADE COMPUTER PROCEDURES FOR TESTING OLDER DRIVER CAPABILITIE	01-15-95/	SYSTEMS TECHNOLOGY, INC.	
1 R43AG12628-01A1	KLEINSEK, DON A RAPID PCR DIAGNOSTIC FOR INFLUENZA	07-01-95/	GERIGENE MEDICAL CORPORATION	
1 U01AG12642-01	CZEISLER, CHARLES A CLINICAL TRIAL/MELATONIN AS HYPNOTIC FOR NEUROLAB CREW	09-20-95/07-31-96	BRIGHAM AND WOMEN'S HOSPITAL	251,262
1 U01AG12645-01	DARLING, WARREN G COORDINATE SYSTEMS FOR MOVEMENT CONTROL IN MICROGRAVITY	07-01-95/	UNIVERSITY OF IOWA	
1 U01AG12646-01	BRADY, SCOTT T SPACE FLIGHT, STRESS, AND NEURONAL PLASTICITY	08-15-95/07-31-96	UNIVERSITY OF TEXAS SW MED CTR/DALLA	256,159
1 U01AG12647-01	ESSOCK, EDWARD A EFFECT OF SPATIAL ORIENTATION CUES ON VISUAL PERFORMANCE	07-01-95/	UNIVERSITY OF LOUISVILLE	
1 R01AG12653-01A1	MC KINNEY, MICHAEL GENE EXPRESSION IN AGING CENTRAL CHOLINERGIC NEURONS	08-25-95/07-31-96	MAYO FOUNDATION	210,731
1 R01AG12654-01A1	POLICH, JOHN M ELECTROPHYSIOLOGICAL ASSESSMENT OF COGNITIVE AGING	12-01-94/	SCRIPPS RESEARCH INSTITUTE	
1 R01AG12655-01A1	BUTTERFIELD, D ALLAN B-AMYLOID PEPTIDE FREE RADICAL PRODUCTION/NEUROTOXICITY	07-01-95/	UNIVERSITY OF KENTUCKY	
1 R01AG12656-01	SLOTKIN, THEODORE A AGING RAT BRAIN: 5HT TRANSPORTER, STEROIDS, DEPRESSION	12-01-94/	DUKE UNIVERSITY	
1 R29AG12658-01A1	COSTA, DORA L HEALTH OF YOUNG ADULTS--EVIDENCE CAUSES AND OUTCOMES	08-10-95/07-31-97	MASSACHUSETTS INSTITUTE OF TECHNOLOG	82,180
1 R01AG12659-01	GALE, BETTY J FUNCTIONAL HEALTH OF OLDER ANGLO AND HISPANIC POOR WOMEN	01-01-95/	ARIZONA STATE UNIVERSITY	
1 R01AG12660-01A1	DIETZSCHOLD, BERNHARD THERAPEUTIC STRATEGIES IN INFLAMMATORY DEGENERATIVE CNS	07-01-95/	THOMAS JEFFERSON UNIVERSITY	
1 R01AG12661-01	HOLLIDAY, ROBIN ANTI-AGING EFFECTS OF THE DIPEPTIDE CARNOSINE	12-01-94/	COMMONWEALTH SCI & IND RES ORG	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 R01AG12663-01	COTMAN, CARL W GENETIC AND BIOCHEMICAL EVENTS IN AB-INDUCED APOPTOSIS	01-15-95/12-31-95	UNIVERSITY OF CALIFORNIA IRVINE	149,710
1 R01AG12664-01	TERRY, ROBERT D DO TAU ABNORMALITIES CORRELATE WITH SYNAPTIC LOSS?	12-01-94/	UNIVERSITY OF CALIFORNIA SAN DIEGO	
1 R13AG12665-01	BEISECKER, ANALEE E RESEARCH ON PHYSICIAN/ELDERLY PATIENT INTERACTIONS	12-30-94/12-31-96	UNIVERSITY OF KANSAS MEDICAL CENTER	49,836
1 R13AG12666-01	MOHANTY, AMIYA K INTERNATIONAL SEMINAR ON AGING WITH EMPHASIS ON HEALTH	02-19-94/	EASTERN KENTUCKY UNIVERSITY	
1 R13AG12667-01	RYFF, CAROL D SELF & SOCIETY IN AGING PROCESSES	01-20-95/01-19-96	UNIVERSITY OF WISCONSIN MADISON	44,164
1 R01AG12668-01	DICKSON, FRAN C UNDERSTANDING LATER-LIFE, LONG-LASTING MARRIAGES	12-01-94/	UNIVERSITY OF COLORADO HLTH SCIENCES	
1 R01AG12669-01	SMITH, EVERETT L TEN YEAR FOLLOW-UP: A COHORT OF EXPERCISING OLDER WOMEN	01-01-95/	UNIVERSITY OF WISCONSIN MADISON	
1 R01AG12670-01	WOODS, MARGO N MENOPAUSAL SYMPTOMS IN WOMEN IN HIGH BREAST CANCER RISK	12-01-94/	TUFTS UNIVERSITY BOSTON	
1 R29AG12671-01	MACAULEY, JOHN B TESTING THE SOMATIC MUTATION THEORY OF AGING	12-01-94/	JACKSON LABORATORY	
1 R01AG12672-01	WEI, HUACHEN OXIDATIVE DAMAGE TO MITOCHONDRIAL MACROMOLECULE & AGING	12-01-94/	UNIVERSITY OF ALABAMA AT BIRMINGHAM	
5 R01AG12673-02	NEUNDORFER, MARCIA M DEPRESSION AND AGITATION IN AD--EFFECTS ON CAREGIVERS	09-15-95/08-31-96	CASE WESTERN RESERVE UNIVERSITY	104,311
5 R29AG12674-02	BONDI, MARK W COGNITIVE ABILITIES OF AT RISK ELDERLY FOR DEMENTIA	04-01-95/03-31-96	UNIVERSITY OF CALIFORNIA SAN DIEGO	95,273
1 R01AG12675-01	KOSSLYN, STEPHEN M IMAGERY PROCESSING IN OLD AGE	01-20-95/12-31-95	HARVARD UNIVERSITY	155,931
1 R01AG12676-01	AVANT, LLOYD L AGING AND THE PROCESSING OF TRAFFIC SIGN INFORMATION	09-01-94/	IOWA STATE UNIVERSITY OF SCIENCE & T	
1 R01AG12677-01	ELLINWOOD, EVERETT H, JR AGE, DRUGS & MORBIDITY: CNS FUNCTIONING IN DRIVING	12-01-94/	DUKE UNIVERSITY	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 R29AG12679-01A1	WALSH, JOHN P SENESCENCE AND STRIATAL SYNAPTIC PLASTICITY	08-10-95/07-31-96	UNIVERSITY OF SOUTHERN CALIFORNIA	103,359
1 R01AG12680-01	BOWMAN, BARBARA H OVER-EXPRESSION OF HUMAN APOE ALLELES	12-01-94/	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	
1 R01AG12681-01	MEADOR, KIMFORD J THIAMINE IN AGING AND DEMENTIA	12-01-94/	MEDICAL COLLEGE OF GEORGIA	
1 R01AG12682-01	MITTELMAN, MARY S HOME MANAGEMENT OF URINARY INCONTIENCE IN AD	12-01-94/	NEW YORK UNIVERSITY	
1 R01AG12683-01	ROUTTENBERG, ARYEH AGING MEMORY: MOLECULAR REGULATION OF NEURONAL PLASTICIT	12-01-94/	NORTHWESTERN UNIVERSITY	
1 R01AG12684-01	SASTRY, B R AGE-RELATED AND ISCHEMIA-INDUCED PRESYNAPTIC CHANGES	10-01-94/	UNIVERSITY OF BRITISH COLUMBIA	
7 R01AG12685-03	YOUNKIN, STEVEN G FACTORS GOVERNING ALZHEIMERS ABETA PROTEIN	02-10-96/03-31-96	MAYO FOUNDATION	223,069
1 R29AG12686-01A1	BUSH, ASHLEY ZINC AND ALZHEIMERS DISEASE PATHOPHYSIOLOGY	09-01-95/08-31-96	MASSACHUSETTS GENERAL HOSPITAL	111,449
1 R01AG12688-01	AMRHEIM, PAUL C AGE AND COGNITIVE PROCESSING OF PICTURES AND WORDS	01-01-95/	UNIVERSITY OF NEW MEXICO ALBUQUERQUE	
1 R01AG12689-01	RIDDLE, DONALD L GENES WITH MAJOR EFFECTS ON LIFE SPAN IN C ELEGANS	01-01-95/12-31-95	UNIVERSITY OF MISSOURI COLUMBIA	249,850
1 R29AG12690-01A1	BRUZDZINSKI, CAROLYN J REGULATION OF PAI I AND LIVER PATHOLOGY IN THE AGED	08-01-95/06-30-96	UNIVERSITY OF ILLINOIS AT CHICAGO	107,760
1 R01AG12692-01	BECKER, ROBERT E COGNITIVE EFFECTS OF CHOLINESTERASE INHIBITION IN AD	12-01-94/	SOUTHERN ILLINOIS UNIVERSITY SCH OF	
1 R01AG12693-01A1	TROY, CAROL M AGE-RELATED NEURONAL DEGENERATION: ROLE OF FREE RADICAL	07-01-95/	COLUMBIA UNIVERSITY NEW YORK	
1 R01AG12694-01A1	COTMAN, CARL W ANIMAL MODEL OF HUMAN AGING AND DEMENTIA	09-30-95/08-31-96	UNIVERSITY OF CALIFORNIA IRVINE	216,732
1 R01AG12695-01	SIEGEL, GEORGE J NA, K-ATPASE IN NORMAL AND PATHOLOGICAL AGING BRAIN	12-01-94/	U.S. DEPT/VETS AFFAIRS MED CTR(HINES	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 R01AG12696-01	LILLARD, LEE A ELDERLY FRAILTY & LIVING ARRANGEMENTS DYNAMICS	01-01-95/	RAND CORPORATION	
1 R01AG12697-01	LEWIS, WILLIAM MITOCHONDRIAL DNA REPLICATION, AGING AND HEART FAILURE	12-01-94/	UNIVERSITY OF CINCINNATI	
1 R01AG12698-01	ADELMAN, RONALD D INTERPERSONAL CARE OF OLDER ADULTS IN AN EMERGENCY ROOM	01-02-95/	WINTHROP-UNIVERSITY HOSPITAL	
1 R01AG12699-01	KIMURA, HIDEO RECEPTORS FOR AMYLOID BETA PROTEIN AND ITS PRECURSOR	12-01-94/	SALK INSTITUTE FOR BIOLOGICAL STUDIE	
1 R29AG12700-01	RECKELHOFF, JANE F MECHANISMS RESPONSIBLE FOR AGE-RELATED GLOMERULAR CHANGE	12-01-94/	UNIVERSITY OF MISSISSIPPI MEDICAL CE	
1 R01AG12701-01	SLADEK, CELIA D REGULATION OF VASOPRESSIN MESSENGER RNA DURING AGING	12-15-94/11-30-95	FINCH UNIV OF HLTH SCI/CHICAGO MED S	148,706
3 R01AG12701-01S1	SLADEK, CELIA D REGULATION OF VASOPRESSIN MESSENGER RNA DURING AGING	08-10-95/11-30-95	FINCH UNIV OF HLTH SCI/CHICAGO MED S	14,311
1 R01AG12702-01A1	KINDY, MARK S ROLE OF APOLIPOPROTEIN E IN AMYLOIDOSES	07-01-95/	UNIVERSITY OF KENTUCKY	
1 R01AG12703-01	FUKUCHI, KEN-ICHIRO ANIMAL MODELS FOR BETA-AMYLOIDISIS	12-01-94/	UNIVERSITY OF WASHINGTON	
1 R01AG12704-01	SCHNEIDERMAN, LAWRENCE J IMPACT OF APOE SCREENING ON SUBJ CONCERNED ABOUT ALZ DIS	12-01-94/	UNIVERSITY OF CALIFORNIA SAN DIEGO	
1 R01AG12705-01	GASTON, SANDRA M ALZHEIMERS DISEASE: YAC-TRANSGENIC MODELS FOR CHR 14 FAD	12-01-94/	BOSTON UNIVERSITY	
1 R01AG12708-01	TANGA, MARY J MECHANISMS OF ACTION OF NOVEL NEUROPROTECTANT AGENTS	12-01-94/	SRI INTERNATIONAL	
1 R01AG12710-01A1	ANGEL, RONALD J INCORPORATION AND HEALTH AMONG HISPANIC ELDERLY	07-01-95/	UNIVERSITY OF TEXAS AUSTIN	
1 R01AG12713-01A1	YESAVAGE, JEROME A AGE RELATED LONGITUDINAL CHANGES IN AVIATOR PERFORMANCE	09-10-95/08-31-96	STANFORD UNIVERSITY	186,091
1 R01AG12714-01	LOGAN, JOHN EXOGENOUS CONTINGENCIES IN MIDLIFE CAREERS	12-01-94/	UNIVERSITY OF WISCONSIN MADISON	

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FY: 95				
1 P01AG12715-01	SAITOH, TSUNAO BIOLOGICAL FUNCTIONS OF APP	12-01-94/	UNIVERSITY OF CALIFORNIA SAN DIEGO	
1 R01AG12717-01A1	ZANNIS, VASSILIS I APOE STRUCTURE FUNCTION AND ALZHEIMERS DISEASE	09-01-95/07-31-96	BOSTON UNIVERSITY	224,544
1 R29AG12718-01	SHAPIRO, I PAUL FUNCTION OF AN APP CYTOPLASMIC DOMAIN BINDING PROTEIN	01-20-95/12-31-95	OREGON HEALTH SCIENCES UNIVERSITY	93,111
1 R01AG12720-01	SCHWARTZ, DAVID C PREVENTION HOME ACCIDENTS AMONG N J'S FRAIL ELDERLY	10-01-94/	RUTGERS THE STATE UNIV NEW BRUNSWICK	
1 R01AG12722-01A1	WILLIAMS, DAVID R SES DIFFERENCES IN MORTALITY IN AN AGING NATIONAL COHORT	07-01-95/	UNIVERSITY OF MICHIGAN AT ANN ARBOR	
1 R01AG12723-01	POWERS, WILLIAM J HYPERGLYCEMIC MEMORY FACILITATION IN ALZHEIMERS DISEASE	12-01-94/	WASHINGTON UNIVERSITY	
1 R01AG12724-01	GOODKIN, KARL MINORITY ELDERLY CAREGIVER GROUPS FOR ANTICIPATORY LOSS	12-01-94/	UNIVERSITY OF MIAMI	
1 R01AG12725-01	LIU, WILLIAM T APO E POLYMORPHISM/RATES IN ALZHEIMER'S DISEASE	09-01-94/	SAN DIEGO STATE UNIVERSITY	
1 R29AG12728-01	HAMEED, ARIF HUMAN GRANZYMES & THE BIOLOGY OF AGING	12-01-94/	OHIO STATE UNIVERSITY	
1 R01AG12729-01	KRECKER, MARGARET WORK CAREER PATTERNS OF MEN AND WOMEN IN MIDLIFE	12-01-94/	UNIVERSITY OF WISCONSIN MADISON	
1 R01AG12730-01	POIRIER, JUDES APOLIPOPROTEIN E AND ALZHEIMER DISEASE: THE EPSILON4 ALL	09-01-94/	MC GILL UNIVERSITY	
1 R29AG12731-01A1	MARKS, NADINE F SOCIOECONOMIC INEQUALITIES, GENDER, AND MIDLIFE HEALTH	08-01-95/07-31-96	UNIVERSITY OF WISCONSIN MADISON	97,783
3 R29AG12731-01A1S1	MARKS, NADINE F SOCIOECONOMIC INEQUALITIES, GENDER, AND MIDLIFE HEALTH	09-30-95/07-31-96	UNIVERSITY OF WISCONSIN MADISON	30,600
1 P01AG12732-01A1	ABRAHAM, CARMELA R ROLE OF APOE IN THE PATHOGENESIS OF ALZHEIMER'S DISEASE	07-01-95/	BOSTON UNIVERSITY	
1 R01AG12733-01	BONDER, BETTE R ASSESSMENT OF SELF-CARE IN ALZHEIMER'S DISEASE	10-01-94/	CLEVELAND STATE UNIVERSITY	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 R01AG12734-01	RAO, KAMARSU V STUDY OF ELDERLY ASIAN INDIANS IN THE UNITED STATES	01-02-95/	BOWLING GREEN STATE UNIV BOWLING GRE	
1 R01AG12735-01	GROSSMAN, LAWRENCE I MITOCHONDRIAL DNA ALTERATIONS AND AGING IN MICE	12-01-94/	WAYNE STATE UNIVERSITY	
1 R01AG12736-01	ROSENWAIKE, IRA THE ELDERLY IN AGE-SEGREGATED COMMUNITIES	12-01-94/	UNIVERSITY OF PENNSYLVANIA	
1 R01AG12737-01	SOLOMON, ARTHUR K ALZHEIMER'S DISEASE EFFECT ON RED CELL MEMBRANE PROTEINS	12-01-94/	HARVARD UNIVERSITY	
1 R01AG12739-01	FREY, WILLIAM H, II INHIBITOR OF MUSCARINIC RECEPTOR IS ELEVATED IN AD BRAIN	12-01-94/	ST. PAUL-RAMSEY MEDICAL CENTER	
1 R01AG12740-01	PRUCHNO, RACHEL A ASSISTED LIVING: PHYSICAL, EMOTIONAL AND SOCIAL EFFECTS	12-01-94/	MENORAH PARK CENTER FOR THE AGING	
1 R01AG12742-01	ROACH, DEBORAH A TESTS OF THE EVOLUTIONARY THEORIES OF SENESCENCE	12-01-94/	DUKE UNIVERSITY	
1 R01AG12743-01	CAWTHON, RICHARD M IDENTIFICATION OF GENES CONTRIBUTING TO HUMAN LONGEVITY	12-01-94/	UNIVERSITY OF UTAH	
1 R01AG12744-01A1	DENHARDT, DAVID T OSTEOPONTIN: ROLE IN ISCHEMIA, OXIDANT STRESS AND AGING	07-01-95/	RUTGERS THE STATE UNIV NEW BRUNSWICK	
1 R01AG12749-01	SELKOE, DENNIS J PROTEIN/PROTEIN INTERACTIONS IN THE BIOLOGY OF BETA APP	01-01-95/11-30-95	BRIGHAM AND WOMEN'S HOSPITAL	380,034
1 R01AG12751-01	JUSTER, F THOMAS PENSION AND SOCIAL SECURITY WEALTH IN THE HRS	02-01-95/01-31-98	UNIVERSITY OF MICHIGAN AT ANN ARBOR	155,210
1 R01AG12753-01A1	HASHER, LYNN A AGE, OPTIMAL TIME OF DAY, AND COGNITION	09-30-95/08-31-96	DUKE UNIVERSITY	240,998
1 R01AG12754-01	THOMPSON, MARK G MANAGING CHRONIC PAIN FOR DEMENTIA PATIENTS	09-01-94/	PALO ALTO INSTITUTE FOR RES & EDU	
1 R29AG12755-01	BUCKLEY, CYNTHIA J IMPLICATIONS OF AGING IN RURAL RUSSIA	01-01-95/	UNIVERSITY OF TEXAS AUSTIN	
1 R01AG12765-01	BLAZER, DAN G, II PHSE TEN YEAR FOLLOW-UP	09-25-95/08-31-96	DUKE UNIVERSITY	479,036

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 R01AG12767-01	KNAPP, THOMAS A ELDERLY MOBILITY BEHAVIOR: EVIDENCE FROM THE PUMS	01-01-95/	PENNSYLVANIA STATE UNIVERSITY-UNIV P	
1 R01AG12768-01	ZAKERI, ZAHRA MECHANISMS OF CELL DEATH: A CELLULAR & GENETIC APPROACH	12-01-94/	QUEENS COLLEGE	
1 R55AG12771-01	DA VANZO, JULIE S PARENT/CHILD CORESIDENCE IN TWO DEVELOPING COUNTRIES	09-25-95/08-31-97	RAND CORPORATION	100,000
1 R01AG12772-01	LAPERRIERE, ARTHUR R COMMUNITY BASED EXERCISE FOR BLACK WOMEN ELDERS	12-01-94/	UNIVERSITY OF MIAMI	
1 P01AG12773-01	KEMPER, SUSAN COMMUNICATION AND AGING PROGRAM PROJECT	12-01-94/	UNIVERSITY OF KANSAS LAWRENCE	
1 P01AG12775-01	GREENE, LLOYD A MECHANISMS OF CELL DEATH IN AGING	12-01-94/	COLUMBIA UNIVERSITY NEW YORK	
1 R29AG12776-01A1	ARJMANDI, BAHRAM H THE EFFECTS OF ANDROGENS ON INTESTINAL CALCIUM TRANSPORT	01-01-95/	UNIVERSITY OF ILLINOIS AT CHICAGO	
1 R29AG12777-01A1	YEH, CHIH-KO THE EFFECT OF AGING ON OSTEOBLASTIC FUNCTION	09-01-95/	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	
1 R55AG12777-01A1	YEH, CHIH-KO AGING EFFECT ON OSTEOBLASTIC FUNCTION	09-10-95/08-31-98	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	100,000
1 R29AG12778-01	KRISTAL, BRUCE S OXIDANTS/DEFENSE SYSTEMS AND MITOCHONDRIAL TRANSCRIPTION	12-01-94/	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	
1 R01AG12779-01A1	VITEK, MICHAEL P APOE REGULATES BAP AGGREGATION	07-01-95/	PICOWER INSTITUTE FOR MEDICAL RESEAR	
3 R03AG12782-01S1	SMITH, KENNETH D FAMILY, HEALTH, OCCUPATION AND THE RETIREMENT PROCESS	09-01-95/08-31-96	JOHNS HOPKINS UNIVERSITY	5,000
1 R03AG12792-01A1	MOORE, CONSTANCE T ESTROGEN IN THE AGING HYPOTHALAMUS	09-30-95/08-31-96	UNIVERSITY OF NEBRASKA MEDICAL CENTE	14,958
1 R29AG12796-01A1	KINTER, MICHAEL T OXIDATIVE MODIFICATIONS OF PROTEINS IN AGING AND DISEASE	07-01-95/	UNIVERSITY OF VIRGINIA CHARLOTTESVIL	
1 R01AG12797-01	RINEHART, CLIFFORD A AGING AND IL-1 IN ENDOMETRIAL AND BREAST CANCER	12-01-94/	UNIVERSITY OF NORTH CAROLINA CHAPEL	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 R01AG12804-01	WU, TSUNG-CHIEH J INHIBIN, GONADOTROPINS, AND AGING	12-01-94/	UNIVERSITY OF CALIFORNIA LOS ANGELES	
1 R01AG12806-01A1	COLDITZ, GRAHAM A IMPACT OF WORK ON WOMEN'S HEALTH AND QUALITY OF LIFE	09-30-95/08-31-96	BRIGHAM AND WOMEN'S HOSPITAL	240,131
1 R01AG12807-01	GARLAND, THEODORE, JR EFFECTS OF DIETARY RESTRICTION ON POST-REPRODUCTIVE MICE	01-01-95/	UNIVERSITY OF WISCONSIN MADISON	
5 P20AG12810-02	WISE, DAVID A NBER CENTER FOR AGING AND HEALTH RESEARCH	09-15-95/08-31-96	NATIONAL BUREAU OF ECONOMIC RESEARCH	371,276
1 R01AG12811-01	CAPUTO, GARY R AORTIC COMPLIANCE, EXERCISE CONDITIONING, DIET AND AGING	01-01-95/	UNIVERSITY OF CALIFORNIA SAN FRANCIS	
1 R01AG12812-01	MC CULLY, KEVIN K NIRS OF CALF MUSCLES IN ELDERLY MEN	12-01-94/	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	
1 R01AG12813-01	POSNER, JOEL D DOES PHYSIOLOGY PREDICT FUNCTION IN OLD WOMEN	12-01-94/	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	
1 R01AG12814-01	YARASHESKI, KEVIN E AGING GROWTH HORMONE AND MUSCLE ANABOLISM	12-01-94/	WASHINGTON UNIVERSITY	
5 P20AG12815-02	LILLARD, LEE A RAND CENTER FOR THE STUDY OF AGING	09-30-95/08-31-96	RAND CORPORATION	281,845
1 R01AG12817-01	WOODWARD, SUZANNE SLEEP AND BREATHING IN MENOPAUSAL, MIDDLE-AGED WOMEN	12-01-94/	WAYNE STATE UNIVERSITY	
1 R29AG12818-01	EMERSON, JANE F CORTICAL CSF VOLUME FLUCTUATION IN BRAIN AGING & DEMENTI	12-01-94/	UNIVERSITY OF CALIFORNIA IRVINE	
1 R29AG12819-01A1	KENT-BRAUN, JANE A SKELETAL MUSCLE FUNCTION IN AGING	09-01-95/08-31-96	UNIVERSITY OF CALIFORNIA SAN FRANCIS	84,118
1 R29AG12820-01A1	JACKOLA, DUAINE R INTEGRIN FUNCTIONS OF LYMPHOCYTES FROM AGED HUMANS	07-01-95/	UNIVERSITY OF MINNESOTA TWIN CITIES	
1 R29AG12821-01	PAHLAVANI, MOHAMMAD A IS NFAT RESPONSIBLE FOR THE DECLINE IN IL-2 WITH AGE	07-01-95/	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	
1 R01AG12823-01	FAST, LOREN D ROLE OF LATE CD8 CELLS IN AGE INDUCED IMMUNE DYSFUNCTION	12-01-94/	RHODE ISLAND HOSPITAL (PROVIDENCE, R	

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 R01AG12824-01	MAURER, ALAN H GI MOTILITY IN THE ELDERLY AND 'FAILURE TO THRIVE'	12-01-94/	TEMPLE UNIVERSITY	
1 R29AG12825-01	BEMBEN, MICHAEL G AGE & SEX INFLUENCES ON MUSCLE HYPERTROPHY POTENTIAL	12-01-94/	UNIVERSITY OF OKLAHOMA NORMAN	
1 R01AG12826-01	RICHIE, JOHN P, JR REGULATION OF GLUTATHIONE DURING AGING	12-01-94/	AMERICAN HEALTH FOUNDATION	
1 R29AG12827-01	WEBER, GEORGE F REACTIVE OXYGEN INTERMEDIATES IN T-CELL ONTOGENY	12-01-94/	DANA-FARBER CANCER INSTITUTE	
1 R01AG12828-01A1	CHOW, CHING K DIETARY AND GENETIC MODULATION OF ANTIOXIDANT POTENTIAL	07-01-95/	UNIVERSITY OF KENTUCKY	
1 R01AG12829-01A1	ROBERTS, SUSAN B DIETARY ENERGY RESTRICTION AND METABOLIC AGING IN WOMEN	09-01-95/07-31-96	TUFTS UNIVERSITY BOSTON	327,209
1 R29AG12830-01	LEE, MAKAU P AGING, GASTRIC MUCOSAL DEFENSE AND NSAID GASTROPATHY	12-01-94/	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	
1 R01AG12831-01	BROWN, MARYBETH GENDER TREATMENT AND AGE EFFECTS WITH UNWEIGHTING	12-01-94/	WASHINGTON UNIVERSITY	
1 R01AG12833-01	BRUNZELL, JOHN D ESTROGENS, BODY FAT & LIPOPROTEINS IN AGING WOMEN	12-01-94/	UNIVERSITY OF WASHINGTON	
1 R29AG12834-01A1	KIRWAN, JOHN P AGE, EXERCISE, DIET--EFFECTS ON GLUCOSE/FATTY ACID CYCLE	09-15-95/08-31-96	PENNSYLVANIA STATE UNIVERSITY-UNIV P	85,715
5 P20AG12836-02	PRESTON, SAMUEL H CENTER ON THE DEMOGRAPHY OF AGING	09-15-95/08-31-96	UNIVERSITY OF PENNSYLVANIA	180,396
3 P20AG12837-01S1	WOLF, DOUGLAS A CENTER FOR DEMOGRAPHY AND ECONOMICS OF AGING	05-15-95/08-31-95	SYRACUSE UNIVERSITY AT SYRACUSE	25,977
5 P20AG12837-02	WOLF, DOUGLAS A CENTER FOR DEMOGRAPHY AND ECONOMICS OF AGING	09-30-95/08-31-96	SYRACUSE UNIVERSITY AT SYRACUSE	292,529
5 P20AG12839-02	LEE, RONALD D CENTER ON THE DEMOGRAPHY AND ECONOMICS OF AGING	09-15-95/08-31-96	UNIVERSITY OF CALIFORNIA BERKELEY	177,739
1 R01AG12841-01	WYATT, AASE J FUNCTIONAL ACCESSORY TRUNK MOTION IN WOMEN AGE 60-90	01-01-95/	OAKLAND UNIVERSITY	

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 R01AG12842-01	CAMPBELL, WAYNE W VITAMIN E AND RESISTANCE TRAINING IN OLDER WOMEN	12-01-94/	PENNSYLVANIA STATE UNIVERSITY-UNIV P	
1 R01AG12843-01	GRANT, MARK D DECLINING CHOLESTEROL, RESERVE LOSS, & FAILURE TO THRIVE	01-01-95/	UNIVERSITY OF ILLINOIS AT CHICAGO	
5 P20AG12844-02	NATHANSON, CONSTANCE A HOPKINS CENTER ON THE DEMOGRAPHY OF AGING	09-15-95/08-31-96	JOHNS HOPKINS UNIVERSITY	198,452
5 P20AG12846-02	HERMALIN, ALBERT I MICHIGAN EXPLORATORY CENTER ON DEMOGRAPHY OF AGING	09-30-95/08-31-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	395,097
1 R01AG12847-01	LACKO, ANDRAS G ALTERED CHOLESTEROL TRANSPORT IN ALZHEIMER'S DISEASE?	12-01-94/	UNIVERSITY OF NORTH TEXAS HLTH SCI C	
1 R01AG12848-01	WU, JOSEPH M PROCESSING OF PROTEIN TAU BY A DNA-ACTIVATED PROTEASE	12-01-94/	NEW YORK MEDICAL COLLEGE	
1 R01AG12849-01A1	ROTHSTEIN, JEFFREY D OXYGEN RADICAL TOXICITY AND CHRONIC NEURONAL LOSS	07-01-95/	JOHNS HOPKINS UNIVERSITY	
5 R01AG12850-03	FUKUCHI, KEN-ICHIRO EXPRESSION OF PERLECAN & BETA AMYLOID PRECURSOR PROTEIN	09-01-95/08-31-96	UNIVERSITY OF ALABAMA AT BIRMINGHAM	198,468
5 P20AG12852-02	MANTON, KENNETH G CENTER FOR LONGITUDINAL ANALYSIS IN MEDICAL DEMOGRAPHY	09-15-95/08-31-96	DUKE UNIVERSITY	345,446
1 R01AG12853-01	MAGGIO, JOHN AMYLOID PEPTIDE CONFORMATION AND AMYLOIDOSIS	01-01-95/12-31-95	HARVARD UNIVERSITY	260,045
1 R01AG12854-01	PICCARDO, PEDRO THE BIOLOGY OF CELLS EXPRESSING MUTATED APP	12-01-94/	INDIANA UNIV-PURDUE UNIV AT INDIANAP	
1 R01AG12855-01A1	RUSSO, CARLO OLIGOCLONAL CD8 T CELL EXPANSIONS IN AGING	07-10-95/06-30-96	CORNELL UNIVERSITY MEDICAL CENTER	254,221
1 R01AG12856-01	SAPER, CLIFFORD B MECHANISMS OF NEUROFIBRILLARY DEGENERATION	01-01-95/12-31-95	BETH ISRAEL DEACONESS MEDICAL CENTER	295,519
5 P20AG12857-02	WAITE, LINDA J CENTER ON DEMOGRAPHY AND ECONOMICS OF AGING (COA)	09-15-95/08-31-96	NATIONAL OPINION RESEARCH CENTER	228,945
1 R43AG12860-01	WU, SHUDONG A FLUORESCENCE & REFLECTANCE SENSOR FOR AGING STUDIES	11-01-94/	PHYSICAL OPTICS CORPORATION	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 R43AG12861-01	ZINKOWSKI, RAYMOND P CYTOGENIC MARKERS FOR THE DIAGNOSIS OF ALZHEIMER'S	11-01-94/	MOLECULAR GERIATRICS CORPORATION	
1 R43AG12862-01	WAGNER, STEVEN L DEVELOPMENT OF BIOCHEMICAL ASSAY FOR ALZHEIMER'S DISEASE	11-01-94/	SIBIA, INC.	
1 R43AG12864-01	WEST, JAMES W DNA PROMOTER SCREEN FOR ALZHEIMER'S DISEASE THERAPEUTICS	11-01-94/	CELL THERAPEUTICS, INC.	
1 R43AG12865-01	CHEN, STEPHEN T ESTRADIOL TRANSDERMAL THERAPEUTIC SYSTEM DEVELOPMENT	11-01-94/	STC INTERNATIONAL, INC.	
1 R43AG12866-01	MAULUCCI, RUTH A AMBULATORY MONITORING OF FALLS IN THE ELDERLY	11-01-94/	MOCO, INC.	
1 R43AG12867-01A1	LEONE, PETER B LOW COST BIOMECHANICAL STUDY OF ELDERLY GAIT & FALL RISK	08-01-95/	DIGITRACE CARE SERVICES, INC.	
1 R43AG12868-01	JONES, KATHLEEN A MOBILE URINAL FOR MOBILITY IMPAIRED INDIVIDUALS	06-01-94/	URINETTE, INC.	
1 R43AG12869-01	MATIAS, JONATHAN R DEVELOPMENT OF THE SHREW AS ANIMAL MODEL FOR BIOMEDICAL	11-15-94/	NOVA BIOSCIENCES, LTD.	
1 R43AG12870-01	LIENHARD, SUSAN PREVENTING ADVERSE DRUG REACTIONS IN ELDERLY	11-01-94/	ADAPTIVE DESIGN SYSTEM	
1 R43AG12871-01	WALKER, RICHARD F GROWTH HORMONE SECRETAGOGUES REVERSE DEFECTS OF AGING	11-01-94/	GUNTER ASSOCIATES, INC.	
1 R43AG12872-01	BELLOTT, EMILE M RATIONALLY DESIGNED M1 MUSCARINIC AGONISTS	11-01-94/	PHARM-ECO LABORATORIES	
1 R43AG12873-01	PAN, DAVID DROSOPHILA K CHANNEL MUTANTS LINKED TO ALZHEIMER DISEASE	11-01-94/	BIO-INNO, INC.	
1 R43AG12874-01	MALONE, THOMAS B AUTOMATED DISCHARGE FOR AGED PATIENT TRANSITION (ADAPT)	07-01-94/	CARLOW INTERNATIONAL INC.	
1 R43AG12874-01A1	MALONE, THOMAS B AUTOMATED DISCHARGE FOR AGED PATIENT TRANSITION (ADAPT)	10-01-94/	CARLOW INTERNATIONAL INC.	
1 R43AG12875-01A1	FETTERMAN, ELSIE ECHO HOUSING: A REVENUE-GENERATING OPPORTUNITY FOR RURA	07-01-95/	GLENN H. WOODS CORPORATION	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 R43AG12876-01	HUNT, GAIL G OVERCOMING SENIORS' RESISTANCE TO HIGH-TECH	11-01-94/	GIBSON-HUNT ASSOCIATES, LTD.	
1 R43AG12877-01	HUSSEINY, ABDO A FACES, REPRESENTATION OF POPULATION AGING ASPECTS	11-01-94/	TECHNOLOGY INTERNATIONAL, INC. OF VA	
1 R43AG12878-01	SWEENEY, MARGARET M MEASURING INDIVIDUAL DIFFERENCES IN OLDER DRIVERS	11-01-94/	ADVANCED RESOURCE TECHNOLOGIES, INC.	
1 R43AG12879-01	GASPAR, FLORENCE A ELDER ABUSE AND REDUCTION OF ELDERLY TO CRIME	11-01-94/	DATA COMMUNICATIONS RESEARCH	
1 R43AG12880-01	COUCH, THOMAS W RETROFIT MODIFICATION OF BATHTUBS FOR IMPROVED ACCESS	11-01-94/	AMERITUB, INC.	
1 R43AG12881-01	KRIEG, DEBRA P UNIQUE PROTECTIVE BARRIER FOR INCONTINENCE	02-05-95/07-31-95	BIOMEDICAL DEVELOPMENT CORPORATION	100,000
1 R43AG12883-01	BROWN, REBECCA MEDIA BASED CURRICULUM--PLANNING CARE FOR FAMILY ELDERS	02-25-95/08-24-95	NORTHWEST MEDIA, INC.	99,996
1 R43AG12884-01	WONG, STEWART THE CHOW SYSTEM FOR REHABILITATION OF GERIATRIC PATIENTS	11-01-94/	JING XING HEALTH AND SAFETY RESOURCE	
1 R43AG12885-01	DOLDER, SHARON D SENIORS REHABILITATION WALKING PROGRAM	11-01-94/	SENIOR AMERICANS REHAB WALKING INST	
1 R43AG12886-01	OVERTON, EDWARD W, JR EVALUATING TRAMPOLINE EXERCISE FOR THE SEDENTARY ELDERLY	08-01-94/	RICK'S IRON WORKS	
1 R43AG12886-01A1	OVERTON, EDWARD W, JR EVALUATING TRAMPOLINE EXERCISE FOR THE SEDENTARY ELDERLY	04-01-95/	RICK'S IRON WORKS	
1 R43AG12887-01A1	BRINK, SUSAN G PATIENT EDUCATION FOR HORMONE REPLACEMENT THERAPY	07-01-95/	HEALTHMARK ASSOCIATES	
1 R43AG12888-01	FRAIZER, RENEE' S PROMOTING HEALTH SELF-CARE FOR THE AGED	10-01-94/	HEALTH MANAGEMENT RESOURCES, INC.	
1 R43AG12889-01	MATTHEWS, MOLLY CARING FOR THE CAREGIVERS	11-01-94/	MATTHEWS MEDIA WORKS	
1 R43AG12889-01A1	MATTHEWS, MOLLY CARING FOR THE CAREGIVERS	07-01-95/	MATTHEWS MEDIA WORKS	

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FY: 95				
1 R43AG12890-01	RYABY, JOHN P PREVENTION OF OSTEOPENIA BY MECHANICAL STRAIN	07-01-94/	EXAGEN, INC.	
1 R43AG12891-01	HOFFMANN, DANIEL F 'DEMONSTRATION OF THE USES OF TELEMEDICINE IN THE HOME'	11-01-94/	INTERACTIVE HEALTH COMPANY	
1 R43AG12893-01	WANG, AI-MIN PERFORMANCE DETECTION OF CNS IMPAIRMENT IN AGING	11-01-94/	PSYBIO HEALTHMETRIC SYSTEMS, INC.	
1 R43AG12894-01	BERGMAN, VICTORIA B IMPROVE COMMUNICATION OF HEALTH INFORMATION TO ELDERLY	11-01-94/	SAVANT ASSOCIATES	
1 R43AG12895-01	BRINK, SUSAN G KIN CONNECTIONS: DISTANT CAREGIVERS SELF-STUDY PROGRAM	11-01-94/	HEALTHMARK ASSOCIATES	
1 R43AG12896-01	KELM, ROBERT J IMMUNOASSAY FOR DES-GAMMA-CARBOXY OSTEOCALCIN	11-01-94/	HAEMATOLOGIC TECHNOLOGIES, INC.	
1 R13AG12897-01	DOOLEY, DAVID M REDOX ACTIVE AMINO ACID COFACTORS--GORDON CONFERENCE	01-05-95/12-31-95	MONTANA STATE UNIVERSITY (BOZEMAN)	15,000
1 R43AG12898-01	HANSEN, PER K DEVICE TO AID SENSORY AND MEMORY DYSFUNCTIONS FOR THE AG	11-01-94/	POINTER SYSTEMS, INC.	
3 R01AG12899-01S1	SILVERMAN, MYRNA HEALTH CARE RESPONSES OF OLDER AFRICAN/WHITE AMERICANS	05-08-95/08-31-95	UNIVERSITY OF PITTSBURGH AT PITTSBUR	12,864
5 R01AG12899-02	SILVERMAN, MYRNA HEALTH CARE RESPONSES OF OLDER AFRICAN AMERICANS/WHITES	09-01-95/08-31-96	UNIVERSITY OF PITTSBURGH AT PITTSBUR	265,884
3 R01AG12899-02S1	SILVERMAN, MYRNA HEALTH CARE RESPONSES OF OLDER AFRICAN AMERICANS/WHITES	09-30-95/08-31-96	UNIVERSITY OF PITTSBURGH AT PITTSBUR	13,572
1 R01AG12900-01	BRUCE, MARTHA L PSYCHOSOCIAL FACTORS IN PHYSICAL AND SOCIAL DISABILITY	12-22-94/11-30-95	YALE UNIVERSITY	66,570
1 R43AG12902-01A1	LYNCH, TIMOTHY J COMPUTERIZED QUALITY INDICATOR TRACKING SYSTEM	06-01-94/	PSYCHSOFT INCORPORATED	
1 R43AG12903-01	CHATTREE, NEELU A CD-ROM ARCHIVE FOR DATA ON THE AGED POPULATION	11-01-94/	TECHNOLOGY INTERNATIONAL, INC. OF VA	
1 R43AG12904-01	POROPATICH, LAWRENCE T MULTIMEDIA TUTOR ON THE DYNAMICS OF POPULATION AGING	11-01-94/	BETAC CORPORATION	

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FY: 95				
1 R43AG12905-01	STRONG, STEPHEN W JOY S STRONG PERSONAL CARE ATTENDANT PROJECT	11-15-94/	SYSTEM SERVICES CONSULTING, INC.	
5 R01AG12907-02	GOLDSCHNEIDER, IRVING THYMUS INVOLUTION AND RECENT THYMIC EMIGRANTS	08-01-95/07-31-96	UNIVERSITY OF CONNECTICUT HEALTH CEN	194,531
5 R01AG12908-02	THOMAN, MARILYN L HORMONE AND CYTOKINE INFLUENCES ON THYMIC INVOLUTION	09-05-95/08-31-96	SCRIPPS RESEARCH INSTITUTE	215,225
3 R01AG12908-02S1	THOMAN, MARILYN L HORMONE AND CYTOKINE INFLUENCES ON THYMIC INVOLUTION	09-15-95/08-31-96	SCRIPPS RESEARCH INSTITUTE	49,320
2 R44AG12909-02	DROGE, JANET A ADVANCE DIRECTIVES FOR ELDERLY COMMUNITY RESIDING ADULTS	07-01-95/	HEALTH AND EDUCATION RESOURCES	
5 R01AG12910-06	MULLAN, JOSEPH T STRESS AND COPING AMONG AIDS CAREGIVERS	09-05-95/08-31-96	UNIVERSITY OF CALIFORNIA SAN FRANCIS	416,918
1 R13AG12911-01A1	DAYNES, RAYMOND A DEHYDROEPIANDROSTERONE (DHEA) AND AGING	06-01-95/05-31-96	NEW YORK ACADEMY OF SCIENCES	19,331
1 R01AG12912-01	DANGL, JEFFREY L PROGRAMMED CELL DEATH MUTANTS IN ARABIDOPSIS	07-01-95/	UNIVERSITY OF NORTH CAROLINA CHAPEL	
1 R01AG12913-01	JOHNSON, GAIL V TAU MODIFICATIONS: THE EFFECTS OF OXIDATIVE STRESS & CA	05-01-95/	UNIVERSITY OF ALABAMA AT BIRMINGHAM	
5 R01AG12914-05	YESAVAGE, JEROME A TREATMENTS FOR INSOMNIA	06-01-95/05-31-96	STANFORD UNIVERSITY	198,403
5 R01AG12915-02	PRINZ, PATRICIA N SLEEP & MENTAL FUNCTION IN THE AGED--ANABOLIC INFLUENCE	09-01-95/08-31-96	UNIVERSITY OF WASHINGTON	154,988
1 R13AG12917-01	MILLER, RICHARD A SUMMER TRAINING COURSES IN EXPERIMENTAL AGING RESEARCH	04-01-95/03-31-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	29,358
1 R01AG12918-01	LAJTHA, ABEL CHANGES IN BRAIN PROTEIN METABOLISM IN AGING	04-01-95/	NATHAN S. KLINE INSTITUTE FOR PSYCH	
1 R01AG12919-01	VERNON, PHILIP A INFORMATION PROCESSING SPEED, INTELLIGENCE, AND AGING	05-01-95/	UNIVERSITY OF WESTERN ONTARIO	
1 R01AG12920-01	POWELL, DONALD A CLASSICAL CONDITIONING: A MODEL OF COGNITIVE AGING?	01-01-95/	UNIVERSITY OF SOUTH CAROLINA AT COLU	

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 R01AG12922-01	SANDBERG, AVERY A LOSS OF Y CHROMOSOME AND AGING IN MALES	04-01-95/	SOUTHWEST BIOMEDICAL RESEARCH INSTIT	
1 R01AG12925-01	HARRIS, DAVID A PROPERTIES OF CELLULAR PRION PROTEINS	05-01-95/04-30-96	WASHINGTON UNIVERSITY	196,993
1 R01AG12926-01	GUNDERSEN, GREGG G PHOSPHATASE TARGETING AND ALZHEIMERS DISEASE TAU	05-05-95/04-30-96	COLUMBIA UNIVERSITY NEW YORK	238,345
5 R01AG12928-07	MALENKA, ROBERT C MECHANISMS OF SYNAPTIC PLASTICITY IN THE HIPPOCAMPUS	09-01-95/08-31-96	UNIVERSITY OF CALIFORNIA SAN FRANCIS	153,385
1 R13AG12929-01	SMITH, JAMES R GORDON CONFERENCE ON THE BIOLOGY OF AGING	05-07-95/04-30-96	GORDON RESEARCH CONFERENCES	35,325
1 R01AG12930-01	CARNEY, JOHN M AB PEPTIDES INDUCE FREE RADICALS AND NEUROTOXICITY	12-01-94/	UNIVERSITY OF KENTUCKY	
1 R29AG12932-01	BISHOP, AMY ROLE OF METHOXATIN (PQQ) IN AGING BRAIN MITOCHONDRIA	04-01-95/	CHILDREN'S HOSPITAL (BOSTON)	
1 R01AG12933-01	CRUTCHER, KEITH A AGING, NGF AND NEURONAL PLASTICITY	04-01-95/	UNIVERSITY OF CINCINNATI	
1 R01AG12934-01	ROBAKIS, NIKOLAOS K SOLUBILIZATION OF APP AND PRODUCTION OF AMYLOID PEPTIDE	03-01-95/	MOUNT SINAI SCHOOL OF MEDICINE OF CU	
1 R01AG12935-01	SHELANSKI, MICHAEL L IL1 INDUCTION OF ALZHEIMER-LIKE CYTOSKELETON ALTERATIONS	04-01-95/	COLUMBIA UNIVERSITY NEW YORK	
1 R01AG12936-01	GOATE, ALISON M MOLECULAR GENETICS OF FAMILIAL DEMENTIA	04-01-95/	WASHINGTON UNIVERSITY	
1 R01AG12937-01	TRONCOSO, JUAN C E4: ROLE IN THE PATHOGENESIS OF ALZHEIMER'S DISEASE	04-01-95/	JOHNS HOPKINS UNIVERSITY	
1 R01AG12938-01	SCHAFFNER, CARL P HAMSTER BENIGN PROSTATIC HYPERTROPHY MODEL	04-01-95/	RUTGERS THE STATE UNIV NEW BRUNSWICK	
1 R01AG12939-01	MONIG, MARJORIE RACIAL DIFFERENCES IN FAMILY RETIREMENT EXPECTATIONS	06-01-95/	CUNY GRADUATE SCH AND UNIV CTR	
1 R01AG12940-01	BECKER, ROBERT E CHOLINERGIC SYSTEM IN ALZHEIMER'S DISEASE	04-01-95/	SOUTHERN ILLINOIS UNIVERSITY SCH OF	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 R01AG12941-01	HARDY, JOHN A CHROMOSOME 14 ALZHEIMER'S DISEASE	01-01-95/	UNIVERSITY OF SOUTH FLORIDA	
1 R29AG12942-01	CHEN, JIAFANG EPIDEMIOLOGY OF MORTALITY FROM SOME MAJOR DISEASES	07-01-95/	UNIVERSITY OF GEORGIA	
1 R01AG12944-01	NAYLOR, MARY D HOME FOLLOW-UP OF ELDERLY PATIENTS WITH HEART FAILURE	05-01-95/	UNIVERSITY OF PENNSYLVANIA	
1 R01AG12945-01	LE BOEUF, RENEE C MODELING ALZHEIMERS DISEASE--BY AMYLOID AND APOE	09-01-95/08-31-96	UNIVERSITY OF WASHINGTON	162,244
1 R37AG12947-01	JOHNSON, EUGENE M, JR MECHANISM OF PROGRAMMED NEURONAL DEATH	05-25-95/04-30-96	WASHINGTON UNIVERSITY	217,999
1 R01AG12950-01	URBANSKI, HENRYK F GLUTAMATE RECEPTORS & NEUROFIBRILLARY DEGENERATION	04-01-95/	OREGON REGIONAL PRIMATE RESEARCH CEN	
5 R01AG12951-02	BLAIR, HARRY C CALMODULIN AND OSTEOCLAST CONTROL	09-01-95/08-31-96	UNIVERSITY OF ALABAMA AT BIRMINGHAM	172,759
5 R01AG12953-02	SNOW, ALAN D RAT MODEL TO STUDY BETA/A4 AMYLOID DEPOSITION IN BRAIN	07-01-95/06-30-96	UNIVERSITY OF WASHINGTON	120,422
5 R01AG12954-05	NEVE, RACHAEL L MOLECULAR BIOLOGY OF ALZHEIMER DISEASE NEURODEGENERATION	07-15-95/06-30-96	MC LEAN HOSPITAL (BELMONT, MA)	174,458
3 R01AG12954-05S1	NEVE, RACHAEL L MOLECULAR BIOLOGY OF ALZHEIMER DISEASE NEURODEGENERATION	09-30-95/06-30-96	MC LEAN HOSPITAL (BELMONT, MA)	44,866
1 R01AG12955-01	FAN, WEIMIN MOLECULAR CHANGES OF CELLULAR SENESCENCE	04-01-95/	MEDICAL UNIVERSITY OF SOUTH CAROLINA	
1 R01AG12956-01	FRIEDMAN, EITAN G PROTEIN FUNCTION IN AGING & ALZHEIMER'S DISEASE	04-01-95/	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	
1 R01AG12957-01	ULAS, JOLANTA U N-METHYL--D ASPARTATE RECEPTORS IN AGING DISEASE	04-01-95/	UNIVERSITY OF CALIFORNIA IRVINE	
1 R01AG12959-01	CHAPMAN, HAROLD A CATHEPSIN S AND ALZHEIMERS DISEASE	08-20-95/07-31-96	BRIGHAM AND WOMEN'S HOSPITAL	202,125
1 R01AG12960-01	CHAFFIN, DON B MUSCULOSKELETAL EXERTIONS IN OLDER PERSONS	09-01-94/	UNIVERSITY OF MICHIGAN AT ANN ARBOR	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
5 R01AG12963-02	SALMON, DAVID P COGNITIVE STUDIES OF THE LEWY BODY VARIANT OF AD	07-01-95/06-30-96	UNIVERSITY OF CALIFORNIA SAN DIEGO	174,869
1 R01AG12966-01	PESKIND, ELAINE R GLUCOCORTICOIDS AND APOE-4 IN AGING AND ALZHEIMER'S	04-01-95/	UNIVERSITY OF WASHINGTON	
1 R01AG12971-01	CARTER, RANDY R FUNCTIONAL ELECTRICAL STIMULATION AND AGING	04-01-95/	HUNTINGTON MEDICAL RESEARCH INSTITUT	
1 R01AG12972-01	MOGUL, HARRIETTE R BLACK AND WHITE AMERICANS: MENOPAUSAL DIFFERENCES	04-01-95/	NEW YORK MEDICAL COLLEGE	
1 R01AG12973-01	RAMPINO, NICHOLAS J GENE SPECIFIC REPAIR OF OXIDATIVE DAMAGE IN AGING	03-01-95/	CALIFORNIA INSTITUTE OF BIOLOGICAL R	
1 R01AG12974-01	KOLODINSKY, JANE M LIFE COURSE IMPLICATIONS OF RETIREMENT	04-01-95/	UNIVERSITY OF VERMONT & ST AGRIC COL	
1 R01AG12976-01	POTTER, LINCOLN T DISCOVERY AND EXPRESSION OF NEW ANTICHOLINERGIC TOXINS	09-01-95/08-31-96	UNIVERSITY OF MIAMI	188,828
1 U01AG12980-01	JUSTER, F THOMAS ASSET AND HEALTH DYNAMICS AMONG THE OLDEST OLD	07-10-95/12-31-95	UNIVERSITY OF MICHIGAN AT ANN ARBOR	1,765,869
5 R01AG12981-02	KINDY, MARK S STRUCTURAL PREREQUISITES FOR AMYLOID FIBRILLOGENESIS	07-01-95/06-30-96	UNIVERSITY OF KENTUCKY	160,301
1 R13AG12982-01	LOCKSHIN, RICHARD A GORDON CONFERENCE--CELL DEATH	08-01-95/07-31-96	GORDON RESEARCH CONFERENCES	5,000
1 R43AG12984-01	MC KEE, KATHLEEN A AUDITORY INTEGRATION TRAINING AND ALZHEIMER'S DISEASE	12-01-94/	PACIFIC AUDIO INTEGRATIVE THERAPIES	
1 R01AG12985-01	RUST, JOHN P ANALYSIS OF DYNAMIC MODELS OF RETIREMENT/SAVINGS	03-10-95/02-29-96	UNIVERSITY OF WISCONSIN MADISON	94,779
1 R29AG12987-01A1	CLARK, DANIEL O FUNCTIONAL STATUS, EXERCISE, SES, & RACE AMONG THE AGED	09-30-95/08-31-96	INDIANA UNIV-PURDUE UNIV AT INDIANAP	44,408
1 R01AG12989-01	SCHWARTZ, ALAN L CELLULAR BIOLOGY OF APOE CLEARANCE RECEPTOR IN CNS	04-01-95/	WASHINGTON UNIVERSITY	
1 R01AG12990-01	HIRSHORN, BARBARA A POST-RETIREMENT WORK OF WOMEN: A LIFE COURSE ANALYSIS	03-01-95/	WAYNE STATE UNIVERSITY	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 R01AG12991-01	NOSEK, MARGARET A WOMEN AGING WITH DISABILITY: CULTURAL CONTEXTS	09-01-95/	BAYLOR COLLEGE OF MEDICINE	
1 P01AG12992-01	BROWN, ROBERT H, JR SUPEROXIDE DISMUTASE IN AGING AND NEURODEGENERATION	04-15-95/03-31-96	MASSACHUSETTS GENERAL HOSPITAL	821,961
1 P01AG12993-01	MICHAELIS, ELIAS K REACTIVE OXYGEN SPECIES AND AGING	09-01-95/07-31-96	UNIVERSITY OF KANSAS LAWRENCE	935,020
1 R01AG12994-01	HEILMAN, KENNETH M EMOTIONAL SEMANTICS IN GERIATRIC NEUROLOGICAL DISEASES	01-01-95/	UNIVERSITY OF FLORIDA	
1 R01AG12995-01	GABRIELI, JOHN D FUNCTIONAL MRI ANALYSIS OF MEMORY IN AGING AND AMNESIA	05-15-95/04-30-96	STANFORD UNIVERSITY	258,120
1 R01AG12996-01	HALE, SANDRA S PROCESSING SPEED, WORKING MEMORY AND COGNITION IN DAT	09-01-95/06-30-96	WASHINGTON UNIVERSITY	99,145
1 R01AG12997-01	MUFSON, ELLIOTT J NEUROTROPHINS IN ALZHEIMER'S DISEASE	12-01-94/	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	
1 R25AG13002-01	MORGAN, RUSSELL E, JR NATIONAL TOWN FORUM/STUDENT SYMPOSIUM PROGRAM	07-10-95/06-30-96	INSTITUTE ADVANCED STUDIES/IMMUNO/AG	38,375
1 R01AG13003-01	WELTY, FRANCINE K MENOPAUSE AND HEALTH IN AGING WOMEN	04-01-95/	BETH ISRAEL DEACONESS MEDICAL CENTER	
1 R01AG13005-01	SALASSA, JOHN R OBJECTIVE PHARYNGEAL SWALLOWING DATA IN THE ELDERLY	06-01-95/	MAYO FOUNDATION	
1 R01AG13007-01	COTMAN, CARL W MECHANISMS AND MOLECULAR PROFILES OF DEGENERATION IN AD	05-25-95/04-30-96	UNIVERSITY OF CALIFORNIA IRVINE	204,137
1 R15AG13011-01	NAGELE, ROBERT G ROLE OF TELOMERE REDUCTION IN CELL AGING AND SENESCENCE	06-01-95/	UNIV OF MED/DENT NJ-SCH OSTEOPATHIC	
1 R01AG13012-01	ANDERSEN, GEORGE J AGE RELATED CHANGES IN SENSITIVITY TO OPTIC FLOW	04-01-95/	UNIVERSITY OF CALIFORNIA RIVERSIDE	
1 R01AG13013-01A1	SCHNELLE, JOHN F MOBILITY AND INCONTINENCE MANAGEMENT EFFECTS ON SICKNESS	09-30-95/08-31-96	UNIVERSITY OF CALIFORNIA LOS ANGELES	385,786
1 R15AG13014-01	SOMANI, SATU M OLD AGE/EXERCISE:ANTIOXIDANT ENZYME ACTIVATION/INDUCTION	06-01-95/	SOUTHERN ILLINOIS UNIVERSITY SCH OF	

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 R15AG13015-01	GARCIA-GARCIA, RUBEN ADH/ANG II ROLE IN AGE-RELATED CHANGES IN RENAL FUNCTION	06-01-95/	UNIVERSITY OF PUERTO RICO RIO PIEDRA	
1 R29AG13018-01	FLEISCHMAN, DEBRA A AGING AND IMPLICIT MEMORY--EVIDENCE FROM LESION STUDIES	05-01-95/04-30-96	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	103,083
1 R01AG13021-01	HEYMSFIELD, STEVEN B AGING AND SKELETAL MUSCLE--NEW BODY COMPOSITION MODELS	04-17-95/03-31-96	ST. LUKE'S ROOSEVELT HOSP CTR (NEW Y	247,577
1 R15AG13023-01	JACOB, SUSAN R STRUCTURED GRIEF SUPPORT GROUP EFFECT ON OLDER ADULTS	08-01-95/07-31-98	UNIVERSITY OF MEMPHIS	104,831
1 R01AG13025-01	ROSS, CATHEY S COMMUNICATING SOCIAL SUPPORT IN EXTENDED FAMILIES	06-01-95/	UNIVERSITY OF NORTH CAROLINA GREENSB	
1 R01AG13027-01	JONIDES, JOHN AGE & WORKING MEMORY--NEUROIMAGING & BEHAVIORAL STUDIES	09-30-95/06-30-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	272,131
1 R01AG13029-01	RABIN, DAVID L MINORITY USE OF MEDICARE POST HOSPITAL HOME HEALTH CARE	06-01-95/	GEORGETOWN UNIVERSITY	
1 R29AG13031-01	RUDBERG, MARK A DISABILITY PATHWAYS IN OLDER PERSONS	04-01-95/	UNIVERSITY OF CHICAGO	
1 R15AG13034-01	BOOSALIS, MARIA G INTERACTION OF CYTOKINES AND MALNUTRITION IN ELDERS	06-01-95/	UNIVERSITY OF KENTUCKY	
1 R01AG13035-01	BRANDT, JASON CHARACTERIZING AND OPTIMIZING MEMORY IN THE ELDERLY	04-01-95/	JOHNS HOPKINS UNIVERSITY	
1 R13AG13039-01	WILKING, SPENCER V 1995 SUMMER INSTITUTE IN GERIATRIC MEDICINE	07-01-95/06-30-96	BOSTON UNIVERSITY	40,354
1 R29AG13040-01	BURKE, JEANMARIE B PHYSICAL ACTIVITY, AGING AND SPINAL INHIBITORY PATHWAYS	06-01-95/	UNIVERSITY OF SOUTH CAROLINA AT COLU	
1 R01AG13041-01	FOWKES, WILLIAM C NUTRITION INTERVENTION OF AT - RISK INDEPENDENT ELDERS	04-01-95/	STANFORD UNIVERSITY	
1 R01AG13042-01	EBERHARDT, ALAN W CORRELATION OF JOINT FORCES AND STRESSES TO KNEE OA	04-01-95/	UNIVERSITY OF ALABAMA AT BIRMINGHAM	
1 R01AG13043-01	YORK, JOHN L CORRELATES OF AGING AND CALORIC RESTRICTION IN MICE	01-01-95/	UNIVERSITY OF ARKANSAS MED SCIS LTL	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 R01AG13044-01	DANZO, BENJAMIN J AGING AND EPIDIDYMAL PHYSIOLOY	04-01-95/	VANDERBILT UNIVERSITY	
1 R29AG13045-01	HAN, EUN-SOO AGING, FOOD RESTRICTION AND HYPERADRENOCORTICISM	04-01-95/	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	
1 R01AG13047-01	KANALEY, JILL A ESTROGEN REPLACEMENT AND EXERCISE IN MENOPAUSAL WOMEN	04-01-95/	UNIVERSITY OF VIRGINIA CHARLOTTESVIL	
1 P01AG13048-01	BALL, MELVYN J CYTOPATHIC MECHANISMS IN THE COURSE OF ALZHEIMER DISEASE	04-01-95/	OREGON HEALTH SCIENCES UNIVERSITY	
1 R43AG13049-01	ZAWADSKI, RICK T INTEGRATED INFORMATION SYSTEMS FOR ADULT DAY SERVICES	06-15-95/03-14-96	RTZ ASSOCIATES	73,219
1 R01AG13052-01	SCHWARTZ, ROBERT S DIET AND EXERCISE INTERVENTION IN OLDER DIABETICS	04-01-95/	UNIVERSITY OF WASHINGTON	
1 R01AG13053-01	COSTELLO, LESLIE C PROSTATE CITRATE PRODUCTION AND AGING	12-01-94/	UNIVERSITY OF MARYLAND BALT PROF SCH	
1 R01AG13054-01	MOORADIAN, ARSHAG D AGE-RELATED CHANGES IN APOA1 EXPRESSION	04-01-95/	ST. LOUIS UNIVERSITY	
5 R01AG13056-02	SHEA, THOMAS B EXACERBATION OF AD NEUROPATHOLOGY BY ASTROGLIAL FACTORS	08-15-95/06-30-96	UNIVERSITY OF MASSACHUSETTS LOWELL	125,251
5 R01AG13059-02	HASLAM, SANDRA Z HORMONAL RESPONSIVENESS OF POSTMENOPAUSAL MAMMARY GLAND	09-01-95/08-31-96	MICHIGAN STATE UNIVERSITY	164,361
1 R15AG13060-01	WILLOUGHBY, DARRYN S WEIGHT TRAINING IN THE AGED: EFFECTS ON MUSCLE PROTEIN	06-01-95/	TARLETON STATE UNIVERSITY	
1 R15AG13061-01	ZIMMERMAN, JAY A ANTI-OXIDANT PROTECTION IN THE METHIONINE-RESTRICTED RAT	06-01-95/	ST. JOHN'S UNIVERSITY	
1 R01AG13064-01	CREW, MARK D MOLECULAR BASIS FOR THE MHC INFLUENCE ON AGING	04-01-95/	UNIVERSITY OF ARKANSAS MED SCIS LTL	
1 R01AG13065-01	EFFROS, RITA B IMMUNOLOGIC ENHANCEMENT OF VACCINES IN THE ELDERLY	04-01-95/	UNIVERSITY OF CALIFORNIA LOS ANGELES	
1 R01AG13066-01	BLACK, SUSAN PROLONGED POSTOPERATIVE COGNITIVE DYSFUNCTION IN ELDERLY	05-01-95/	UNIVERSITY OF FLORIDA	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 R01AG13067-01	NISSEN, STEVEN L ROLE OF PROTEOLYSIS IN REVERSING ELDERLY MUSCLE WASTING	06-01-95/	IOWA STATE UNIVERSITY OF SCIENCE & T	
1 R01AG13069-01	GREENSPAN, SUSAN L FEMORAL OSTEOPOROSIS IN ELDERLY WOMEN	08-20-95/04-30-96	BETH ISRAEL DEACONESS MEDICAL CENTER	435,819
3 R01AG13069-01S1	GREENSPAN, SUSAN L FEMORAL OSTEOPOROSIS IN ELDERLY WOMEN	08-20-95/04-30-96	BETH ISRAEL DEACONESS MEDICAL CENTER	16,700
1 R01AG13072-01	DEVITO, CAROLEE A SAFE-GRIP FALL/INJURIES INTERVENTION: A RANDOMIZED TRIAL	04-01-95/	UNIVERSITY OF MIAMI	
1 R15AG13073-01	LEE, SANDRA L AGING RELATED INTERVERTEBRAL DISK DEGENERATION IN DOGS	06-01-95/	MIDWESTERN UNIVERSITY	
5 R01AG13078-08	FINK, PAMELA J SELECTION OF THE T CELL RECEPTOR REPERTOIRE	09-15-95/08-31-96	UNIVERSITY OF WASHINGTON	195,131
1 R01AG13080-01	FILLIT, HOWARD M AN ENHANCED INFLUENZA VACCINE FOR THE ELDERLY	04-01-95/	MOUNT SINAI SCHOOL OF MEDICINE OF CU	
1 R01AG13082-01	PUDDINGTON, LYNN AGE-RELATED REGULATION OF INTESTINAL T CELLS BY SCF	04-01-95/	UNIVERSITY OF CONNECTICUT HEALTH CEN	
1 R43AG13083-01	SIEGEL, MARVIN I A METHOD TO REDUCE XEROSIS IN THE AGING	03-01-95/	CAROGEN, INC.	
1 R43AG13085-01	LLOYD, DONALD G URODYNAMIC MODELING OF BENIGN PROSTATIC HYPERPLASIA	04-01-95/	LOATS ASSOCIATES, INC.	
1 R43AG13086-01	MC KEE, KATHLEEN A DOGFISH SHARK OIL THERAPY FOR ALZHEIMER'S DISEASE	02-15-95/	PACIFIC AUDIO INTEGRATIVE THERAPIES	
5 R01AG13087-02	DONAHUE, HENRY J GAP JUNCTIONS AND BONE CELL RESPONSE TO PHYSICAL SIGNALS	09-01-95/08-31-96	PENNSYLVANIA STATE UNIV HERSHEY MED	175,590
1 R43AG13088-01A1	GORDON, KATHERINE DIAGNOSTIC TEST DETERMINING BIOLOGICAL ESTROGEN EFFICACY	06-01-95/	APOLLO GENETICS, INC.	
1 R43AG13089-01	KLEINSEK, DON A A NOVEL MODEL FOR AGING DECELERATION	03-01-95/	GERIGENE MEDICAL CORPORATION	
1 R43AG13090-01	ITO, RALPH KAZUO CARBONYLATED HEMOGLOBIN: A MEASURE OF OXIDATIVE STRESS	04-01-95/	ODYSSEY THERAPEUTICS CORPORATION	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 R43AG13091-01	WU, ALEXANDER C METHODS AND TECHNIQUES OF HEALTH ENHANCEMENT EXERCISES	07-01-95/	AROMA CORPORATION	
1 R43AG13092-01	SWEZEY, ROBERT L DEVICE FOR THE PREVENTION AND TREATMENT OF OSTEOPOROSIS	02-01-95/	CEQUAL PRODUCTS, INC.	
1 R43AG13093-01	KILBRIDE, PAUL E OLDER DRIVER MOBILE AND INTERACTIVE RE-EDUCATION PROGRAM	03-01-95/	VIRTUAL WORLDS, INC.	
5 P20AG13094-02	WICHA, MAX S BREAST CANCER IN ELDERLY WOMEN	09-30-95/08-31-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	152,114
5 P20AG13095-02	GANZ, PATRICIA A BREAST CANCER PREVENTION AND CONTROL IN OLDER WOMEN	09-15-95/08-31-96	UNIVERSITY OF CALIFORNIA LOS ANGELES	149,373
1 R43AG13096-01	ELBAUM, DANEK TOWARDS ALZHEIMER DISEASE DIAGNOSTICS	03-01-95/	BIOTRACES	
1 R43AG13098-01	VALVANO, JANICE M URINE COLLECTION DEVICE FOR BEDBOUND WOMEN	03-01-95/	GLORY HEALTH CARE PRODUCTS, INC.	
1 R43AG13099-01	LANE, STEPHEN S RESIDENTIAL HOME MONITOR	02-15-95/	AMRON CORPORATION	
1 R43AG13100-01	SAWATARI, TAKEO ACOUSTIC MONITORING SYSTEM FOR AN ELDERLY PERSON'S CARE	03-01-95/	SENTEC CORPORATION	
1 R43AG13101-01	ARMSTRONG, RICHARD W A PNUEMATIC, TIMED RELEASE, DOOR HOLDER FOR HOME USE	03-01-95/	ARMSTRONG COMPANY	
1 R43AG13103-01	FELSING, GARY W DETECTION OF FALLS	03-01-95/	MOTUS, INC.	
1 R43AG13104-01	BRAIG, J-ME D LONG TERM CARE PRODUCT DELIVERY SERVICE	03-01-94/	OUTER BANKS GROUP	
1 R43AG13105-01	SAMULEWICZ, THOMAS CIRCULAR TACTILE KEYPAD	03-01-95/	INDIVIDUAL AWARD--SAMULEWICZ, THOMAS	
1 R43AG13106-01	PUGH, ROBERT W, JR FEMALE ANTI-INCONTINENCE DEVICE	04-01-95/	DACOMED CORPORATION	
5 R01AG13107-02	COUNTE, MICHAEL A ANALYSES OF HEALTH MAINTENANCE BEHAVIOR OF OLDER PEOPLE	09-01-95/12-31-96	ST. LOUIS UNIVERSITY	68,494

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
9 R01AG13108-11	ROTHENBERG, ELLEN V FUNCTION IN THYMOCYTE DIFFERENTIATION	01-01-95/12-31-95	CALIFORNIA INSTITUTE OF TECHNOLOGY	251,850
1 R43AG13109-01	DYER, CHARLES ALONZO MULTIMEDIA DELIVERY OF CONGNITIVE ACTIVITIES TO THE AGED	02-01-95/	DM-TWO SOLUTIONZ, INC.	
1 R43AG13110-01	FEIL, NAOMI VALIDATION THERAPIST TRAINING CURRICULUM	03-01-95/	EDWARD FEIL PRODUCTIONS	
1 R43AG13112-01	HILLMAN, CHARLES E AUTOMATED SYSTEM FOR IN-HOME ELDER CARE	03-01-95/	HILLMAN CONSULTING SERVICES, INC.	
1 R43AG13113-01	KASPER, JOYCE Z ELDER PERSONAL/HEALTH CARE IN UNIQUE LIVING ENVIRONMENT	04-01-95/	NEWFLEX GROUP, INC.	
1 R43AG13114-01	JAMES, MELISSA MANAGED PERSONAL ASSISTANCE FOR OLDER PEOPLE	03-01-95/	TECHNOLOGY INTERNATIONAL, INC. OF VA	
1 R43AG13115-01	ALEXANDER, NANCY EAP PLUS EXTENDED FAMILY CARE	03-01-95/	COMPLETE CARE MANAGEMENT, INC.	
1 R43AG13117-01	KENNEDY, ROBERT S HEAD MOUNTED ACCELEROMETER TO INDEX POSTURAL STABILITY	04-01-95/	ESSEX CORPORATION	
1 R43AG13118-01	VILLANI, PATRICIA J OLDER AE QUALITY OF LIFE PLANNING MODEL FOR BOOMER WOMEN	03-01-95/	GERO, INC.	
1 R43AG13120-01	WEBB, BRUCE W A MODEL SYSTEM FOR CONSUMER EDUCATION IN LONG TERM CARE	03-01-95/	DOLLEY, KENISTON AND WEBB	
1 R43AG13121-01	KENNEDY, ROBERT S IMPROVING VISUAL SKILLS IN THE ELDERLY	04-01-95/	ESSEX CORPORATION	
1 R43AG13122-01	BLACKSHEAR, LEONARD A USING TELECOMMUNICATION TO REACH MINORITY CAREGIVERS	02-01-95/	ASSOCIATED ENTERPRISES, INC.	
1 R43AG13123-01	THOMPSON, DON P FEASIBILITY STUDY FOR A GOLDEN AGE CHANNEL	07-01-95/	CPN TELEVISION	
1 R43AG13124-01	FIRMAN, JAMES P FEASIBILITY OF CD-ROM FOR SENIORS	03-01-95/	USHC DEVELOPMENT CORPORATION	
1 R43AG13126-01	DROGE, JANET A INCREASING ELDERLY ADULTS' USE OF ADVANCE DIRECTIVES	03-01-95/	HEALTH AND EDUCATION RESOURCES	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 R43AG13127-01	SWEZEY, ROBERT W DYNAMIC VISUAL ACUITY MEASURMENT FOR OLDER DRIVERS	03-01-95/	ISA ASSOCIATES, INC.	
1 R43AG13128-01	DITTENBER, GAIL MOBILE URINE COLLECTION, STORAGE AND ANALYSIS SYSTEM	11-01-94/	URINETTE, INC.	
1 R43AG13129-01A1	HUNT, GAIL G DOES CORPORATE ELDERCARE BENEFIT MANAGERS AS WELL AS EMP	07-01-95/	GIBSON-HUNT ASSOCIATES, LTD.	
1 R43AG13130-01	VERTREES, JAMES C HEALTH OF ELDERLY HOUSEHOLDS: PROJECTION SOFTWARE	03-16-95/	SOLON CONSULTING GROUP, LTD.	
1 R43AG13131-01	CARROLL, CAROLYN A MONITORING ALZHEIMER'S PATIENTS WHO WANDER	03-01-95/	STAT TECH	
1 R01AG13132-01	DORSHKIND, KENNETH A LYMPHOPOIESIS DURING THYMIC INVOLUTION AND REGENERATION	05-15-95/04-30-96	UNIVERSITY OF CALIFORNIA RIVERSIDE	177,767
1 R43AG13133-01	JONES, KEITH A REMOTE TELEVIDEO CONFIGURATION FOR HOME CARE MONITORING	03-15-95/	QUALIMATICS	
1 R43AG13135-01	ADKINS, CHARLES CUING DEVICE FOR DEMENTIA IMPAIRED INDIVIDUALS	03-01-95/	MEDICUE	
1 R01AG13136-01	BREUER, BRENDA ASSESSING LIFE EXPECTANCY OF NURSING HOME RESIDENTS	09-01-95/	JEWISH HOME AND HOSPITAL	
1 R01AG13139-01	OGILVIE, DANIEL M PERSONAL PROJECTS & THEIR EVALUATIONS OVER THE LIFESPAN	07-01-95/	RUTGERS THE STATE UNIV NEW BRUNSWICK	
1 R01AG13140-01	BORST, STEPHEN E GROWTH HORMONE IN AGING: INFLUENCE OF DRUGS AND EXERCISE	04-01-95/	UNIVERSITY OF FLORIDA	
1 R01AG13141-01	GOLDGABER, DMITRY Y SEQUESTRATION OF AMYLOID BETA PROTEIN	07-01-95/	STATE UNIVERSITY NEW YORK STONY BROO	
1 R01AG13142-01	SPARKS, DAVID L NEUROFIBRILLARY TANGLE FORMATION IN HYPERTENSION	07-01-95/	UNIVERSITY OF KENTUCKY	
1 R13AG13143-01	MACIAG, THOMAS MOLECULAR MECHANISMS OF CELLULAR SENESCENCE	05-30-95/	SOCIETY FOR IN VITRO BIOLOGY	
1 R01AG13146-01	PARR, JOYCE K SATISFACTION & CONTROL: PREDICTORS/OUTCOMES OF HEALTH	07-01-95/	UNIVERSITY OF SOUTH FLORIDA	

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FY: 95				
1 R01AG13148-01	HERTZOG, CHRISTOPHER K AGING METAMEMORY AND STRATEGY USE DURING LEARNING	07-25-95/06-30-96	GEORGIA INSTITUTE OF TECHNOLOGY	133,896
1 R01AG13154-01	WALLACE, DOUGLAS C MITOCHONDRIAL GENETICS AND AGING	07-10-95/06-30-96	EMORY UNIVERSITY	197,663
1 R29AG13158-01	VENKATRAMAN, MANORAMA M PSYCHOSOCIAL STRESS, HEALTH, AND ILLNESS BEHAVIOR	07-01-95/	UNIVERSITY OF WASHINGTON	
1 R01AG13160-01	THOMPSON, PERRY G IMPACT OF SELECTED INFLUENCES ON MALNUTRITION	05-30-95/	UNIVERSITY OF ARKANSAS MED SCIS LTL	
1 R01AG13161-01	JOHNSON, KEITH A RELATIONSHIP OF BRAIN FMRI AND SPECT TO COGNITION IN AD	07-01-95/	BRIGHAM AND WOMEN'S HOSPITAL	
1 R29AG13162-01	KARLIN, NANCY J AD SUPPORT GROUPS: BARRIERS TO PARTICIPATION OVER TIME	08-01-95/	UNIVERSITY OF NORTHERN COLORADO	
1 R29AG13163-01	MC GUIRE, LISA C OLDER ADULTS' MEMORY FOR MEDICAL INFORMATION	07-01-95/	PENNSYLVANIA STATE UNIVERSITY-UNIV P	
1 R01AG13165-01	TURNER, DENNIS A NEURONAL AND POST LESION PLASTICITY IN AGING HIPPOCAMPUS	08-10-95/07-31-96	DUKE UNIVERSITY	208,466
1 R01AG13167-01	HARDY, JOHN A MOLECULAR ANALYSIS OF THE APOE LOCUS IN ALZHEIMER'S DIS	07-01-95/	UNIVERSITY OF SOUTH FLORIDA	
1 R01AG13168-01	KAPLAN, DAVID R CYTOKINE RESPONSE TO PARAINFLUENZA VIRUS IN THE ELDERLY	07-01-95/	CASE WESTERN RESERVE UNIVERSITY	
1 R01AG13169-01	BOYKINS-BAPTISTE, LINDA M MINORITY ELDERLY USING IN-HOME SUPPORT SERVICES	10-01-94/	KAIR IN-HOME SOCIAL SERVICES	
1 R01AG13171-01	GANDY, SAMUEL E MOLECULAR PATHOLOGY OF BRAIN AGING: HORMONAL REGULATION	07-01-95/	CORNELL UNIVERSITY MEDICAL CENTER	
1 R01AG13172-01	MEDRANO, ESTELA E TERMINAL DIFFERENTIATION AND SENESCENCE IN MELANOCYTES	07-01-95/	UNIVERSITY OF CINCINNATI	
1 R01AG13173-01	BARASH, DAVID P AGE-RELATED BEHAVIORAL INDIVIDUALITY	06-16-95/	UNIVERSITY OF WASHINGTON	
1 R43AG13175-01	FINKEL, MADELON L HOW TO SELECT A PHYSICIAN IN THE ERA OF MANAGED CARE	03-01-95/	SECOND OPINION CONSULTANTS, INC.	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 R01AG13178-01	DE TOLEDO-MORRELL, LEYLA SYNAPTIC SUBSTRATES OF LTD: EFFECTS OF AGING	07-01-95/	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	
1 R01AG13179-01	BHATNAGAR, YOGENDRA M AGING, TELOMERES AND HUMAN BRAIN	07-01-95/	UNIVERSITY OF SOUTH ALABAMA	
9 R44AG13183-02	WALKER, BONNIE L INJURY PREVENTION FOR THE ELDERLY	06-01-95/05-31-96	BONNIE WALKER AND ASSOCIATES	363,400
1 R01AG13184-01	COHEN, DONNA EVALUATION OF THE NUTRITION SCREENING INITIATIVE	07-01-95/	UNIVERSITY OF SOUTH FLORIDA	
1 R01AG13185-01	LIEM, RONALD K NEUROFILAMENT KINASES AND ALZHEIMERS DISEASE TAU	08-20-95/07-31-96	COLUMBIA UNIVERSITY NEW YORK	312,793
1 R01AG13186-01	JOHNSON, RICHARD E PREDICTORS OF DISABILITY PATTERNS IN THE ELDERLY	07-01-95/	KAISER FOUNDATION RESEARCH INSTITUTE	
1 R01AG13187-01	BURKE, JAMES R DIAGNOSTIC USE APOE 4/4 COST BENEFIT IN DEMENTIA WORKUP	09-01-95/	DUKE UNIVERSITY	
1 R01AG13188-01	CAVANAUGH, JOHN C ETHNIC MINORITY CAREGIVERS: A LIFE COURSE APPROACH	07-01-95/	UNIVERSITY OF DELAWARE	
1 R01AG13190-01	CHOLEWIAK, ROGER W TACTILE DISPLAY OF SPATIAL ORIENTATION INFORMATION	07-01-95/	PRINCETON UNIVERSITY	
1 R01AG13191-01	LEICHT, KEVIN T POPULATION AGING AND BUSINESS ACTIVITY IN THE RURAL US	07-01-95/	PENNSYLVANIA STATE UNIVERSITY-UNIV P	
1 R01AG13193-01	ANDERSON, NORMAN B HEALTH, BEHAVIOR & AGING IN BLACKS: AN ALUMNI STUDY	07-01-95/	DUKE UNIVERSITY	
1 R01AG13194-01	FROST, J JAMES DOPAMINE TRANSPORTER IMAGING BY PET IN AGING AND DISEASE	09-01-95/06-30-96	JOHNS HOPKINS UNIVERSITY	304,697
1 R01AG13197-01	MORRIS, REBECCA J THE EFFECTS OF AGING ON EPIDERMAL REGENERATION	07-01-95/	LANKENAU MEDICAL RESEARCH CENTER	
1 R29AG13198-01	STEVENS, ALAN B SOCIAL AND BEHAVIORAL EFFECTS OF AN ACTIVITY PROGRAM	07-01-95/	UNIVERSITY OF ALABAMA AT BIRMINGHAM	
1 R29AG13202-01	BUCKWALTER, J GALEN SIMULATION OF COGNITIVE CHANGES IN ALZHEIMER'S DISEASE	07-01-95/	UNIVERSITY OF SOUTHERN CALIFORNIA	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 R01AG13203-01	TATE, BARBARA A CYTOARCHITECTURE OF THE AGED HYPOTHALAMUS	07-01-95/	MIRIAM HOSPITAL	
1 R01AG13205-01	CHIAO, JEN W PROSTATE GROWTH REGULATION BY INTERLEUKIN 1	07-01-95/	NEW YORK MEDICAL COLLEGE	
1 R29AG13206-01	HUBBLE, JEAN P RISK FACTORS IN ALZHEIMER'S AND PARKINSON'S DISEASE	07-01-95/	UNIVERSITY OF KANSAS MEDICAL CENTER	
1 R29AG13208-01	BOWSER, ROBERT NOVEL ANTIGEN IN DEVELOPING BRAIN AND ALZHEIMERS DISEASE	08-15-95/07-31-96	UNIVERSITY OF PITTSBURGH AT PITTSBUR	99,666
1 R01AG13209-01	NORRIS, DAVID O THE SALMON BRAIN AS A MODEL FOR AGING	07-01-95/	UNIVERSITY OF COLORADO AT BOULDER	
1 R01AG13211-01	DE LEON, MONY J SPECIFIC MEMORY RELATED BRAIN CHANGES IN AGING	07-01-95/	NEW YORK UNIVERSITY	
1 R01AG13212-01	RUBENSTEIN, RICHARD IN VITRO NEURONAL MODELS TO STUDY BAPP AND PRPC FUNCTION	07-01-95/	INSTITUTE FOR BASIC RES IN DEV DISAB	
1 R01AG13214-01	ROSES, ALLEN D ISOLATION & ANALYSIS OF GENES IN FAD3 REGION OF CHRL4	07-01-95/	DUKE UNIVERSITY	
1 R01AG13215-01	DEAN, GARY E ALZHEIMER'S NEUROTOXIC PHF-ASSOCIATED LIPIDS	07-01-95/	UNIVERSITY OF CINCINNATI	
1 R01AG13216-01	KLEIN, CLAUDETTE METABOLIC REGULATION IN DIFFERENTIATION AND AGING	07-01-95/	ST. LOUIS UNIVERSITY	
1 R01AG13217-01	SCHMID, THOMAS M DOXYCYCLINE PROTECTS CHONDROCYTES IN AGING CARTILAGE	07-01-95/	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	
1 R01AG13219-01	VERSTRAETE, MARY C GAIT INITIATION IN THE ELDERLY	07-01-95/	UNIVERSITY OF AKRON	
1 R01AG13220-01	WINCHURCH, RICHARD A THE ROLE OF TGF-BETA IN IMMUNOSENESCENCE	07-01-95/	JOHNS HOPKINS UNIVERSITY	
1 R01AG13221-01	KANG, JAE O AGING, OXIDATIVE DAMAGE, AND EXCESS IRON	07-01-95/	UNIVERSITY OF NEW HAMPSHIRE	
1 R01AG13226-01	ANDERSON, GREGORY J DIETARY N-3 FATTY ACIDS IN THE CALORIE-RESTRICTED RAT	07-01-95/	OREGON HEALTH SCIENCES UNIVERSITY	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 R29AG13227-01	BRECHUE, WILLIAM F EXERCISE TRAINING AND FUNCTION IN DYSFUNCTIONAL ELDERLY	07-01-95/	UNIVERSITY OF FLORIDA	
1 R29AG13229-01	WINSTEIN, CAROLEE J CONTROL OF AIMED HAND MOVEMENTS IN AGING HUMANS	07-01-95/	UNIVERSITY OF SOUTHERN CALIFORNIA	
1 R01AG13232-01	GREENSPAN, SUSAN L BONE LOSS PREVENTION AFTER ACUTE HIP FRACTURE IN ELDERLY	07-01-95/	BETH ISRAEL DEACONESS MEDICAL CENTER	
1 R01AG13233-01	RAO, K MURALI KRISHNA AMYLOID PRECURSOR PROTEIN REGULATION IN LEUKOCYTES	07-01-95/	DUKE UNIVERSITY	
1 R01AG13234-01	STEGMAN, MARY R FRACTURE PREVENTION BY DIETARY CALCIUM	07-01-95/	CREIGHTON UNIVERSITY	
1 R01AG13235-01	PODUSLO, SHIRLEY E A GENETIC STUDY OF LATE ONSET ALZHEIMER'S DISEASE	07-01-95/	TEXAS TECH UNIVERSITY HEALTH SCIS CE	
1 R01AG13236-01	GRISSO, JEANE A TRIAL OF EXERCISE TO REDUCE FALLS IN INNER-CITY ELDERLY	07-01-95/	UNIVERSITY OF PENNSYLVANIA	
1 R29AG13237-01	SILVERSTEIN, MERRIL GRANDPARENT/ADULT GRANDCHILD RELATIONS & PSYCHOLOGICAL	09-01-95/08-31-96	UNIVERSITY OF SOUTHERN CALIFORNIA	117,816
1 R01AG13240-01	SULLIVAN, DENNIS M ONSEPHF TRIAL--PILOT PHASE	09-30-95/08-31-96	UNIVERSITY OF ARKANSAS MED SCIS LTL	169,572
1 R01AG13241-01	HALL, JANET E AGING AND THE HYPOTHALAMIC-PITUITARY REPRODUCTIVE AXIS	08-01-95/07-31-96	MASSACHUSETTS GENERAL HOSPITAL	267,501
1 R01AG13243-01	LOTZ, MARTIN K NITRIC OXIDE AND CELLULAR AGING	08-20-95/06-30-96	UNIVERSITY OF CALIFORNIA SAN DIEGO	176,143
1 R01AG13244-01	URIST, MARSHALL R HBMP AN INDICATOR OF BONE QUALITY IN HEALTH AND DISEASE	07-02-95/	UNIVERSITY OF CALIFORNIA LOS ANGELES	
1 R01AG13245-01	FULOP, TAMAS AGE AND THE SIGNAL TRANSDUCTION OF HUMAN T LYMPHOCYTES	01-06-95/	UNIVERSITY OF SHERBROOKE	
1 U01AG13247-01	FOX, PATRICK J ALZHEIMER'S FAMILY CAREGIVING COORDINATING CENTER	08-01-95/	UNIVERSITY OF CALIFORNIA SAN FRANCIS	
9 R44AG13248-02	STROMBECK, RITA D AIDS AND AGING--WHAT PEOPLE OVER 50 NEED TO KNOW	04-01-95/03-31-96	HEALTHCARE EDUCATION ASSOCIATES	145,374

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FY: 95				
1 U01AG13249-01	HOLMES, DOUGLAS COORDINATING CENTER TO COOPERATIVE FAMILY STUDIES	03-01-94/	HEBREW HOME FOR THE AGED AT RIVERDAL	
1 R01AG13250-01	JOHNSON, MARK D AGE-RELATED CHANGES IN ALPHA ADRENOCEPTOR MECHANISMS	07-01-95/	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	
1 R01AG13251-01	TAFFET, GEORGE E LIPID MODIFICATION OF THE SENESCENT HEART	02-05-95/12-31-95	BAYLOR COLLEGE OF MEDICINE	186,678
1 U01AG13252-01	SWEARER, JOAN M INTERVENTION STRATEGIES FOR CAREGIVER BURDEN	08-01-95/	UNIVERSITY OF MASSACHUSETTS MEDICAL	
1 U01AG13253-01	BURNS, EDITH A A REPRESENTATIONAL INTERVENTION FOR CAREGIVER STRESS	08-01-95/	SINAI SAMARITAN MEDICAL CENTER	
1 U01AG13255-01	MAHONEY, DIANE M TLC TELEPHONE SYSTEM FOR ALZHEIMERS FAMILY CAREGIVERS	09-15-95/08-31-96	BOSTON UNIVERSITY	349,999
3 U01AG13255-01S1	MAHONEY, DIANE M TLC TELEPHONE SYSTEM FOR ALZHEIMERS FAMILY CAREGIVERS	09-30-95/08-31-96	BOSTON UNIVERSITY	51,740
1 U01AG13256-01	SMYTH, KATHLEEN A INTERVENTION SITE FOR RFA: AG-94-03	08-01-95/	CASE WESTERN RESERVE UNIVERSITY	
1 U01AG13257-01	STUCKEY, JON C COORDINATING CENTER FOR RFA: AG-94-003	08-01-95/	CASE WESTERN RESERVE UNIVERSITY	
1 U01AG13258-01	OSTWALD, SHARON K ENHANCING CAREGIVING: AFRICAN, ANGLO & MEXICAN AMERICANS	08-01-95/	UNIVERSITY OF TEXAS HLTH SCI CTR HOU	
1 U01AG13259-01	ROYALL, DONALD R ECF DIRECTED CAREGIVER INTERVENTIONS FOR DEMENTIA (SITE)	08-01-95/	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	
1 P30AG13260-01	SCHNEIDER, EDWARD L NATHAN SHOCK CENTER FOR EXCELLENCE IN BASIC BIOLOGY OF A	07-01-95/	UNIVERSITY OF SOUTHERN CALIFORNIA	
1 U01AG13261-01	CROWLEY-SCHRAEDER, CHERYL RURAL CAREGIVERS OF ALZHEIMER'S RESPITE AND EDUCATION	08-01-95/	CARLE FOUNDATION HOSPITAL (URBANA, I	
1 U01AG13262-01	BOTTENBERG, DONNA J COMMUNICATIVE INTERVENTION FOR SPOUSES & PERSONS WITH AD	08-01-95/	UNIVERSITY OF NORTHERN COLORADO	
1 U01AG13264-01	MONTGOMERY, RHONDA J TARGETING INTERVENTIONS TO MARKERS IN CAREGIVING CAREERS	08-01-95/	UNIVERSITY OF KANSAS LAWRENCE	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 U01AG13266-01	MORRIS, JOHN N NEW ENGLAND FAMILY PARTNERSHIP IN IN-HOME CARE	08-01-95/	HEBREW REHABILITATION CENTER FOR AGE	
1 P30AG13267-01	LIPSCHITZ, DAVID A SHOCK CENTER IN BASIC BIOLOGY OF AGING AT UAMS	07-01-95/	UNIVERSITY OF ARKANSAS MED SCIS LTL	
1 U01AG13268-01	LINDEMAN, DAVID A RANDOMIZED INTERVENTION STUDY: AGGRESSIVE BEHAVIOR IN AD	08-01-95/	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	
1 U01AG13270-01	CRAIG, ULLA-KATRINA GUAM DEMENTIA CAREGIVER INTERVENTION PROJECT	08-01-95/	UNIVERSITY OF GUAM	
1 U01AG13271-01	THOMPSON, BRUCE M ENHANCING FAMILY CAREGIVING FOR ADRD COORDINATING CENTER	08-01-95/	MARYLAND MEDICAL RESEARCH INSTITUTE	
1 U01AG13272-01	WIMBERLEY, EDWARD T CONGREGATIONAL RESPITE FOR AFRICAN-AMERICAN CAREGIVERS	08-01-95/	GEORGIA STATE UNIVERSITY	
1 U01AG13273-01	HEINER, MYRON F A MULTIDIMENSIONAL APPROACH TO DEMENTIA CAREGIVER BURDEN	08-01-95/	UNIVERSITY OF TEXAS SW MED CTR/DALLA	
1 U01AG13276-01	ROBINSON, KAREN M SKILL DEVELOPMENT IN SPOUSAL CAREGIVERS	07-01-95/	UNIVERSITY OF LOUISVILLE	
1 U01AG13277-01	MITTELMAN, MARY S ADULT CHILD CAREGIVERS AND MILD AD: COMPREHENSIVE SUPPO	08-01-95/	NEW YORK UNIVERSITY	
1 U01AG13278-01	KUTNER, NANCY G ADRD IN AFRICAN-AMERICANS: FAMILY & CHURCH CAREGIVING	08-01-95/	EMORY UNIVERSITY	
1 P30AG13279-01	GRACY, ROBERT W MOLECULAR AND CELLULAR ANALYSIS OF FUNCTIONAL AGING	07-01-95/	UNIVERSITY OF NORTH TEXAS HLTH SCI C	
1 P30AG13280-01	RABINOVITCH, PETER S BASIC BIOLOGY OF AGING	07-20-95/06-30-96	UNIVERSITY OF WASHINGTON	432,719
1 P30AG13281-01	HANNUN, YUSUF A CELL AND MOLECULAR BIOLOGY OF AGING	07-01-95/	DUKE UNIVERSITY	
1 P30AG13283-01	FAULKNER, JOHN A BIOLOGY OF AGING	09-05-95/06-30-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	228,010
1 P30AG13284-01	MC CLEARN, GERALD E NATHAN SHOCK CENTER FOR GERONTOLOGICAL GENETICS	07-01-95/	PENNSYLVANIA STATE UNIVERSITY-UNIV P	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 U01AG13285-01	LAWTON, M POWELL COUNSELING AND ACTIVITY ENHANCEMENT: CAREGIVER BENEFITS	08-01-95/	PHILADELPHIA GERIATRIC CTR-FRIEDMAN	
1 U01AG13286-01	DWYER, JEFFREY W ADRD AND MINORITY FAMILIES: CAREGIVING INTERVENTIONS	08-01-95/	WAYNE STATE UNIVERSITY	
1 U01AG13287-01	FINERMAN, RUTHBETH D ENHANCING AFRICAN-AMERICAN CAREGIVERS SUPPORT NETWORKS	08-01-95/	NORTHEAST COMMUNITY MENTAL HEALTH CE	
1 U01AG13288-01	HAIGHT, BARBARA K CAREGIVER INTERVENTIONS: LIFE REVIEW, LIFE STORY BOOKS	07-01-95/	MEDICAL UNIVERSITY OF SOUTH CAROLINA	
1 U01AG13289-01	GALLAGHER-THOMPSON, DOLORES E TREATMENT OF DISTRESS IN HISPANIC AND ANGLO CAREGIVERS	09-15-95/08-31-96	PALO ALTO INSTITUTE FOR RES & EDU	349,987
1 P30AG13290-01	WISE, PHYLLIS M CENTER ON THE BIOLOGY OF AGING	07-01-95/	UNIVERSITY OF KENTUCKY	
1 R01AG13291-01	WOLF, STEVEN L RESPONSE TO C.O.P. FEEDBACK FOR POSTURAL CONTROL	07-01-95/	EMORY UNIVERSITY	
1 P30AG13292-01	DISTERHOFT, JOHN F SIGNAL TRANSDUCTION IN AGING: FROM MOLECULES TO BEHAVIOR	07-01-95/	NORTHWESTERN UNIVERSITY	
1 U01AG13293-01	JACKSON, JOHN E CROSS CULTURAL CAREGIVER INTERVENTION	08-01-95/	UNIVERSITY OF CALIFORNIA SAN DIEGO	
1 P30AG13294-01	CARSON, DENNIS A REGULATION OF INJURY-RESPONSE MECHANISMS IN AGING	07-01-95/	UNIVERSITY OF CALIFORNIA SAN DIEGO	
1 P30AG13296-01	WEINDRUCH, RICHARD H THE UW-MADISON NATHAN SHOCK CENTER	07-01-95/	UNIVERSITY OF WISCONSIN MADISON	
1 U01AG13297-01	EISDORFER, CARL FAMILY-BASED INTERVENTIONS FOR CAREGIVERS	09-15-95/08-31-96	UNIVERSITY OF MIAMI	349,464
1 U01AG13298-01	COE, RODNEY M EASING BURDEN OF CAREGIVING ALZHEIMER'S PATIENTS	08-01-95/	ST. LOUIS UNIVERSITY	
1 P30AG13299-01	HOFFER, BARRY BIOLOLOGY OF AGING CORE SUPPORT	07-01-95/	UNIVERSITY OF COLORADO HLTH SCIENCES	
1 U01AG13302-01	WEBBER, PAMELA ARNSBERGER AN EVALUATION OF DEMENTIA SPECIFIC CASE MGMT IN ADCS	08-01-95/	UNIVERSITY OF CALIFORNIA SAN FRANCIS	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 U01AG13303-01	BOURGEOIS, MICHELLE S SKILLS TRAINING INTERVENTIONS FOR ADRD CAREGIVERS	08-01-95/	UNIVERSITY OF PITTSBURGH AT PITTSBUR	
1 U01AG13304-01	QUAYHAGEN, MARY P ENHANCING CAREGIVING: INTEGRATED STRATEGIES FOR DEMENTIA	09-01-95/	UNIVERSITY OF COLORADO HLTH SCIENCES	
1 U01AG13305-01	SCHULZ, RICHARD COORDINATING CENTER FOR ENHANCING ADRD CAREGIVING	09-15-95/08-31-96	UNIVERSITY OF PITTSBURGH AT PITTSBUR	349,889
1 R01AG13307-01	HASKELL, WILLIAM L NEW TECHNOLOGY FOR MEASURING ACTIVITY OF OLDER ADULTS	07-01-95/	STANFORD UNIVERSITY	
1 R01AG13308-01	SMALL, GARY W FUNCTIONAL MRI FOR EARLY DIAGNOSIS OF ALZHEIMER DISEASE	08-10-95/06-30-96	UNIVERSITY OF CALIFORNIA LOS ANGELES	225,044
1 R01AG13309-01	KALU, DIKE N ESTROGEN AND AGE RELATED DECLINE IN CALCIUM ABSORPTION	08-15-95/06-30-96	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	212,782
1 R29AG13310-01	BREUEL, KEVIN F ROLE OF THE OOCYTE IN DECREASED FERTILITY IN AGING RATS	07-01-95/	EAST TENNESSEE STATE UNIVERSITY	
1 U01AG13312-01	COHEN, DONNA CAREGIVER TELEPHONIC COMMUNICATION SYSTEM	08-01-95/	UNIVERSITY OF SOUTH FLORIDA	
1 U01AG13313-01	BURNS, ROBERT PROVIDERS AND ALZHEIMERS CAREGIVERS TOGETHER (PACT)	09-15-95/08-31-96	UNIVERSITY OF TENNESSEE AT MEMPHIS	295,148
1 P30AG13315-01	MONNIER, VINCENT M CLEVELAND NATHAN SHOCK CENTER OF EXCELLENCE	07-01-95/	CASE WESTERN RESERVE UNIVERSITY	
9 R44AG13317-02	MILBURY, PAUL E A COMPARITIVE BEAR MODEL FOR IMMOBILITY OSTEOPENIA	02-20-95/01-31-96	ESA, INC.	267,071
1 R29AG13318-01	NIEMINEN, ANNA-LIISA MITOCHONDRIAL FUNCTION IN OXIDATIVE INJURY	01-01-95/12-31-95	CASE WESTERN RESERVE UNIVERSITY	105,700
1 P30AG13319-01	RICHARDSON, ARLAN G NATHAN SHOCK AGING CENTER	07-10-95/06-30-96	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	417,765
1 R03AG13320-01	SIERRA, MARK A OXIDATIVE MODIFICATION OF MEMBRANE ASSOCIATED PROTEINS	08-20-95/07-31-96	UNIVERSITY OF NORTH DAKOTA	16,200
1 R01AG13321-01	POEHLMAN, ERIC T METABOLIC ADAPTATIONS TO EXERCISE IN OBESE ELDERLY	07-01-95/	UNIVERSITY OF MARYLAND BALT PROF SCH	

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
9 R44AG13322-02	COTTERMAN, ROBERT F COMPILING AND DOCUMENTING THE CPS ON COMPACT DISC	04-14-95/03-31-96	UNICON RESEARCH CORPORATION	282,713
1 R03AG13323-01	TAYLOR, STEPHANIE D DETERMINANTS OF SELF MEDICATION BEHAVIOR IN THE ELDERLY	08-20-95/07-31-96	OHIO STATE UNIVERSITY	19,994
1 R03AG13324-01	KEARNS, CECILIA M NEUROPROTECTIVE EFFECTS OF GDNF AGAINST 6-OHDA IN VIVO	08-25-95/07-31-96	UNIVERSITY OF KENTUCKY	16,200
1 R03AG13325-01	KING, HUEI-FANG CHEN FAMILY CAREGIVING FOR ELDERLY CHINESE-AMERICANS	05-01-95/	UNIVERSITY OF WASHINGTON	
1 R03AG13326-01	COMBS, COLIN K DEVELOPMENTAL REGULATION OF TAU PHOSPHORYLATION IN VITRO	08-25-95/07-31-96	UNIVERSITY OF ROCHESTER	27,000
1 R03AG13328-01	EAVES, YVONNE D CAREGIVING IN RURAL AFRICAN AMERICAN FAMILIES	09-15-95/08-31-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	32,391
1 P01AG13329-01	ROSENTHAL, NADIA A MECHANISMS OF MUSCLE AGING--ANALYSIS AND INTERVENTION	09-01-95/06-30-96	MASSACHUSETTS GENERAL HOSPITAL	847,816
1 R03AG13330-01	RUSSELL, YVETTE M MULTIMEDIA CACR FOR STROKE CLIENTS IN AN URBAN SETTING	01-10-95/	UNIVERSITY OF WISCONSIN MILWAUKEE	
1 P30AG13331-01	BLASS, JOHN P NATHAN SHOCK CENTER, CORNELL UNIV/BURKE MED RES INST	07-01-95/	WINIFRED MASTERSON BURKE MED RES INS	
1 R41AG13334-01	CONLON, PAUL J DEHYDROEPIANDROSTERONE TREATMENT OF ALZHEIMERS DISEASE	09-30-95/08-31-96	NEUROCRINE BIOSCIENCES, INC.	90,000
1 R41AG13335-01	GELLER, LISA N TRISOMY 21 AND A POTENTIAL TEST FOR ALZHEIMERS DISEASE	09-30-95/08-31-97	GENICA PHARMACEUTICALS CORPORATION	78,635
1 R41AG13336-01	MC KNIGHT, A JAMES TRANSPORTATION FOR THE ELDERLY: A FEASIBILITY STUDY	07-01-95/	KATHERINE FREUND ASSOCIATES	
1 R41AG13337-01	PAPE, LOUIS E, II DEVELOPMENT OF A GERIATRIC PERSONAL TRANSPONDER SYSTEM	07-15-95/	TELEHELP, INC.	
1 R01AG13338-01	OBLINGER, MONICA M ESTROGENIC REGULATION OF GENE EXPRESSION DURING NEURONAL	02-10-95/01-31-96	FINCH UNIV OF HLTH SCI/CHICAGO MED S	155,186
1 R43AG13339-01	NUWAYSER, E S MICROSPHERE FOR INJECTABLE DEPOT DELIVERY OF FINASTERIDE	07-01-95/	BIOTEK, INC.	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 R43AG13340-01	WALKER, RICHARD F DIAGNOSTIC KIT FOR PITUITARY GH SECRETORY CAPABILITY	07-01-95/	GUNTER ASSOCIATES, INC.	
1 R43AG13341-01	HU, CHIA-LING A NEW SUBSTANCE P ASSAY FOR ALZHEIMER'S DISEASE RESEARCH	06-01-95/	STANDARD SCIENTIFICS, INC.	
1 R41AG13343-01	DAVIS, HOWARD P BIOMECHANICS OF FALLING AND ACTIVE HARM PREVENTION	07-01-95/	SCIENTECH, INC.	
1 R43AG13344-01	GHOSH, SOUMITRA S DNA-BASED ASSAY FOR DETECTING ALZHEIMER'S DISEASE	07-01-95/	APPLIED GENETICS	
1 R43AG13345-01	FARROW, JUANITA S HEALTH RESEARCH FOR ELDERLY, RURAL, MINORITIES.	06-01-95/	FARROW AND ASSOCIATES MGMT CONSULTIN	
1 R43AG13346-01	ABRAMOVICE, BEN COMPREHENSIVE INFORMATION SYSTEM FOR THE ELDERLY	07-01-95/	LIFESPAN CORPORATION	
1 R43AG13347-01	WALKER, GRAHAM INFLATABLE BATH ASSIST SYSTEM	07-01-95/	URSELLAS RESEARCH, INC.	
1 R43AG13348-01	ERIKSON, KENNETH R ULTRASONIC EARLY DETECTION OF PRESSURE ULCERS	07-01-95/	SONOLIFE CORPORATION	
1 R41AG13349-01	HUTH, JOHN H DEVELOPMENT OF GERONTOLOGY HYPERTEXT	07-01-95/	C-SYSTEMS INTERNATIONAL	
1 R43AG13350-01	SAMUELS, RICHARD M COMPUTER COGNITIVE STIMULATION WITH ALZHEIMER'S DISEASE	08-01-95/	BIOTECH RESOURCE CENTER CORPORATION	
1 R43AG13351-01	DUNN, WILLIAM L EVALUATION OF AUTOMATED TIMED MANUAL PERFORMANCE DEVICES	08-01-95/	QUANTUM RESEARCH SERVICES	
1 R43AG13352-01	DROGE, JANET A BURDEN PREVENTTION VIDEO FOR CAREGIVERS TO ELDERLY ADULT	07-01-95/	HEALTH AND EDUCATION RESOURCES	
1 R43AG13353-01	VANE, RUSSELL R GAME INTERVENTION FOR TEACHING (GIFT)	07-01-95/	RESEARCH DEVELOPMENT CORPORATION	
1 R43AG13354-01	HSU, YING W MINATURE GYRO FOR BIOMEDICAL A-SESSMENT OF FALL IN THE E	07-01-95/	IRVINE SENSORS CORPORATION	
1 R43AG13355-01	SEWING, BETTY O SURVEY TO DETERMINE WAYS TO PROLONG SENIORS ACTIVE YEARS	07-01-95/	SEWING'S RESEARCH & DEVELOPMENT CORP	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START , END	INSTITUTION	TOTAL
FY: 95				
1 R43AG13356-01	IRVINE, A BLAIR INTERACTIVE HEALTH RISK APPRAISAL FOR THE ELDERLY	09-30-95/12-31-96	OREGON CENTER FOR APPLIED SCIENCE	99,008
1 R43AG13357-01	FRIEDMAN, MARK B QUALITY ASSURANCE TOOLS FOR NURSING CARE OF THE ELDERLY	08-05-95/05-31-96	AUGMENTECH, INC.	94,570
1 R43AG13359-01	WILKINSON, MORRIS A PERI-MENOPAUSAL/MENOPAUSAL WOMEN: KNOWING YOUR BODY	07-01-95/	BETWEEN TWO WORLDS, INC.	
1 R43AG13360-01	BLACKSHEAR, PATSY B RURAL ELDERLY INTEGRATED TELECOMMUNICATIONS LINKAGES	07-01-95/	ASSOCIATED ENTERPRISES, INC.	
1 R43AG13361-01	BUSH, LARRY R TC-LABELED PEPTIDES FOR IMAGING ALZHEIMER'S DISEASE	07-01-95/	DIATIDE, INC.	
1 R43AG13362-01	SOKOLOFF, SHARON M AGING DEMOGRAPHICS SIMULATION SOFTWARE FEASIBILITY STUDY	09-14-95/05-31-96	MIKALIX AND COMPANY	99,972
1 R43AG13363-01	SEARS, JAMES T GERIATRIC INDEPENDENT READING DEVICE	09-25-95/07-31-96	ASCENT TECHNOLOGY	100,000
1 R43AG13364-01	CUSHMAN-BARKAN, DEBORA BRIDGING ISOLATION: INNOVATIVE RESOURCES IN ELDERCARE	07-01-95/	REGENERATIVE HEALTH SYSTEMS, INC.	
1 R43AG13365-01	KAWASAKI, GLENN H PEPTIDES FOR DETECTING AND TREATING ALZHEIMER'S DISEASE	07-01-95/	APTEIN, INC.	
1 R43AG13366-01	SENTISSI, ABDELLAH BIOERODIBLE ESTROGEN PELLET TO TREAT ALZHEIMER'S DISEASE	07-01-95/	ENDOCON, INC.	
1 R43AG13367-01	SISK, SUSAN C AGE-RELATED MICROENVIRONMENTAL CONTROL OF TUMORIGENESIS	07-15-95/	NOVEL PHARMACEUTICALS	
1 R43AG13368-01	DAVIS, ROBERT E DEVELOPMENT OF A CELLULAR MODEL OF ALZHEIMER'S DISEASE	07-01-95/	APPLIED GENETICS	
1 R43AG13370-01	HERRNSTADT, CORINNA GENETIC MUTATIONS ASSOCIATED WITH ALZHEIMER'S DISEASE	07-01-95/	APPLIED GENETICS	
1 R43AG13371-01	KNOTH, BRUCE H BALANCE ASSESSMENT SYSTEM:VIRTUAL REALITY & FORCE PLATES	09-01-95/	ADVANCED MECHANICAL TECHNOLOGY, INC.	
1 R01AG13374-01	LIAO, WARREN S AGING/INFLAMMATION-INDUCED KININOGEN GENE EXPRESSION	07-01-95/	UNIVERSITY OF TEXAS MD ANDERSON CAN	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 R43AG13375-01	JOHNSON, EDWARD A MINIATURE RESPIRATION MONITOR FOR GERIATRIC INDEPENDENCE	07-01-95/	ION OPTICS, INC.	
1 R29AG13376-01	RUBINSTEIN, DANIEL B B-1 LYMPHOCYTES, AUTOANTIBODIES, AND HIV	07-01-95/	BOSTON UNIVERSITY MEDICAL CENTER HOS	
1 R43AG13381-01	CHAKRAVARTHY, DEBASHISH NITRIC OXIDE RELEASING DRESSINGS FOR WOUND HEALING	07-15-95/05-31-96	VARISEAL MANUFACTURING CORPORATION	71,390
1 R01AG13382-01	MOUTON, PETER R COMPUTERIZED UNBIASED STEREOLOGY OF HUMAN BRAIN	07-01-95/	JOHNS HOPKINS UNIVERSITY	
1 R01AG13406-01	BLAU, DAVID M HEALTH INSURANCE, HEALTH, AND RETIREMENT DYNAMICS	09-30-95/08-31-96	UNIVERSITY OF NORTH CAROLINA CHAPEL	116,267
1 R01AG13408-01	PEACOCK, MUNRO COMPARISON OF BONE STRENGTH AND MUSCLE STRENGTH AT HIP	09-30-95/08-31-96	INDIANA UNIV-PURDUE UNIV AT INDIANAP	240,615
1 R13AG13422-01	HEINDRUCH, RICHARD H MITOCHONDRIAL AND FREE RADICAL INVOLVEMENT IN AGING	09-30-95/08-31-96	AMERICAN AGING ASSOCIATION	13,531
1 R43AG13515-01	GIBIAN, GARY L IMPROVED MULTIMICROPHONE DIRECTIONAL HEARING AID	06-01-95/03-31-96	PLANNING SYSTEMS, INC.	96,943
1 R01AG13517-01	SCHNITZLER, CHRISTINE M EFFECTS OF RACE AND AGING ON BONE QUALITY AND QUANTITY	04-01-95/	UNIVERSITY OF THE WITWATERSRAND	
1 R01AG13518-01	EL-HAJJ FULEIHAN, GHADA EFFECTS OF AGE GENDER ON PTH CA SKELETAL DYNAMICS	04-01-95/	BRIGHAM AND WOMEN'S HOSPITAL	
1 R01AG13519-01	GLOWACKI, JULIANNE AGE AND HORMONES ON BONE MARROW BIOLOGY	09-30-95/08-31-96	BRIGHAM AND WOMEN'S HOSPITAL	238,525
1 R01AG13520-01	BOCKMAN, RICHARD S REGULATING MATRIX GENE EXPRESSION IN AGING OSTEOBLASTS	04-01-95/	HOSPITAL FOR SPECIAL SURGERY	
1 R29AG13521-01	VAN AUKEN, MOIRA L OSTEOGENIC STEM CELL CULTURES OF RAT VERTEBRAE AND FEMUR	04-01-95/	UNIVERSITY OF MASSACHUSETTS MEDICAL	
1 R01AG13522-01	ALETTA, JOHN M REGULATION/AGE-RELATED CHANGES OF HUMAN OSTEOBLAST ERK	04-01-95/	STATE UNIVERSITY OF NEW YORK AT BUFF	
1 R01AG13523-01	LONG, MICHAEL W AGE RELATED CHANGES IN HUMAN OSTEOPROGENITOR CELLS	04-05-95/03-31-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	187,997

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 R01AG13524-01	MALLUCHE, HARTMUT H LOCAL FACTORS OSTEOPOROTIC AND AGING BONE	04-01-95/	UNIVERSITY OF KENTUCKY	
1 R01AG13525-01	HAYNESWORTH, STEPHEN E MESENCHYMAL STEM CELLS AND OSTEOPOROSIS	04-01-95/	CASE WESTERN RESERVE UNIVERSITY	
1 R01AG13526-01	KOHLMEIER, MARTIN EFFECT OF VITAMIN D AND VITAMIN K ON BONE DENSTIY IN ELD	04-01-95/	UNIVERSITY OF NORTH CAROLINA CHAPEL	
1 R01AG13528-01	SIMSKE, STEVEN J MOUSE BONE DISORDERS: SKELETAL AND IMMUNE SYSTEM EFFECT	04-01-95/	UNIVERSITY OF COLORADO AT BOULDER	
1 R01AG13529-01	EPSTEIN, SOL ROLE OF COMPLEMENT IN BONE DISEASE	06-01-95/	ALBERT EINSTEIN MED CTR (PHILADELPHI	
1 R01AG13530-01	SUMNER, DALE R GROWTH FACTOR ENHANCED BONE REPAIR IN AGING	04-01-95/	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	
1 R01AG13531-01	FLEET, JAMES C OSTEOBLAST RESPONSE TO OSTEOGENIC STIMULI: EFFECT OF AGE	04-01-95/	TUFTS UNIVERSITY BOSTON	
1 R01AG13532-01	BEAMER, WESLEY G GENETIC REGULATION OF SENESCENT BONE DENSITY	04-01-95/	JACKSON LABORATORY	
1 R01AG13533-01	MUSCHLER, GEORGE F AGING & OSTEOPOROSIS: CHANGES IN BONE MARROW STEM CELLS	04-01-95/	CLEVELAND CLINIC FOUNDATION	
1 R01AG13534-01	PACIFICI, ROBERTO MENOPAUSE AND HUMAN OSTEOCLASTOGENESIS	08-01-95/05-31-96	BARNES-JEWISH HOSPITAL	208,667
1 R01AG13535-01	KALU, DIKE N CYTOKINES AND AGING BONE LOSS IN THE RAT MODEL	04-01-95/	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	
1 R03AG13545-01	FAULKNER, BILLIE L NEUROBIOLOGY OF AGING AMYGDALA/PERIRHINAL AREA	09-30-95/08-31-96	YALE UNIVERSITY	16,200
1 R13AG13546-01	OLSHANSKY, STUART J REVES 8	09-30-95/09-29-96	UNIVERSITY OF CHICAGO	38,853
1 R03AG13547-01	MARCELINO, JOSE IRON INDUCED CHANGES IN OA CARTILAGE	09-30-95/08-31-96	CLEVELAND STATE UNIVERSITY	16,082
1 R03AG13549-01	DUHON, STACEY A MAPPING AND CHARACTERIZATION OF AGE MUTANTS	09-30-95/08-31-96	UNIVERSITY OF COLORADO AT BOULDER	19,286

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 R03AG13551-01	RAMOS, NYDIA I DNA REPAIR AND AMYLOID PROTEIN IN ALZHEIMERS DISEASE	09-30-95/02-28-97	UNIVERSITY OF MEDICINE & DENTISTRY O	26,460
1 R13AG13553-01	WISE, PHYLLIS M GSA MEETING--BIOLOGY OF AGING & GERIATRIC DISEASES	09-01-95/08-31-96	GERONTOLOGICAL SOCIETY OF AMERICA	36,775
1 R01AG13556-01	KOSMAN, DANIEL J CELL CYCLE ARREST IN CHRONIC OXIDATIVE STRESS AND AGING	07-01-95/	STATE UNIVERSITY OF NEW YORK AT BUFF	
1 R29AG13558-01	MACAULEY, JOHN B NUTRIENT MODIFICATION OF SOMATIC MUTATION RATES IN AGING	07-01-95/	JACKSON LABORATORY	
1 R01AG13559-01	CEFALU, WILLIAM T CALORIC RESTRICTION AGING AND GLUCOSE TRANSPORT	07-01-95/	WAKE FOREST UNIVERSITY	
1 R01AG13560-01	WALTER, CHRISTI A DNA REPAIR PROTEINS TARGETED TO THE MITOCHONDRIAL MATRIX	07-20-95/06-30-96	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	188,172
1 R01AG13561-01	VIJG, JAN NUTRITIONAL IMBALANCE AND GENETIC INSTABILITY IN AGING	07-01-95/	BETH ISRAEL DEACONESS MEDICAL CENTER	
1 R01AG13562-01	MOBBS, CHARLES V AGE & NUTRITION-REGULATED HYPOTHALAMIC GENE EXPRESSION	05-01-95/	MOUNT SINAI SCHOOL OF MEDICINE OF CU	
1 R01AG13565-01	PONNAPPAN, USHA AGING AND IMMUNE FUNCTION: ROLE OF FATTY ACIDS	07-01-95/	UNIVERSITY OF ARKANSAS MED SCIS LTL	
1 R01AG13566-01	NAPOLI, JOSEPH L RETINAL DEHYDROGENASES	07-10-95/06-30-96	STATE UNIVERSITY OF NEW YORK AT BUFF	162,754
1 R01AG13567-01	DAS, HRIDAY K NUTRIENT MODULATION OF AGE INDUCED APOB GENE REGULATION	07-01-95/	UNIVERSITY OF NORTH TEXAS HLTH SCI C	
1 R13AG13570-01	CREESE, IAN N 1995 GORDON CONFERENCE ON CATECHOLAMINES	08-10-95/07-31-96	GORDON RESEARCH CONFERENCES	7,000
1 R01AG13586-01	SHAY, NEIL F ZINC DEFICIENCY AND HYPOTHALAMIC DYSFUNTION	08-20-95/07-31-96	UNIVERSITY OF ILLINOIS URBANA-CHAMPA	216,964
1 R01AG13612-01	MAJUMDAR, SHARMILA NON-INVASIVE ASSESSMENT OF TRABECULAR ARCHITECTURE	09-30-95/08-31-96	UNIVERSITY OF CALIFORNIA SAN FRANCIS	190,392
1 R01AG13613-01	RYFF, CAROL D LIFE HISTORIES AND MENTAL HEALTH IN MIDLIFE	09-20-95/08-31-96	UNIVERSITY OF WISCONSIN MADISON	188,808

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
9 R01AG13616-08	DE LEON, MONY J CLINICAL CORRELATES OF LONGITUDINAL PET CHANGES IN AD	09-01-95/08-31-96	NEW YORK UNIVERSITY	222,176
1 R01AG13617-01	YOUNG, ANNE B METABOTROPIC GLUTAMATE RECEPTORS IN NEURODEGENERATION	08-15-95/07-31-96	MASSACHUSETTS GENERAL HOSPITAL	208,018
1 R01AG13619-01	PITAS, ROBERT E APOE3 AND APOE4 EFFECTS ON CELLULAR PATHOBIOLOGY	09-01-95/06-30-96	J. DAVID GLADSTONE INSTITUTES	289,089
9 R01AG13620-09	ZIFF, EDWARD B DYNAMICS OF C-FOS PROTEIN INTERACTIONS	08-01-95/07-31-96	NEW YORK UNIVERSITY	150,938
9 R01AG13621-04	EFANGE, S MBUA-NGALE NEW RADIOTRACERS FOR MAPPING CHOLINERGIC INNERVATION	08-07-95/06-30-96	UNIVERSITY OF MINNESOTA TWIN CITIES	224,019
1 R01AG13622-01	SILVA, ALCINO J GENE TARGETING APPROACHES TO LEARNING AND MEMORY STUDIES	07-25-95/06-30-96	COLD SPRING HARBOR LABORATORY	241,373
7 R29AG13623-02	LIPPA, CAROL F DEMENTIA WITH PARKINSONISM--WHAT ARE WE DIAGNOSING?	04-08-96/08-31-96	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	77,341
1 R01AG13624-01	NORTON, EDWARD C ECONOMICS OF SPEND-DOWN TO MEDICAID	07-01-95/	RESEARCH TRIANGLE INSTITUTE	
9 R01AG13625-09	ROODMAN, GARSON D DEVELOPMENTAL ASPECTS OF OSTEOCLAST FORMATION IN VITRO	08-10-95/07-31-96	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	167,075
1 P60AG13627-01	LOWENTHAL, DAVID T MODIFYING RISK FACTORS TO REDUCE FUNCTIONAL DEPENDENCE	09-01-95/	UNIVERSITY OF FLORIDA	
1 P60AG13628-01	ABRASS, ITAMAR B UW OLDER AMERICANS INDEPENDENCE CENTER	09-30-95/	UNIVERSITY OF WASHINGTON	
1 P60AG13629-01	HOLLOSZY, JOHN O WASHINGTON UNIVERSITY CLAUDE D PEPPER OAIC	09-30-95/08-31-96	WASHINGTON UNIVERSITY	1,180,037
1 P60AG13630-01	POPE, MALCOLM H IOWA OLDER AMERICANS INDEPENDENCE CENTER	09-30-95/	UNIVERSITY OF IOWA	
1 P60AG13632-01	RUSSELL, ROBERT M CLAUDE D PEPPER OLDER AMERICANS INDEPENDENCE CENTER AT T	09-30-95/	TUFTS UNIVERSITY BOSTON	
1 P60AG13633-01	LUCHI, ROBERT J CLAUDE D PEPPER OLDER AMERICANS INDEPENDENCE CENTERS	09-30-95/	BAYLOR COLLEGE OF MEDICINE	

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 P60AG13634-01	GERETY, MEGHAN B CLAUDE D PEPPER OLDER AMERICANS INDEPENDENCE CENTER (EVR	10-01-95/	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	
1 R43AG13635-01	UMAN, GWEN C NOISE ABATEMENT TECHNOLOGY FOR LONG TERM CARE	09-30-95/02-28-96	VITAL RESEARCH	100,000
1 R01AG13645-01	KIEL, DOUGLAS P GENETIC EPIDEMIOLOGY OF OSTEOPOROSIS	09-30-95/08-31-96	HEBREW REHABILITATION CENTER FOR AGE	281,366
1 R43AG13716-01	GRADY, KATHLEEN E AID FOR IMPLICIT LEARNING OF FOOD GROUPS AMONG SENIORS	09-30-95/09-30-96	MASSACHUSETTS INSTITUTE BEHAVIORAL M	97,695
1 R43AG13731-01	FIRMAN, JAMES P DECISION SUPPORT SOFTWARE FOR FINANCING LONG TERM CARE	09-30-95/03-30-96	NATIONAL COUNCIL ON AGING DEVELOP CO	99,246
1 R01AG13743-01	LETOVSKY, STANLEY I SPATIALLY ORIENTED DATABASE FOR DIGITAL BRAIN IMAGES	09-30-95/06-30-96	JOHNS HOPKINS UNIVERSITY	281,400
1 R29AG13773-01	BRUGGE, KAREN L DETECTION OF EARLY DEMENTIA IN ADULTS WITH DOWN SYNDROME	08-01-95/06-30-96	HARVARD UNIVERSITY	129,627
9 R44AG13775-02	NUWAYSER, ELIE S INJECTABLE MICROCAPSULE FOR ESTROGEN REPLACEMENT THERAPY	09-30-95/08-31-96	BIOTEK, INC.	270,202
1 R01AG13779-01	ROTTENBERG, HAGAI MITOCHONDRIAL DYSFUNCTION IN IMMUNOSENESCENCE	09-15-95/07-31-96	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	184,868
1 R01AG13784-01	SASSOON, DAVID MOLECULAR BASIS OF UTERINE CELLULAR INTERACTIONS	09-01-95/07-31-96	MOUNT SINAI SCHOOL OF MEDICINE OF CU	257,154
1 R01AG13797-01	HERMAN, BRIAN A APOPTOSIS AND CERVICAL CANCER	09-01-95/07-31-96	UNIVERSITY OF NORTH CAROLINA CHAPEL	184,399
9 R01AG13798-06	YABLONKA-REUVENI, ZIPORA SATELLITE CELL DYNAMICS--A ROLE FOR THE MYOFIBER	09-15-95/08-31-96	UNIVERSITY OF WASHINGTON	212,106
1 R01AG13799-01	PASINETTI, GUILIO M COMPLEMENT AND NEUROPROTECTION--A MODEL FOR ALZHEIMERS	09-20-95/08-31-96	MOUNT SINAI SCHOOL OF MEDICINE OF CU	177,281
1 R01AG13807-01	SONNENSCHEIN, CARLOS BREAST CANCER & AGING--A SOMATIC CELL GENETICS APPROACH	09-01-95/08-31-96	TUFTS UNIVERSITY BOSTON	251,455
1 R01AG13837-01	GENTER, MARY B IMPACT OF ENVIRONMENTAL TOXICANTS ON OLFACTORY SYSTEMS	09-15-95/08-31-96	UNIVERSITY OF CINCINNATI	103,650

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
1 R01AG13839-01	VITEK, MICHAEL P ADVANCED GLYCOSYLATION ENDPRODUCTS AND AD AMYLOIDOSIS	09-15-95/08-31-96	DUKE UNIVERSITY	205,457
1 R01AG13843-01	OOI, WEE L IMPACT OF NURSING HOME ENVIRONMENT ON MORBID OUTCOMES	09-30-95/08-31-96	HEBREW REHABILITATION CENTER FOR AGE	260,000
1 R01AG13845-01	JACOBY, LARRY L AGE EFFECTS IN ATTENTION & MEMORY--PROCESS DISSOCIATION	09-30-95/07-31-96	NEW YORK UNIVERSITY	251,630
9 R01AG13847-07	RILEY, RICHARD L B CELL REPERTOIRE OF NORMAL AND AUTOIMMUNE MICE	09-30-95/08-31-96	UNIVERSITY OF MIAMI	153,600
3 N01AG22100-004	TOCKMAN, MELVYN S PULMONARY FUNCTION DATA STUDY ON AGING	02-21-95/03-31-95	JOHNS HOPKINS UNIVERSITY	
7 N01AG22102-004	ALLEN, ANTON M HEALTH MONITORING OF AGED HYBRID RAT COLONY	03-31-95/03-30-96	MICROBIOLOGICAL ASSOCIATES, INC.	23,755
7 N03AG30007-002	MAINTENANCE ON ELEVATORS	10-01-94/10-12-95	SSC LARGE BUSINESS-MARYLAND	11,419
3 N03AG30007-003	MAINTENANCE ON ELEVATORS	02-10-95/10-12-95	SSC LARGE BUSINESS-MARYLAND	
3 N03AG30030-003	MULTI LAYER PAN LINERS	10-01-94/04-15-95	SSC SMALL BUSINESS NEW YORK	40,953
7 N03AG30030-004	MULTI LAYER PAN LINERS	04-16-95/04-15-96	SSC SMALL BUSINESS NEW YORK	16,953
7 N03AG40004-002	OPERATION ALZHEIMERS DISEASE EDUCATION/REFERRAL CENTER	12-23-94/12-31-95	HERNER AND COMPANY	1,044,000
2 N03AG40004-003	OPERATION ALZHEIMERS DISEASE EDUCATION/REFERRAL CENTER	08-30-95/12-31-95	HERNER AND COMPANY	
3 N03AG40014-001	VETERINARY SERVICES	10-27-94/06-06-95	UNIVERSITY OF MARYLAND BALT PROF SCH	24,559
7 N03AG40014-002	VETERINARY SERVICES	06-07-95/06-06-96	UNIVERSITY OF MARYLAND BALT PROF SCH	25,537
3 N03AG40016-001	MECHANICAL MAINTENANCE OF GRC	10-20-94/07-14-95	SSC SMALL BUSINESS MARYLAND	643,212

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
2 N03AG40016-002	MECHANICAL MAINTENANCE OF GRC	01-23-95/07-14-95	SSC SMALL BUSINESS MARYLAND	
3 N03AG40016-003	MECHANICAL MAINTENANCE OF GRC	02-01-95/07-14-95	SSC SMALL BUSINESS MARYLAND	
7 N03AG40016-004	MECHANICAL MAINTENANCE OF GRC	07-31-95/07-31-96	SSC SMALL BUSINESS MARYLAND	105,473
2 N03AG40024-001	PROVIDE LASER SCAN CONFOCAL MICROSCOPE	07-11-95/03-31-96	SSC SMALL BUSINESS NEW JERSEY	
2 N03AG40024-002	PROVIDE LASER SCAN CONFOCAL MICROSCOPE	08-01-95/08-31-95	SSC SMALL BUSINESS NEW JERSEY	199,441
3 N03AG40040-002	ASSAYS FOR APOLIPOPROTEIN E-4 GENOTYPE	07-17-95/09-28-95	BIOTECHNOLOGY RESEARCH INSTITUTE	90,000
3 N03AG40040-003	ASSAYS FOR APOLIPOPROTEIN E-4 GENOTYPE	08-11-95/09-28-95	BIOTECHNOLOGY RESEARCH INSTITUTE	
3 N03AG40040-004	ASSAYS FOR APOLIPOPROTEIN E-4 GENOTYPE	09-29-95/03-29-96	BIOTECHNOLOGY RESEARCH INSTITUTE	
7 N01AG42100-003	HANSEN, BARBARA C OBESITY, DIABETES, & AGING ANIMAL RESOURCES	05-19-95/06-20-96	UNIVERSITY OF MARYLAND BALT PROF SCH	362,514
3 N01AG42142-001	BREITNER, JOHN HEAD INJURY & ALZHEIMER'S DISEASE	03-06-95/08-31-95	DUKE UNIVERSITY	
3 N01AG42142-002	BREITNER, JOHN HEAD INJURY & ALZHEIMER'S DISEASE	06-29-95/08-31-96	DUKE UNIVERSITY	1,181,249
3 N01AG42148-001	HURLEY, BEN AGE AND STRENGTH TRAINING EFFECTS ON MUSCLE STRENGTH	09-11-95/09-29-95	UNIVERSITY OF MARYLAND COLLEGE PK CA	
5 N01AG42148-002	HURLEY, BEN AGE AND STRENGTH TRAINING EFFECTS ON MUSCLE STRENGTH	09-28-95/09-29-96	UNIVERSITY OF MARYLAND COLLEGE PK CA	223,724
2 N01AG42149-001	FOLEY, DANIEL HONOLULU ASIA AGING STUDY	09-27-95/06-30-96	KUAKINI MEDICAL CENTER	2,760,109
5 N01AG42150-001	SCHAEFER, GERALD INVESTIGATIONAL NEW DRUG TOXICOLOGY TREAT ALZHEIMER'S	09-26-95/09-29-96	MPI RESEARCH, LLC	96,143

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 95				
9 N03AG50024-000	TRASH HAULING	08-14-95/08-14-96	SSC SMALL BUSINESS MARYLAND	4,794
1 N03AG50036-000	CODE DATA FOR RISK REDUCTION PROGRAM	09-25-95/03-31-97	JEFFERSON COMPREHENSIVE CARE SYSTEM	38,557
1 N03AG50315-000	ADP SUPPORT SERVICES AND ENHANCEMENT SYSTEM	09-29-95/09-28-96	SSC SMALL BUSINESS MARYLAND	180,000
1 N01AG52104-000	ALLEN, ANTON PATH MONITORING MULTIGENOTYPIC MOUSE/RAT COLONIES	05-02-95/04-13-96	MICROBIOLOGICAL ASSOCIATES, INC.	54,318
3 N01AG52104-001	ALLEN, ANTON PATH MONITORING MULTIGENOTYPIC MOUSE/RAT COLONIES	07-25-95/04-13-96	MICROBIOLOGICAL ASSOCIATES, INC.	
1 N01AG52113-000	ZERHOUNI, ELIAS LONGITUDINAL EVALUATION OF PROSTATE GROWTH (MRI STUDIES)	09-29-95/09-29-96	JOHNS HOPKINS UNIVERSITY	131,032
3 N01AG52115-017	CAIL, STEPHEN P MAINTENANCE OF A LONG-TERM COLONY OF AGED HYBRID RATS	11-16-94/03-11-95	CHARLES RIVER LABORATORIES, INC.	
3 N01AG52115-018	CAIL, STEPHEN P MAINTENANCE OF A LONG-TERM COLONY OF AGED HYBRID RATS	07-07-95/09-11-95	CHARLES RIVER LABORATORIES, INC.	80,000
3 N01AG52115-019	CAIL, STEPHEN P MAINTENANCE OF A LONG-TERM COLONY OF AGED HYBRID RATS	09-14-95/09-29-95	CHARLES RIVER LABORATORIES, INC.	
3 N01AG52115-020	CAIL, STEPHEN P MAINTENANCE OF A LONG-TERM COLONY OF AGED HYBRID RATS	09-28-95/09-29-95	CHARLES RIVER LABORATORIES, INC.	
5 N01AG52115-021	CAIL, STEPHEN P MAINTENANCE OF A LONG-TERM COLONY OF AGED HYBRID RATS	09-28-95/09-29-95	CHARLES RIVER LABORATORIES, INC.	
5 N01AG92114-011	CAIL, STEPHEN P LONG TERM COLONY OF MULTIGENOTYPIC AGED MOUSE STRAINS	06-30-95/12-31-95	CHARLES RIVER LABORATORIES, INC.	1,081,376
5 N01AG92114-012	CAIL, STEPHEN P LONG TERM COLONY OF MULTIGENOTYPIC AGED MOUSE STRAINS	09-26-95/12-31-96	CHARLES RIVER LABORATORIES, INC.	1,242,590
5 N01AG92116-006	WEISFELDT, MYRON NONINVASIVE ASSESSMENT OF CARDIAC STRUCTURE AND FUNCTION	05-16-95/09-29-95	JOHNS HOPKINS UNIVERSITY	125,000
5 N01AG92116-007	WEISFELDT, MYRON NONINVASIVE ASSESSMENT OF CARDIAC STRUCTURE AND FUNCTION	07-12-95/09-29-96	JOHNS HOPKINS UNIVERSITY	417,240

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET START	DATES END	INSTITUTION	TOTAL
FY: 95					
					364,510,628
					2,040

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 R01AG12741-01A1	RILEY, JAMES C TESTING INSULT ACCUMULATION WITH COMPETING MODELS	09-10-96/08-31-98	INDIANA UNIVERSITY BLOOMINGTON	100,000
1 R01AG13986-01	STALLARD, PJ E FORECASTING MODELS FOR ACUTE AND LONG-TERM CARE	07-01-96/	DUKE UNIVERSITY	
1 R43AG14058-01	LESLEY, STUART L PREVENTIVE HEALTHCARE MANAGEMENT INFORMATION SYSTEM	06-01-96/	STRUCTURED SOLUTIONS, INC	
1 R03AG14225-01	HSU, HUI-CHEN AMYLOIDOSIS IN AGED CD2-FAS TRANSGENIC MICE	07-01-96/	UNIVERSITY OF ALABAMA AT BIRMINGHAM	
5 T32AG00029-21	COHEN, HARVEY J BEHAVIOR AND PHYSIOLOGY IN AGING	05-01-96/04-30-97	DUKE UNIVERSITY	249,419
2 R01AG00029-22	PATTERSON, DAVID GENE EXPRESSION IN SOMATIC CELLS IN THE AGING PROCESS	07-01-96/	ELEANOR ROOSEVELT INST FOR CANCER RE	
5 T32AG00030-20	STORANDT, MARTHA A AGING AND DEVELOPMENT	05-01-96/04-30-97	WASHINGTON UNIVERSITY	203,484
5 T32AG00037-20	BENGTSON, VERN L MULTIDISCIPLINARY RESEARCH TRAINING IN GERONTOLOGY	05-01-96/04-30-97	UNIVERSITY OF SOUTHERN CALIFORNIA	166,922
2 T32AG00048-19	ZARIT, STEVEN H INTERDISCIPLINARY TRAINING IN GERONTOLOGY	05-01-96/04-30-97	PENNSYLVANIA STATE UNIVERSITY-UNIV P	208,407
5 T32AG00057-19	MARTIN, GEORGE M GENETIC APPROACHES TO AGING RESEARCH	05-01-96/04-30-97	UNIVERSITY OF WASHINGTON	409,863
2 T32AG00078-16	HOLLOSZY, JOHN O EXERCISE AS PREVENTIVE MEDICINE IN THE AGING PROCESS	05-01-96/04-30-97	WASHINGTON UNIVERSITY	183,281
5 T32AG00080-17	OLDSTONE, MICHAEL B A NEUROBIOLOGIC AND IMMUNOLOGIC ASPECTS OF AGING	05-01-96/04-30-97	SCRIPPS RESEARCH INSTITUTE	238,257
5 T32AG00093-15	FINCH, CALEB E TRAINING IN ENDOCRINOLOGY AND NEUROIOLOGY OF AGING	05-01-96/04-30-97	UNIVERSITY OF SOUTHERN CALIFORNIA	112,258
5 T32AG00096-14	COTMAN, CARL W TRAINING IN THE NEUROBIOLOGY OF AGING	05-01-96/04-30-97	UNIVERSITY OF CALIFORNIA IRVINE	205,484
2 N03AG00102-018	PROVIDE SUPPORT SERVICES/UTILITIES--GERONTOLOGY RESEARCH	12-28-95/02-29-96	JOHNS HOPKINS BAYVIEW MEDICAL CENTER	256,000

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
2 N03AG00102-019	PROVIDE SUPPORT SERVICES/UTILITIES--GERONTOLOGY RESEARCH	02-28-96/05-31-96	JOHNS HOPKINS BAYVIEW MEDICAL CENTER	384,000
3 N03AG00102-020	PROVIDE SUPPORT SERVICES/UTILITIES--GERONTOLOGY RESEARCH	05-31-96/05-31-96	JOHNS HOPKINS BAYVIEW MEDICAL CENTER	468,000
3 N03AG00102-021	PROVIDE SUPPORT SERVICES/UTILITIES--GERONTOLOGY RESEARCH	06-30-96/05-31-96	JOHNS HOPKINS BAYVIEW MEDICAL CENTER	
5 T32AG00105-12	CAPLAN, ARNOLD I CELLULAR & MOLECULAR AGING	05-01-96/04-30-97	CASE WESTERN RESERVE UNIVERSITY	178,400
3 T32AG00105-12S1	CAPLAN, ARNOLD I CELLULAR & MOLECULAR AGING	08-26-96/04-30-97	CASE WESTERN RESERVE UNIVERSITY	21,815
5 T32AG00107-13	COLEMAN, PAUL D TRAINING IN GERIATRICS AND NEUROBIOLOGY OF AGING	05-01-96/04-30-97	UNIVERSITY OF ROCHESTER	285,881
5 T32AG00114-12	ADELMAN, RICHARD MULTIDISCIPLINARY RESEARCH TRAINING IN AGING	05-01-96/04-30-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	382,748
5 T32AG00115-12	POLGAR, PETER R PRE- AND POSTDOCTORAL TRAINING IN BIOCHEMISTRY OF AGING	05-22-96/04-30-97	BOSTON UNIVERSITY	327,960
3 T32AG00115-12S1	POLGAR, PETER R PRE- AND POSTDOCTORAL TRAINING IN BIOCHEMISTRY OF AGING	06-01-96/04-30-97	BOSTON UNIVERSITY	24,417
5 T32AG00117-12	DUNKLE, RUTH E SOCIAL RESEARCH TRAINING ON APPLIED ISSUES OF AGING	05-01-96/04-30-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	404,255
5 T32AG00120-10	ROTH, JESSE RESEARCH TRAINING IN GERONTOLOGY AND GERIATRICS	05-01-96/04-30-97	JOHNS HOPKINS UNIVERSITY	180,565
2 T32AG00131-12	CRISTOFALO, VINCENT J CELLULAR AND MOLECULAR ASPECTS OF AGING	05-01-96/04-30-97	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	157,863
2 T32AG00134-11	WEISSERT, WILLIAM G PUBLIC HEALTH AND AGING TRAINING PROGRAM	05-01-96/04-30-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	103,371
5 T32AG00139-10	MYERS, GEORGE C SOCIAL AND MEDICAL CENOGRAPHY OF AGING	12-01-95/04-30-97	DUKE UNIVERSITY	199,598
3 T32AG00140-20S1	GOLDSCHEIDER, FRANCES K DEMOGRAPHY OF AGING	08-15-96/06-30-97	BROWN UNIVERSITY	13,218

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
2 T32AG00140-21	GOLDSCHEIDER, FRANCES K DEMOGRAPHY OF AGING	09-01-96/	BROWN UNIVERSITY	
2 T32AG00144-10	KOWAL, JEROME RESEARCH TRAINING IN GERIATRIC MEDICINE	05-01-96/04-30-97	CASE WESTERN RESERVE UNIVERSITY	150,958
2 T32AG00149-10	BRANDT, JASON RESEARCH TRAINING IN DEMENTIAS OF AGING	06-21-96/04-30-97	JOHNS HOPKINS UNIVERSITY	144,436
5 T32AG00153-09	KASL, STANISLAV V RESEARCH TRAINING IN THE EPIDEMIOLOGY OF AGING	05-28-96/04-30-97	YALE UNIVERSITY	9,700
5 T32AG00155-09	ELDER, GLEN H, JR DEMOGRAPHY OF AGING AND THE LIFE COURSE	05-01-96/04-30-97	UNIVERSITY OF NORTH CAROLINA CHAPEL	102,713
5 T32AG00156-07	HORN, JOHN L FORMING CAREERS IN DEVELOPMENTAL NEUROCOGNITION	05-01-96/04-30-97	UNIVERSITY OF SOUTHERN CALIFORNIA	303,716
5 T32AG00158-09	BURING, JULIE E TRAINING PROGRAM IN EPIDEMIOLOGIC RESEARCH ON AGING	05-01-96/04-30-97	BRIGHAM AND WOMEN'S HOSPITAL	140,259
5 T32AG00164-09	DEMENT, WILLIAM C RESEARCH TRAINING IN GERIATRIC SLEEP DISORDERS MEDICINE	05-01-96/04-30-97	STANFORD UNIVERSITY	111,421
5 T32AG00165-09	BOWMAN, BARBARA H TRAINING PROGRAM IN MOLECULAR BASIS OF AGING	05-01-96/04-30-97	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	107,319
3 T32AG00165-09S1	BOWMAN, BARBARA H TRAINING PROGRAM IN MOLECULAR BASIS OF AGING	07-01-96/04-30-97	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	14,044
5 T32AG00172-09	CUMMINGS, JEFFREY L DEMENTIA AND BEHAVIORAL NEUROLOGY: RESEARCH FELLOWSHIP	05-01-96/04-30-97	UNIVERSITY OF CALIFORNIA LOS ANGELES	73,080
2 T32AG00173-06A1	CLARK, ROBERT L DOCTORAL TRAINING IN ECONOMICS OF AGING/ HEALTH ECONOMIC	07-01-96/	NORTH CAROLINA STATE UNIVERSITY RALE	
5 T32AG00175-09	SMITH, ANDERSON D RESEARCH TRAINING IN COGNITIVE AGING	05-24-96/04-30-97	GEORGIA INSTITUTE OF TECHNOLOGY	114,279
5 T32AG00177-08	PRESTON, SAMUEL H DEMOGRAPHY OF AGING	05-01-96/04-30-97	UNIVERSITY OF PENNSYLVANIA	8,973
5 T32AG00181-07	CAULEY, JANE A TRAINING IN THE EPIDEMIOLOGY OF AGING	05-10-96/04-30-97	UNIVERSITY OF PITTSBURGH AT PITTSBUR	198,826

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 T32AG00182-08	ETTINGER, WALTER H, JR TRAINING GRANT: GERONTOLOGY AND GERIATRIC MEDICINE	05-01-96/04-30-97	WAKE FOREST UNIVERSITY	285,799
5 T32AG00183-08	DARLINGTON, GRETCHEN J CELL & MOLECULAR BIOLOGY OF AGING	05-01-96/04-30-97	BAYLOR COLLEGE OF MEDICINE	252,129
5 T32AG00184-07	HU, TEH-WEI ECONOMICS OF AGING AND HEALTH SERVICES	03-15-96/12-31-96	UNIVERSITY OF CALIFORNIA BERKELEY	99,013
5 T32AG00186-08	WISE, DAVID A ECONOMICS OF AGING TRAINING PROGRAM -- EXTENSION	05-01-96/04-30-97	NATIONAL BUREAU OF ECONOMIC RESEARCH	143,977
5 T32AG00189-08	LIEM, RONALD K CELLULAR AND NEUROBIOLOGICAL ASPECTS OF AGING	05-01-96/04-30-97	COLUMBIA UNIVERSITY NEW YORK	258,607
5 T32AG00194-08	HAMERMAN, DAVID AGING TRAINING GRANT	05-01-96/04-30-97	YESHIVA UNIVERSITY	340,049
5 T32AG00196-08	MEYER, EDWIN M TRAINING IN THE NEUROBIOLOGY OF AGING	05-01-96/04-30-97	UNIVERSITY OF FLORIDA	78,729
5 T32AG00204-07	WINGFIELD, ARTHUR TRAINING IN COGNITIVE AGING IN A SOCIAL CONTEXT	05-01-96/04-30-97	BRANDEIS UNIVERSITY	125,713
2 T32AG00205-06A1	NELSON, JAMES F TRAINING IN NUTRITIONAL & INTERVENTIONAL GERONTOLOGY	05-01-96/04-30-97	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	141,097
5 T32AG00208-07	HAYWARD, MARK POPULATION BIOLOGY, GENERATIONS, AND COHORT SUCCESSION	05-21-96/04-30-97	PENNSYLVANIA STATE UNIVERSITY-UNIV P	119,988
5 T32AG00209-07	RUSSELL, ROBERT M RESEARCH TRAINING PROGRAM IN NUTRITION AND AGING	05-01-96/04-30-97	TUFTS UNIVERSITY MEDFORD	106,131
2 T32AG00213-06	WEINDRUCH, RICHARD BIOLOGY OF AGING AND AGE-RELATED DISEASES	05-01-96/04-30-97	UNIVERSITY OF WISCONSIN MADISON	231,376
2 T32AG00214-06	HEISTAD, DONALD D INTERDISCIPLINARY RESEARCH TRAINING PROGRAM IN AGING	05-01-96/04-30-97	UNIVERSITY OF IOWA	378,218
5 T32AG00216-05	GAGE, FRED H TRAINING IN THE NEUROPLASTICITY OF AGING	09-15-96/04-30-97	UNIVERSITY OF CALIFORNIA SAN DIEGO	190,544
5 T32AG00219-05	GOLDBERG, ANDREW P RESEARCH TRAINING OF GERONTOLOGY AND EXERCISE PHYSIOLOGY	05-01-96/04-30-98	UNIVERSITY OF MARYLAND BALT PROF SCH	17,950

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 T32AG00220-03	MARKSON, ELIZABETH MULTIDISCIPLINARY TRAINING PROGRAM IN AGING RESEARCH	05-01-96/04-30-97	BOSTON UNIVERSITY	175,430
5 T32AG00221-05	HERMALIN, ALBERT I TRAINING IN THE DEMOGRAPHY OF AGING	05-02-96/04-30-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	44,883
5 T32AG00222-05	POTTER, HUNTINGTON TRAINING IN THE MOLECULAR BIOLOGY OF NEURODEGENERATION	05-03-96/04-30-97	HARVARD UNIVERSITY	302,021
5 T32AG00223-03	RAMSDELL, JOE W GERIATRIC RESEARCH INSTITUTIONAL TRAINING GRANT	05-21-96/04-30-97	UNIVERSITY OF CALIFORNIA SAN DIEGO	74,058
5 T32AG00226-04	KEMPER, SUSAN RESEARCH TRAINING PROGRAM IN COMMUNICATION AND AGING	05-01-96/04-30-97	UNIVERSITY OF KANSAS LAWRENCE	175,987
2 T35AG00230-04	RICHARDSON, ARLAN G SHORT-TERM TRAINING STUDENTS IN HEALTH PROFESSIONAL SCHO	05-01-96/04-30-97	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	52,056
5 T32AG00231-04	FURNER, SYLVIA EPIDEMIOLOGY AND BIOSTATISTICS IN AGING RESEARCH	05-01-96/04-30-97	UNIVERSITY OF ILLINOIS AT CHICAGO	117,918
5 T32AG00237-03	SCHOEN, ROBERT POSTDOCTORAL TRAINING IN THE DEMOGRAPHY OF AGING	05-01-96/04-30-97	JOHNS HOPKINS UNIVERSITY	42,796
5 T32AG00238-03	BURKHAUSER, RICHARD V ECONOMICS & DEMOGRAPHY OF AGING	05-01-96/04-30-97	SYRACUSE UNIVERSITY AT SYRACUSE	58,484
5 T32AG00241-03	KAHANA, EVA F PREDOC TRNG: SOCIAL ASPECTS OF HEALTH RESEARCH AND AGING	05-01-96/04-30-97	CASE WESTERN RESERVE UNIVERSITY	94,374
5 T32AG00242-03	WISE, PHYLLIS M MOLECULAR AND CELLULAR BASIS OF BRAIN AGING	05-01-96/04-30-97	UNIVERSITY OF KENTUCKY	206,076
5 T32AG00243-03	WAITE, LINDA J SPECIALIZED TRAINING PROGRAM IN THE DEMOGRAPHY & ECON.	05-01-96/04-30-97	UNIVERSITY OF CHICAGO	168,490
5 T32AG00244-03	KAROLY, LYNN A POSTDOCTORAL TRAINING IN THE STUDY OF AGING	06-01-96/04-30-97	RAND CORPORATION	70,620
5 T32AG00245-02	SMALL, GARY W UCLA GERIATRIC RESEARCH FELLOWSHIP PROGRAM	05-01-96/04-30-97	UNIVERSITY OF CALIFORNIA LOS ANGELES	157,608
5 T32AG00246-02	LEE, RONALD D TRAINING IN THE DEMOGRAPHY AND ECONOMICS OF AGING	05-01-96/04-30-97	UNIVERSITY OF CALIFORNIA BERKELEY	42,402

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 T32AG00247-01A1	FRIED, LINDA P EPIDEMIOLOGY AND BIOSTATISTICS OF AGING	05-01-96/04-30-97	JOHNS HOPKINS UNIVERSITY	155,994
1 T32AG00251-01	WEI, JEANNE Y HARVARD INSTITUTIONAL RESEARCH TRAINING PROGRAM ON AGING	07-10-96/04-30-97	HARVARD UNIVERSITY	243,108
5 K12AG00294-12	WEI, JEANNE Y PHYSICIAN SCIENTIST PROGRAM AWARD	08-01-96/07-31-97	HARVARD UNIVERSITY	833,630
5 P01AG00378-24	CRISTOFALO, VINCENT J CELLULAR SENESCENCE AND CONTROL OF CELL PROLIFERATION	02-10-96/12-31-96	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	793,773
3 P01AG00378-24S1	CRISTOFALO, VINCENT J CELLULAR SENESCENCE AND CONTROL OF CELL PROLIFERATION	06-18-96/12-31-96	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	56,758
5 R01AG00424-34	WALFORD, ROY L LIFE EXTENSION EFFECT OF CALORIC RESTRICTION	05-22-96/04-30-98	UNIVERSITY OF CALIFORNIA LOS ANGELES	357,415
2 R01AG00424-35	WALFORD, ROY L MECHANISMS FOR THE LIFE EXTENSION EFFECTS OF CALORIC RES	07-01-96/	UNIVERSITY OF CALIFORNIA LOS ANGELES	
5 R37AG00425-32	HOLLOSZY, JOHN O EXERCISE INDUCED BIOCHEMICAL AND ANATOMIC ADAPTATIONS	07-01-96/06-30-98	WASHINGTON UNIVERSITY	266,261
5 R37AG00443-22	SCHIFFMAN, SUSAN S GUSTATORY AND OLFACTORY CHANGES WITH AGE	02-05-96/08-30-96	DUKE UNIVERSITY	252,311
2 R01AG00443-23	SCHIFFMAN, SUSAN S GUSTATORY AND OLFACTORY CHANGES WITH AGE	09-20-96/08-31-97	DUKE UNIVERSITY	230,524
5 K04AG00465-05	JOHNSON, LARRY BIOLOGY OF THE AGING HUMAN TESTIS	12-15-95/11-30-98	TEXAS A&M UNIVERSITY HEALTH SCIENCE	69,266
5 K08AG00481-04	RUBIN, CRAIG D TREATMENT OF SENILE OSTEOPOROSIS	03-01-96/02-28-97	UNIVERSITY OF TEXAS SW MED CTR/DALLA	70,686
2 K12AG00488-06	SORENSEN, LEIF B GERIATRIC ACADEMIC PROGRAM AWARD	09-01-96/08-31-97	UNIVERSITY OF CHICAGO	442,800
5 K12AG00503-07	ABRASS, ITAMAR B GERIATRIC ACADEMIC PROGRAM AWARD	09-01-96/08-31-97	UNIVERSITY OF WASHINGTON	564,904
5 K08AG00518-05	CAMPBELL, JAMES W MEASUREMENT OF FAMILY FUNCTION IN ELDERLY PERSONS	07-01-96/01-31-97	CASE WESTERN RESERVE UNIVERSITY	76,051

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 K08AG00520-05	OBEID, LINA M TRANSCRIPTIONAL REGULATION OF PROTEIN KINASE C BETA	04-01-96/03-31-97	DUKE UNIVERSITY	76,842
2 K12AG00521-06	WEINER, LESLIE P MCSDPA--NEUROGERONTOLOGY	08-01-96/07-31-97	UNIVERSITY OF SOUTHERN CALIFORNIA	463,050
7 K11AG00523-04	GERHARD, GLENN S MITOCHONDRIA IN AGING	03-26-96/12-31-96	PENNSYLVANIA STATE UNIV HERSHEY MED	87,955
5 K07AG00532-05	CRISTOFALO, VINCENT J GERIATRIC LEADERSHIP ACADEMIC AWARD	12-20-95/11-30-96	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	54,000
5 P01AG00538-20	COTMAN, CARL W BEHAVIORAL AND NEURAL PLASTICITY IN THE AGED	07-16-96/06-30-97	UNIVERSITY OF CALIFORNIA IRVINE	849,515
5 K08AG00540-05	DUBEAU, CATHERINE E DIAGNOSIS OF PROSTATIC OBSTRUCTION	03-01-96/02-28-97	BRIGHAM AND WOMEN'S HOSPITAL	77,220
5 P01AG00541-19	WEKSLER, MARC E IMMUNOBIOLOGY OF AGING	07-01-96/06-30-98	CORNELL UNIVERSITY MEDICAL CENTER	1,052,724
5 K08AG00542-05	WISNIEWSKI, THOMAS DIFFUSE LEWY BODY DISEASE AND GELSOLIN	09-01-96/08-31-97	NEW YORK UNIVERSITY MEDICAL CENTER	81,212
5 K01AG00544-05	ADER, MARILYN ETIOLOGY OF GLUCOSE INTOLERANCE OF AGING	01-01-96/12-31-96	UNIVERSITY OF SOUTHERN CALIFORNIA	90,984
5 K08AG00546-05	REED, RICHARD L GROWTH HORMONE AND MUSCLE STRENGTH	09-01-96/08-31-97	UNIVERSITY OF MINNESOTA TWIN CITIES	73,269
5 K01AG00547-05	COHEN-MANSFIELD, JISKA TREATMENT OF AGITATION IN AGED PEOPLE	02-05-96/12-31-96	GEORGETOWN UNIVERSITY	88,777
7 K08AG00548-06	GRAVENSTEIN, STEFAN ANTIBODY DIVERSITY, AGE AND INFLUENZA VACCINE EFFICACY	12-25-96/12-31-97	EASTERN VIRGINIA MED SCH/MED COL HAM	45,880
5 K04AG00553-05	SNOWDON, DAVID A EPIDEMIOLOGY OF AGING AND ALZHEIMER'S DISEASE	02-10-96/12-31-96	UNIVERSITY OF KENTUCKY	60,815
5 K01AG00554-04	HORIUCHI, SHIRO RELATIONSHIPS BETWEEN AGING AND MORTALITY	07-01-96/06-30-97	ROCKEFELLER UNIVERSITY	94,500
5 K01AG00558-04	JUDGE, JAMES O REDUCING RISK FACTORS FOR FALLS	09-01-96/08-31-97	UNIVERSITY OF CONNECTICUT HEALTH CEN	86,972

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 K08AG00559-06	SHORR, RONALD I GERIATRIC PHARMACOEPIDEMIOLOGY	04-01-96/03-31-97	UNIVERSITY OF TENNESSEE AT MEMPHIS	74,602
5 K01AG00561-05	POWE, NEIL R ECONOMIC CONSEQUENCES OF ILLNESS IN AN AGING SOCIETY	08-01-96/07-31-98	JOHNS HOPKINS UNIVERSITY	91,506
5 K04AG00563-05	SAPOLSKY, ROBERT M GLUCOCORTICOIDS AND ALZHEIMER'S-LIKE HIPPOCAMPAL DAMAGE	08-01-96/07-31-97	STANFORD UNIVERSITY	68,809
7 K04AG00564-06	POEHLMAN, ERIC T PHYSICAL ACTIVITY EFFECTS ON ENERGY METABOLISM	09-30-96/08-31-98	UNIVERSITY OF VERMONT & ST AGRIC COL	75,543
7 K01AG00565-04	RAHMAN, MOHAMMED O IMPACT OF KIN NETWORKS	04-18-96/03-31-97	HARVARD UNIVERSITY	88,439
5 K11AG00568-05	EIDE, FERNETTE F NEUROTROPHINS AND THE HIPPOCAMPUS	07-22-96/06-30-97	UNIVERSITY OF CHICAGO	86,400
5 K08AG00571-05	ROBIN, DEBORAH W DRUG EFFECT ON BALANCE IN THE ELDERLY	09-01-96/08-31-97	VANDERBILT UNIVERSITY	76,802
5 K01AG00577-05	OLSHANSKY, STUART J INTERDISCIPLINARY TRAINING PROGRAM ON AGING	09-01-96/08-31-97	UNIVERSITY OF CHICAGO	87,871
5 K01AG00578-05	CEFALU, WILLIAM T CALORIC RESTRICTION AND CARDIOVASCULAR AGING	09-01-96/08-31-97	WAKE FOREST UNIVERSITY	87,891
5 K08AG00580-05	LACHS, MARK S PREDICTORS OF ELDER MISTREATMENT	07-01-96/06-30-97	CORNELL UNIVERSITY MEDICAL CENTER	78,300
5 K01AG00581-05	ROGERS, MARK W PROTECTIVE STEPPING RESPONSES AND FALLS IN THE ELDERLY	08-01-96/07-31-98	NORTHWESTERN UNIVERSITY	72,792
5 K08AG00583-04	CALLAHAN, CHRISTOPHER M GERIATRIC DEPRESSION IN PRIMARY CARE	07-01-96/06-30-97	INDIANA UNIV-PURDUE UNIV AT INDIANAP	80,314
5 K01AG00585-04	BROWN, MARYBETH SIMULATED BEDREST AND TREATMENT EFFECTS ON AGING MUSCLE	04-01-96/03-31-97	WASHINGTON UNIVERSITY	72,275
5 K01AG00586-06	SEEMAN, TERESA E PSYCHOSOCIAL FACTORS & NEUROENDOCRINE FUNCTION IN AGING	08-01-96/07-31-98	UNIVERSITY OF SOUTHERN CALIFORNIA	92,610
2 K01AG00588-04	EWBANK, DOUGLAS C DEMOGRAPHY OF ALZHEIMERS DISEASE	08-15-96/06-30-97	UNIVERSITY OF PENNSYLVANIA	93,150

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 K01AG00589-02	NEUMARK, DAVID RESEARCH ON THE ECONOMICS OF AGING & AGE DISCRIMINATION	02-01-96/12-31-96	NATIONAL BUREAU OF ECONOMIC RESEARCH	92,877
5 K01AG00593-03	HEADEN, ALVIN E JR RACE, LTC SERVICE MIX, AND CAREGIVER TIME COST	02-01-96/12-31-96	NORTH CAROLINA STATE UNIVERSITY RALE	78,097
5 K04AG00594-04	MEDRANO, ESTELA E SENESCENCE IN THE MELANOCYTE	04-01-96/03-31-97	BAYLOR COLLEGE OF MEDICINE	69,325
5 K08AG00599-03	DUGAN, LAURA L FREE RADICAL MECHANISMS IN NEURAL INJURY IN VITRO	03-15-96/01-31-97	WASHINGTON UNIVERSITY	76,866
5 P01AG00599-19	MINAKER, KENNETH L PROGRAM PROJECT IN BIOMEDICAL OUTCOMES OF AGING	06-01-96/05-31-98	MASSACHUSETTS GENERAL HOSPITAL	822,853
5 K01AG00602-04	SCHMIDT, ANN M AGING, DIABETES AND VASCULAR DISEASE	07-01-96/06-30-97	COLUMBIA UNIVERSITY NEW YORK	93,690
5 K08AG00605-05	MANGIONE, CAROL M IMPACT OF CATARACT EXTRACTION IN VISUCAL FUNCTIONAL STAT	07-01-96/06-30-97	UNIVERSITY OF CALIFORNIA LOS ANGELES	74,790
2 K07AG00608-04	GOLDBERG, ANDREW P GERIATRIC LEADERSHIP ACADEMIC AWARD	07-01-96/06-30-97	UNIVERSITY OF MARYLAND BALT PROF SCH	86,403
5 K08AG00615-03	WALLACE, JEFFREY I WEIGHT LOSS AND FAILURE TO THRIVE	04-01-96/03-31-97	UNIVERSITY OF WASHINGTON	72,360
5 K07AG00618-03	GOODWIN, JAMES S LEADERSHIP ACADEMIC AWARD	04-23-96/03-31-97	UNIVERSITY OF TEXAS MEDICAL BR GALVE	86,400
5 K08AG00619-03	BILIR, BAHRI M GENE EXPRESSION IN AGING LIVER	08-26-96/07-31-97	UNIVERSITY OF COLORADO HLTH SCIENCES	81,743
5 K11AG00621-04	LEEHEY, MAUREEN A MITOCHONDRIAL DNA ANALYSIS IN HUNTINGTONS DISEASE	09-01-96/07-31-97	UNIVERSITY OF COLORADO HLTH SCIENCES	91,370
5 K08AG00623-03	MAHONEY, JANE E FALLS AFTER HOSPITAL DISCHARGE	01-01-96/12-31-96	UNIVERSITY OF WISCONSIN MADISON	78,098
5 K08AG00627-03	HEUSER, MARK D FAILURE TO THRIVE IN ELDERS	03-01-96/02-28-97	UNIVERSITY OF MARYLAND BALT PROF SCH	77,933
5 K08AG00629-03	BAUER, DOUGLAS C THYROID FUNCTION AND OSTEOPOROSIS	05-10-96/06-30-97	UNIVERSITY OF CALIFORNIA SAN FRANCIS	73,440

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 K04AG00631-03	ZAKERI, ZAHRA MECHANISMS OF PROGRAMMED CELL DEATH	05-22-96/04-30-97	QUEENS COLLEGE	69,040
5 K01AG00633-03	TULLY, CHRISTINE L ZINC, B12 AND COGNITIVE DECLINE IN THE ELDERLY	07-01-96/06-30-97	UNIVERSITY OF KENTUCKY	75,618
5 K04AG00634-03	GOATE, ALISON M GENETIC APPROACH TO THE ETIOLOGY OF ALZHEIMER DISEASE	05-01-96/04-30-97	WASHINGTON UNIVERSITY	66,436
5 K07AG00635-03	WISE, DAVID A GERIATRIC LEADERSHIP ACADEMIC AWARD	04-01-96/03-31-97	NATIONAL BUREAU OF ECONOMIC RESEARCH	86,400
5 K08AG00639-03	BARZILAI, NIR AGING AND PERIPHERAL AND HEPATIC GLUCOSE METABOLISM	09-01-96/08-31-97	YESHIVA UNIVERSITY	80,460
5 K08AG00642-03	MONANE, MARK ANTIHYPERTENSIVES AND THE ELDERLY	01-01-96/12-31-96	BRIGHAM AND WOMEN'S HOSPITAL	77,506
5 K08AG00643-03	WEINER, DEBRA K CHRONIC PAIN IN THE NURSING HOME	08-01-96/07-31-97	DUKE UNIVERSITY	72,414
5 K01AG00645-03	MORIN, CATHERINE L INTERACTION OF TNF ALPHA & NUTRITION IN AGED ADIPOSE TIS	09-01-96/08-31-97	UNIVERSITY OF COLORADO HLTH SCIENCES	51,579
5 K08AG00648-03	MARCANTONIO, EDWARD R REDUCING DELIRIUM AFTER HIP FRACTURE--A PROACTIVE MODEL	08-01-96/07-31-97	BRIGHAM AND WOMEN'S HOSPITAL	76,140
7 K11AG00649-04	YUEN, ERIC C BDNF AND OXIDATIVE INJURY IN MOTOR NEURONS	11-04-96/06-30-97	UNIVERSITY OF WASHINGTON	73,350
5 K01AG00650-02	PUGH, THOMAS CALORIES, AGING, AND LOCALIZATION OF MTDNA ABNORMALITIES	09-01-96/08-31-97	UNIVERSITY OF WISCONSIN MADISON	75,712
5 K08AG00656-02	CHIN, STEVEN SUEY-MING TAU PATHOLOGY IN PROGRESSIVE SUPRANUCLEAR PALSY	02-20-96/12-31-96	COLUMBIA UNIVERSITY NEW YORK	82,890
5 K01AG00657-03	GARDNER, ANDREW W EXERCISE REHABILITATION OF YOUNGER AND OLDER CLAUDICANTS	02-15-96/01-31-97	UNIVERSITY OF MARYLAND BALT PROF SCH	77,055
5 K11AG00658-02	OLICHNEY, JOHN M ERPS AND VERBAL MEMORY IN AGING DEMENTIA AND AMNESIA	07-01-96/06-30-97	UNIVERSITY OF CALIFORNIA SAN DIEGO	75,349
5 K04AG00659-02	MAGNUSSON, KATHY R AGE RELATED CHANGE IN GLUTAMATE RECEPTORS	02-20-96/12-31-96	COLORADO STATE UNIVERSITY	63,936

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 K01AG00661-02	KLERMAN, ELIZABETH B REHABILITATION OF CIRCADIAN BLINDNESS IN OLDER PEOPLE	02-20-96/12-31-96	BRIGHAM AND WOMEN'S HOSPITAL	81,540
1 K01AG00662-01A1	VAITKEVICIUS, PETER V EXECRISE REHABILITATION OF OLDER HEART FAILURE P	12-01-95/	JOHNS HOPKINS UNIVERSITY	
5 K04AG00663-02	KOHRT, WENDY M EXERCISE AND HRT IN OSTEOPENIC ELDERLY WOMEN AND MEN	01-01-96/12-31-96	WASHINGTON UNIVERSITY	66,001
5 K01AG00666-02	EL-HAJJ FULEIHAN, GHADA AGE/GENDER EFFECTS ON PTH, CA++ AND SKELETAL DYNAMICS	04-01-96/03-31-97	BRIGHAM AND WOMEN'S HOSPITAL	81,540
1 K01AG00670-01A1	SCHOENI, ROBERT F HEALTH STATUS AND FAMILY SUPPORT OF THE ELDERLY	02-05-96/01-31-97	RAND CORPORATION	98,146
5 K04AG00676-02	LESNEFSKY, EDWARD J MITOCHONDRIA INCREASE OXIDATIVE INJURY IN AGING HEART	07-01-96/06-30-97	CASE WESTERN RESERVE UNIVERSITY	67,230
5 K01AG00677-02	PAHLAVANI, MOHAMMAD A DOES CALORIC RESTRICTION AFFECT IL-2 TRANSCRIPTION?	08-01-96/07-31-97	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	52,195
5 R01AG00677-19	RUTHERFORD, CHARLES L ALTERNATE PATHWAYS IN CELLULAR AGING	04-01-96/03-31-98	VIRGINIA POLYTECHNIC INST AND ST UNI	184,237
5 K07AG00678-02	WYKLE, MAY L GERIATRIC LEADERSHIP ACADEMIC AWARD	07-12-96/03-31-97	CASE WESTERN RESERVE UNIVERSITY	86,354
5 K08AG00680-02	ROSEN, HAROLD N ADJUSTMENT OF ESTROGEN DOSING ACCORDING TO BONE TURNOVER	04-01-96/03-31-97	BETH ISRAEL DEACONESS MEDICAL CENTER	78,237
5 K08AG00681-02	MARQUEZ-STERLING, NUMA R ENDOCYTOTIC TRAFFICKING OF APP IN CULTURED CNS NEURONS	04-01-96/03-31-97	NORTHWESTERN UNIVERSITY	75,330
5 K08AG00684-02	BONOMO, ROBERT A MECHANISMS OF ANTIBIOTIC RESISTANCE IN THE NURSING HOME	09-13-96/08-31-97	CASE WESTERN RESERVE UNIVERSITY	78,172
1 K01AG00685-01A1	BERMAN, DORA M WEIGHT LOSS AND FAT METABOLISM IN POSTMEMOPAUSAL WOMEN	04-01-96/03-31-97	UNIVERSITY OF MARYLAND BALT PROF SCH	81,810
1 K01AG00686-01A1	ARKIN, SHARON M AD REHAB BY STUDENTS--EFFECTS ON FUNCTIONING AND DECLINE	09-15-96/08-31-97	UNIVERSITY OF ARIZONA	79,727
1 K01AG00687-01A1	DAVY, KEVIN P DIET AND EXERCISE EFFECTS IN OBESE POSTMENOPAUSAL WOMEN	04-01-96/03-31-97	UNIVERSITY OF COLORADO AT BOULDER	78,770

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 K01AG00690-02	YAN, SHI DU ALZHEIMERS, GLYCATION, RECEPTORS AND OXIDANT STRESS	07-22-96/06-30-97	COLUMBIA UNIVERSITY NEW YORK	82,890
1 K01AG00691-01A1	RITCHIE, CHRISTINE S NUTRITIONAL STATUS AND ORAL HEALTH IN FRAIL OLDER ADULTS	04-01-96/03-31-97	UNIVERSITY OF ALABAMA AT BIRMINGHAM	88,494
1 K01AG00692-01A1	DELBONO, OSVALDO SKELETAL MUSCLE IMPAIRMENT IN AGING	04-01-96/02-28-97	WAKE FOREST UNIVERSITY	78,840
5 K04AG00694-03	PEACOCKE, MONICA GENETIC STUDIES OF COWDENS SYNDROME	07-12-96/05-31-97	COLUMBIA UNIVERSITY NEW YORK	72,090
1 K11AG00696-01	GOODMAN-GRUEN, D ENDOGENOUS HORMONES & CHRONIC DISEASE IN THE ELDERLY	12-01-95/	UNIVERSITY OF CALIFORNIA SAN DIEGO	
1 K01AG00697-01	MILES, TONI P SERCA IN DEMOGRAPHY AND ECONOMICS OF AGING	01-01-96/	PENNSYLVANIA STATE UNIVERSITY-UNIV P	
1 K08AG00698-01	CHAI, TOBY C NEUROPLASTICITY OF THE AGING BLADDER	02-01-96/01-31-97	UNIVERSITY OF VIRGINIA CHARLOTTESVIL	77,760
1 K01AG00699-01A1	STEVENSON, EDITH EXERCISE IN HYPERTENSION-PRONE POSTMENOPAUSAL WOMEN	07-01-96/06-30-97	UNIVERSITY OF COLORADO AT BOULDER	62,366
1 K01AG00700-01	KIRWAN, JOHN P AGE, EXERCISE, DIET: EFFECTS ON GLUCOSE-FAT METABOLISM	12-01-95/	PENNSYLVANIA STATE UNIVERSITY-UNIV P	
1 K01AG00701-01A1	LARKIN, LISA M REHABILITATION OF MICRONEUROVASCULAR GRAFTS IN OLD RATS	09-20-96/07-31-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	92,581
1 K01AG00702-01A1	ZOHOORI, NAMVAR DEMOGRAPHY OF HEALTHY AGING--ROLE OF NUTRITIONAL FACTORS	08-15-96/07-31-97	UNIVERSITY OF NORTH CAROLINA CHAPEL	86,195
1 K01AG00703-01	WEIR, DAVID R RESEARCH TRAINING IN ECONOMIC ASPECTS OF CHRONIC DISEASE	02-10-96/01-31-97	UNIVERSITY OF CHICAGO	99,054
1 K11AG00704-01	BERGMAN, ROBERT J EFFECTS OF AGING ON STEM CELL MATURATION	12-01-95/	UNIVERSITY OF CALIFORNIA LOS ANGELES	
1 K08AG00705-01	PACALA, JAMES T ADADEMIC AWARD: EVALUATING ELDERLY PRIMARY CARE QUALITY	12-01-95/	UNIVERSITY OF MINNESOTA TWIN CITIES	
1 K04AG00706-01	BUXBAUM, JOSEPH D SIGNAL TRANSDUCTION AND ALZHEIMER AMYLOIDOSIS	02-01-96/	ROCKEFELLER UNIVERSITY	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 K11AG00707-01	SAMUEL, WILLIAM DENTATE GRANULE CELL LOSS: IMPLICATIONS FOR MEMORY & AD	12-01-95/	UNIVERSITY OF CALIFORNIA SAN DIEGO	
1 K02AG00708-01	LI, CHRISTINE FUNCTION OF AMYLOID PRECURSOR-RELATED GENE IN C ELEGANS	02-01-96/11-30-96	BOSTON UNIVERSITY	68,796
1 K04AG00709-01	HEYER, ERIC J CEREBRAL DYSFUNCTION IN ELDERLY PATIENTS:CARDIAC SURGERY	12-01-95/	COLUMBIA UNIVERSITY NEW YORK	
5 K11AG00713-02	MOALLI, MARIA R MECHANOTRANSDUCTION IN TRABECULAR BONE	09-01-96/08-31-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	76,359
1 K08AG00714-01	COVINSKY, KENNETH E IMPROVING QUALITY OF LIFE IN ELDERS WITH MEDICAL ILLNESS	05-21-96/03-31-97	CASE WESTERN RESERVE UNIVERSITY	85,657
5 K08AG00715-02	MARGOLIS, DAVID J PREDICTION MODEL FOR THE TREATMENT OF VENOUS LEG ULCERS	07-01-96/06-30-97	UNIVERSITY OF PENNSYLVANIA	93,163
1 K01AG00716-01	GORE, MITCHELL T AGING, EXERCISE AND ANTIOXIDANT ENZYMES	04-01-96/	UNIVERSITY OF WISCONSIN MADISON	
1 K07AG00718-01	LIPSCHITZ, DAVID A GERIATRIC LEADERSHIP ACADEMIC AWARD	04-08-96/03-31-97	UNIVERSITY OF ARKANSAS MED SCIS LTL	86,400
1 K01AG00721-01	CAI, XINGANG ANALYSIS OF THE EFFECTS OF THE AD3 GENE ON APP PROCESSIN	04-01-96/	UNIVERSITY OF SOUTH FLORIDA	
5 K01AG00723-02	DENGEL, DONALD R INSULIN ACTION, SODIUM AND EXERCISE IN HYPERTENSION	09-01-96/08-31-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	90,331
5 K04AG00724-02	PETERSON, CHARLOTTE A REGULATION OF GENE EXPRESSION IN MUSCLE SATELLITE CELLS	09-01-96/08-31-97	UNIVERSITY OF ARKANSAS MED SCIS LTL	67,500
1 K08AG00725-01	GREENBERG, STEVEN M MOLECULAR RISK FACTORS FOR CEREBRAL AMYLOID ANGIOPATHY	08-15-96/07-31-97	MASSACHUSETTS GENERAL HOSPITAL	88,029
1 K02AG00727-01	BESNER, GAIL E HEPARIN-BINDING EGF - A POTENTIAL WOUND HEALING FACTOR	07-01-96/	CHILDREN'S HOSPITAL (COLUMBUS)	
1 K02AG00728-01	BICKFORD, PAULA C NORADRENERGIC FUNCTION IN BRAIN AGING & OXIDATIVE STRESS	08-15-96/06-30-97	UNIVERSITY OF COLORADO HLTH SCIENCES	63,811
1 K07AG00729-01	FINCH, CALEB E MULTIDISCIPLINARY APPROACHES IN BIOGERONTOLOGY	09-01-96/08-31-97	UNIVERSITY OF SOUTHERN CALIFORNIA	83,044

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 K01AG00732-01	SPECTOR, ALEXANDER A MATHEMATICAL MODELING OF THE AGING COCHLEA	08-15-96/06-30-97	JOHNS HOPKINS UNIVERSITY	79,750
1 K02AG00733-01	BIGELOW, DIANA J AGING AND OXIDATION IN SKELETAL AND CARDIAC MUSCLE	08-01-96/06-30-97	UNIVERSITY OF KANSAS LAWRENCE	68,040
1 K01AG00736-01	WARREN, STACEY G ESTROGEN, BRAIN MORPHOLOGY AND LEARNING	07-01-96/	UNIVERSITY OF ILLINOIS URBANA-CHAMPA	
1 K01AG00737-01	GOODMAN, PHILIP H CORTICAL CIRCUIT PROCESSING IN AGING AND DEMENTIA	09-01-96/	UNIVERSITY OF NEVADA RENO	
1 K02AG00745-01	SCHWINN, DEBRA A TRANSCRIPTIONAL REGULATION OF THE HUMAN 1A ADRENOCEPTORS	05-02-96/04-30-97	DUKE UNIVERSITY	67,014
1 K08AG00755-01	HAMEL, MARY E OUTCOMES AND COSTS OF INVASIVE THERAPIES FOR THE ELDERLY	09-01-96/08-31-97	BETH ISRAEL DEACONESS MEDICAL CENTER	84,321
1 K08AG00774-01	MONTINE, THOMAS J CROSSLINKING OF APOE AND TAU IN ALZHEIMERS DISEASE	08-26-96/06-30-97	VANDERBILT UNIVERSITY	76,950
5 R01AG00947-19	STEIN, GRETCHEN H GROWTH REGULATION--SENESCENT VS NONSENESCENT CELLS	07-01-96/06-30-97	UNIVERSITY OF COLORADO AT BOULDER	275,024
5 R37AG01136-19	YEN, SHU-HUI C AGING BRAIN--IMMUNOHISTOLOGY AND BIOCHEMISTRY	09-01-96/06-30-97	YESHIVA UNIVERSITY	341,772
5 R01AG01159-20	MANTON, KENNETH G DEMOGRAPHIC STUDY OF MULTIPLE CAUSES OF DEATH	12-20-95/11-30-96	DUKE UNIVERSITY	177,645
5 P01AG01188-18	YU, BYUNG P NUTRITIONAL PROBE OF THE AGING PROCESS	06-01-96/05-31-98	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	1,213,804
5 R37AG01228-18	WRIGHT, WOODRING E GENE EXPRESSION IN AGING AND DEVELOPMENT	12-05-95/11-30-97	UNIVERSITY OF TEXAS SW MED CTR/DALLA	327,660
2 R01AG01274-17A1	GRACY, ROBERT W MOLECULAR BASIS FOR ABNORMAL PROTEINS IN AGING CELLS	12-01-95/	UNIVERSITY OF NORTH TEXAS HLTH SCI C	
5 R01AG01548-13	RICHARDSON, ARLAN G EFFECT OF DIETARY RESTRICTION ON GENE EXPRESSION	04-09-96/03-31-97	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	174,065
5 P01AG01743-17	KLINMAN, NORMAN R IMMUNOBIOLOGY OF AGING	03-15-96/09-29-96	SCRIPPS RESEARCH INSTITUTE	862,077

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
2 P01AG01743-18	KLINMAN, NORMAN R IMMUNOBIOLOGY OF AGING	09-30-96/08-31-97	SCRIPPS RESEARCH INSTITUTE	839,342
2 P01AG01751-18	MARTIN, GEORGE M GENE ACTION IN THE PATHOBIOLOGY OF AGING	08-15-96/07-31-97	UNIVERSITY OF WASHINGTON	867,199
5 R01AG01760-16	KLAG, MICHAEL J PRECURSORS OF PREMATURE DISEASE AND DEATH	07-22-96/06-30-97	JOHNS HOPKINS UNIVERSITY	390,909
5 R37AG02049-17	GARRY, PHILIP J PROSPECTIVE STUDY OF NUTRITION IN THE ELDERLY	02-22-96/01-31-97	UNIVERSITY OF NEW MEXICO ALBUQUERQUE	379,407
5 R01AG02128-16	FESSLER, JOHN H BASEMENT MEMBRANE BIOSYNTHESIS	05-10-96/04-30-97	UNIVERSITY OF CALIFORNIA LOS ANGELES	361,140
5 P01AG02132-16	PRUSINER, STANLEY B DEGENERATIVE AND DEMENTING DISEASES OF AGING	04-03-96/12-31-96	UNIVERSITY OF CALIFORNIA SAN FRANCIS	1,757,402
5 P01AG02219-16	MOHS, RICHARD C CLINICAL AND BIOLOGIC STUDIES IN EARLY ALZHEIMERS	04-23-96/03-31-97	MOUNT SINAI SCHOOL OF MEDICINE OF CU	1,461,530
2 R01AG02224-17	WISE, PHYLLIS M NEUROENDOCRINE AND NEUROCHEMICAL FUNCTION DURING AGING	07-11-96/06-30-97	UNIVERSITY OF KENTUCKY	286,375
2 R01AG02325-15	PROSTAK, KENNETH S MECHANO-ULTRASONIC PROPERTIES OF BONE IN AGING	12-01-95/	FORSYTH DENTAL CENTER	
5 R01AG02331-15	CLEMMONS, DAVID R CONTROL OF FIBROBLAST REPLICATION BY IGF-BINDING PROTEIN	08-01-96/07-31-98	UNIVERSITY OF NORTH CAROLINA CHAPEL	258,415
5 R37AG02452-17	LIGHT, LEAH L DIRECT AND INDIRECT MEASURES OF MEMORY IN OLD AGE	09-19-96/08-31-97	PITZER COLLEGE	190,892
2 R01AG02467-15	KUSHNER, IRVING INDUCTION OF ACUTE PHASE PROTEIN BIOSYNTHESIS	03-20-96/02-28-97	CASE WESTERN RESERVE UNIVERSITY	209,908
5 R37AG02577-14	NIMNI, MARCEL E OSTEOGENESIS--DEVELOPMENT, MODULATION, AND AGING	12-20-95/11-30-97	CHILDREN'S HOSPITAL OF LOS ANGELES	202,366
5 R01AG02711-18	ANCOLI-ISRAEL, SONIA PREVALENCE OF SLEEP APNEA IN AN AGED POPULATION	04-11-96/03-31-97	UNIVERSITY OF CALIFORNIA SAN DIEGO	214,100
5 R37AG02751-15	HOWARD, DARLENE V AGING, SEMANTIC PROCESSING AND MEMORY	05-29-96/04-30-97	GEORGETOWN UNIVERSITY	102,681

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 R01AG02822-15	STOCKDALE, FRANK E DEVELOPMENTAL AGE AND CHANGES IN MYOSIN ISOZYMES	12-05-95/11-30-96	STANFORD UNIVERSITY	277,700
5 R01AG03051-13	REISBERG, BARRY AGING AND DEMENTIA--LONGITUDINAL STUDY	07-01-96/06-30-97	NEW YORK UNIVERSITY MEDICAL CENTER	268,497
5 R37AG03055-15	ELIAS, MERRILL F AGE HYPERTENSION AND INTELLECTIVE PERFORMANCE	07-01-96/06-30-97	UNIVERSITY OF MAINE	286,473
5 R37AG03188-15	WOODBURY, MAX A LONGITUDINAL MODELS OF CORRELATES OF AGING AND LONGEVITY	06-01-96/05-31-97	DUKE UNIVERSITY	221,089
5 R01AG03362-10	HARTLEY, JOELLEN T AGING AND PROSE MEMORY--BEHAVIORAL AND EEG PREDICTORS	06-04-96/05-31-97	CALIFORNIA STATE UNIVERSITY LONG BEA	155,683
5 R01AG03376-15	BARNES, CAROL A NEUROBEHAVIORAL RELATIONS IN SENESCENT HIPPOCAMPUS	05-01-96/11-30-97	UNIVERSITY OF ARIZONA	160,290
2 R01AG03417-15A1	FERNANDES, GABRIEL INFLUENCE OF DIET ON REGULATION, AUTOIMMUNITY AND AGING	07-01-96/	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	
5 R37AG03501-15	LEVENTHAL, HOWARD SYMPTOM AND EMOTION STIMULI TO HEALTH ACTION IN ELDERLY	07-01-96/06-30-97	RUTGERS THE STATE UNIV NEW BRUNSWICK	480,962
5 R01AG03578-11	CHEN, KUANG Y TRANSACTING FACTORS AND CELLULAR AGING	07-01-96/06-30-98	RUTGERS THE STATE UNIV NEW BRUNSWICK	203,161
5 R01AG03763-10	WHISLER, RONALD L CELLULAR MECHANISMS OF HUMAN IMMUNOSENESCENCE	02-10-96/12-31-96	OHIO STATE UNIVERSITY	188,953
5 P01AG03934-14	ABRUTYNM, ELI TEACHING NURSING HOME	05-01-96/04-30-98	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	788,104
5 P01AG03949-15	LIPTON, RICHARD B TEACHING NURSING HOME	07-01-96/06-30-98	YESHIVA UNIVERSITY	1,390,511
2 R01AG03978-13A2	MILLER, RICHARD A T CELL SUBSETS DEFINED BY P-GLYCOPROTEIN	12-20-95/11-30-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	143,809
5 P01AG03991-13	BERG, LEONARD HEALTHY AGING AND SENILE DEMENTIA	02-10-96/12-31-96	WASHINGTON UNIVERSITY	1,322,293
3 P01AG03991-13S1	BERG, LEONARD HEALTHY AGING AND SENILE DEMENTIA	02-20-96/12-31-96	WASHINGTON UNIVERSITY	210,161

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
2 R01AG04058-12	WERNER, JOHN S OPTICAL AND NEURAL CHANGES IN AGING VISUAL SYSTEMS	03-05-96/02-28-97	UNIVERSITY OF COLORADO AT BOULDER	157,715
2 R01AG04085-12A2	MURPHY, CLAIRE L CHEMOSENSORY PERCEPTION AND PSYCHOPHYSICS IN THE AGED	09-23-96/05-31-97	SAN DIEGO STATE UNIVERSITY	170,398
2 R01AG04145-14	YEN, SHU-HUI C AGING AND ALZHEIMER DEMENTIA--ROLE OF FIBROUS PROTEINS	05-03-96/04-30-97	YESHIVA UNIVERSITY	304,790
2 R01AG04146-10A2	BOOTH, ALAN MARITAL INSTABILITY OVER THE LIFE COURSE	09-01-96/01-14-97	PENNSYLVANIA STATE UNIVERSITY-UNIV P	223,464
5 R01AG04212-13	OWSLEY, CYNTHIA SPATIAL VISION AND AGING--UNDERLYING MECHANISMS	04-01-96/03-31-97	UNIVERSITY OF ALABAMA AT BIRMINGHAM	196,496
3 R37AG04287-13S1	STEVENS, JOSEPH C CHEMICAL SENSES AND AGING	03-26-96/08-31-97	JOHN B. PIERCE LABORATORY, INC.	5,000
5 R01AG04306-11	HASHER, LYNN A AGE, INHIBITION, AND THE CONTENTS OF WORKING MEMORY	08-15-96/07-31-97	DUKE UNIVERSITY	216,110
5 R37AG04307-14	CHASE, MICHAEL H STATE-DEPENDENT SOMATOMOTOR PROCESSES IN OLD AGE	08-23-96/07-31-97	UNIVERSITY OF CALIFORNIA LOS ANGELES	325,155
5 P01AG04342-13	OLDSTONE, MICHAEL B AGING DISEASE--TRANSGENIC/VIROLOGIC/IMMUNOLOGY STUDIES	12-01-95/11-30-96	SCRIPPS RESEARCH INSTITUTE	986,694
5 R37AG04344-13	PORTER, JOHN C AGING AND MOLECULAR NEUROENDOCRINE IMPAIRMENT	03-05-96/01-31-98	UNIVERSITY OF TEXAS SW MED CTR/DALLA	219,516
5 R01AG04360-14	FARR, ANDREW G AGE DEPENDENT MODULATION OF T CELL FUNCTION	08-15-96/07-31-97	UNIVERSITY OF WASHINGTON	216,308
5 P01AG04390-14	LIPSITZ, LEWIS A RESEARCH NURSING HOME	09-01-96/08-31-97	HEBREW REHABILITATION CENTER FOR AGE	1,134,118
2 P01AG04418-13	BICKFORD, PAULA C AMINERGIC FUNCTION IN AGING AND ALZHEIMERS DISEASE	05-21-96/03-31-97	UNIVERSITY OF COLORADO HLTH SCIENCES	926,991
5 R37AG04517-13	WINGFIELD, ARTHUR AGE AND DECISION STRATEGIES IN RUNNING MEMORY FOR SPEECH	04-08-96/03-31-97	BRANDEIS UNIVERSITY	184,746
5 P30AG04590-12	ROCKWELL, RICHARD C FACTORS IN AGING--DEVELOPMENT RESEARCH RESOURCES	05-01-96/04-30-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	581,637

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
2 R01AG04736-13	THONAR, EUGENE J AGE RELATED DIFFERENCES IN CARTILAGE PROTEOGLYCANS	04-09-96/03-31-97	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	191,701
5 R37AG04791-13	NEBES, ROBERT D SEMANTIC MEMORY IN ALZHEIMERS DISEASE	04-01-96/03-31-98	UNIVERSITY OF PITTSBURGH AT PITTSBUR	149,902
5 R37AG04810-13	LU, JOHN K HORMONE SECRETION AND PREGNANCY DURING AGING	04-01-96/03-31-99	UNIVERSITY OF CALIFORNIA LOS ANGELES	209,263
5 R01AG04821-14	OZER, HARVEY L IMMORTALIZATION OF SV40-TRANSFORMED HUMAN CELLS	09-30-96/07-31-97	UNIVERSITY OF MEDICINE & DENTISTRY O	316,000
5 P01AG04875-13	RIGGS, BYRON L PHYSIOLOGY OF BONE METABOLISM IN AN AGING POPULATION	07-01-96/06-30-97	MAYO FOUNDATION	1,246,895
3 P01AG04953-12S1A1	ALBERT, MARILYN S AGE-RELATED CHANGES OF COGNITION IN HEALTH AND DISEASE	08-01-96/	MASSACHUSETTS GENERAL HOSPITAL	
5 P01AG04953-13	ALBERT, MARILYN S AGE-RELATED CHANGES OF COGNITION IN HEALTH AND DISEASE	08-01-96/07-31-97	MASSACHUSETTS GENERAL HOSPITAL	1,099,294
3 R01AG04980-32A1S1	THORBECKE, GEERTRUIDA J GERMINAL CENTERS, ANTIBODY PRODUCTION, AND LYMPHOMA	02-01-96/06-30-96	NEW YORK UNIVERSITY MEDICAL CENTER	83,750
5 R01AG04980-33	THORBECKE, GEERTRUIDA J GERMINAL CENTERS, ANTIBODY PRODUCTION, AND LYMPHOMA	07-25-96/06-30-97	NEW YORK UNIVERSITY MEDICAL CENTER	305,615
5 R01AG04984-10	RIKANS, LORA E AGING AND HEPATOTOXICITY	09-01-96/08-31-98	UNIVERSITY OF OKLAHOMA HLTH SCIENCES	137,071
2 P01AG05119-10A1	MARKESBERY, WILLIAM R BRAIN OXIDATION IN THE PATHOGENESIS OF AD	09-15-96/04-30-97	UNIVERSITY OF KENTUCKY	703,231
5 P50AG05128-13	ROSES, ALLEN D ALZHEIMERS DISEASE RESEARCH CENTER	05-01-96/04-30-97	DUKE UNIVERSITY	1,779,290
3 P50AG05128-13S1	ROSES, ALLEN D ALZHEIMERS DISEASE RESEARCH CENTER	05-01-96/04-30-97	DUKE UNIVERSITY	36,806
5 P50AG05131-13	THAL, LEON J ALZHEIMERS DISEASE	04-01-96/03-31-97	UNIVERSITY OF CALIFORNIA SAN DIEGO	2,282,466
5 P50AG05133-13	DE KOSKY, STEVEN T ALZHEIMERS DISEASE RESEARCH CENTER	05-01-96/04-30-97	UNIVERSITY OF PITTSBURGH AT PITTSBUR	1,298,525

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FY: 96				
3 P50AG05133-13S1	DE KOSKY, STEVEN T ALZHEIMERS DISEASE RESEARCH CENTER	05-01-96/04-30-97	UNIVERSITY OF PITTSBURGH AT PITTSBUR	64,326
5 P50AG05134-13	GROWDON, JOHN H ALZHEIMERS DISEASE	04-01-96/03-31-97	HARVARD UNIVERSITY	1,803,321
3 P50AG05134-13S1	GROWDON, JOHN H ALZHEIMERS DISEASE	04-01-96/03-31-97	HARVARD UNIVERSITY	89,950
5 P50AG05136-13	MARTIN, GEORGE M ALZHEIMERS DISEASE RESEARCH CENTER	05-01-96/04-30-97	UNIVERSITY OF WASHINGTON	2,090,947
5 P50AG05138-13	DAVIS, KENNETH L ALZHEIMERS DISEASE	04-01-96/03-31-97	MOUNT SINAI SCHOOL OF MEDICINE OF CU	1,867,121
5 P50AG05142-13	FINCH, CALEB E ADRC CONSORTIUM	04-01-96/03-31-97	UNIVERSITY OF SOUTHERN CALIFORNIA	2,855,804
5 P50AG05144-13	MARKESBERY, WILLIAM R ALZHEIMER'S DISEASE RESEARCH CENTER	05-01-96/04-30-97	UNIVERSITY OF KENTUCKY	1,216,234
5 P50AG05146-14	PRICE, DONALD L AGING, NEURODEGENERATIVE DISEASE, AND ANIMAL MODELS	04-01-96/03-31-97	JOHNS HOPKINS UNIVERSITY	2,063,705
3 P50AG05146-14S1	PRICE, DONALD L AGING, NEURODEGENERATIVE DISEASE, AND ANIMAL MODELS	07-01-96/03-31-97	JOHNS HOPKINS UNIVERSITY	66,987
5 R01AG05214-12	ELLIS, JOHN RESPONSES OF SUBPOPULATIONS OF MUSCARINIC RECEPTORS	04-08-96/03-31-97	PENNSYLVANIA STATE UNIV HERSHEY MED	230,948
2 R37AG05233-09	FREEDMAN, ROBERT R BEHAVIORAL TREATMENT OF MENOPAUSAL HOT FLASHES	05-28-96/04-30-97	WAYNE STATE UNIVERSITY	267,018
5 R37AG05284-11	DAVIS, MARADEE A LIVING ARRANGEMENTS HEALTH AND SURVIVAL--OLDER US ADULTS	02-25-96/01-31-97	UNIVERSITY OF CALIFORNIA SAN FRANCIS	220,057
5 R01AG05317-09	WOOLLACOTT, MARJORIE H AGE RELATED CHANGES IN POSTURE AND MOVEMENT	08-01-96/07-31-97	UNIVERSITY OF OREGON	160,094
5 R37AG05333-12	PEREIRA-SMITH, OLIVIA M MOLECULAR AND CYTOGENETIC STUDIES OF HUMAN CELL AGING	06-01-96/04-30-97	BAYLOR COLLEGE OF MEDICINE	229,879
3 U09AG05389-08S3	LACROIX, ANDREA Z STUDY SECTION CHAIRMANS FUND (NIH)	09-30-96/10-31-97	U.S. PHS PUBLIC ADVISORY GROUPS	

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 R01AG05394-11	ENSRUD, KRISTINE FRACTURES IN OLDER WOMEN	02-15-96/09-29-96	UNIVERSITY OF MINNESOTA TWIN CITIES	478,388
2 R01AG05394-12	ENSRUD, KRISTINE FRACTURES IN OLDER WOMEN	09-30-96/08-31-97	UNIVERSITY OF MINNESOTA TWIN CITIES	721,000
5 R01AG05407-11	CUMMINGS, STEVEN R FRACTURES IN OLDER WOMEN	05-01-96/06-30-97	UNIVERSITY OF CALIFORNIA SAN FRANCIS	1,208,689
5 F31AG05576-05	JASPER, JARROD E MINORITY PREDOCTORAL FELLOWSHIP	09-30-96/01-12-97	WAYNE STATE UNIVERSITY	16,112
5 R01AG05601-12	MONNIER, VINCENT M BROWNING OF HUMAN COLLAGEN IN DIABETES AND AGING	04-01-96/03-31-97	CASE WESTERN RESERVE UNIVERSITY	173,657
3 R37AG05604-10S2	NIXON, RALPH DYNAMICS OF THE NEURONAL CYTOSKELETON IN AGING BRAIN	05-15-96/05-31-96	MC LEAN HOSPITAL (BELMONT, MA)	105,060
4 R37AG05604-11	NIXON, RALPH A DYNAMICS OF THE NEURONAL CYTOSKELETON IN AGING BRAIN	07-21-96/12-31-96	MC LEAN HOSPITAL (BELMONT, MA)	233,960
5 F32AG05621-02	ASKARI, NUSHA COGNITIVE ANALYSES OF LANGUAGE DEFICITS IN AD 770	01-01-96/12-31-96	STANFORD UNIVERSITY	31,200
5 R37AG05628-12	GOOD, ROBERT A CELLULAR ENGINEERING TO TREAT/PREVENT DISEASES OF AGING	04-01-96/03-31-97	UNIVERSITY OF SOUTH FLORIDA	162,173
5 F32AG05641-03	MUSIOL, INES M VITAMIN D AND NERVE GROWTH FACTOR--EFFECTS OF AGING	12-05-95/11-30-96	STANFORD UNIVERSITY	32,500
5 F32AG05643-03	FLEMING, LYNNE M METABOLISM & EXPRESSION OF TAU & MAP2--ROLE OF STEROIDS	02-10-96/12-14-96	UNIVERSITY OF ALABAMA AT BIRMINGHAM	29,900
5 F32AG05658-02	PARENT, MARISE B AGING AND CENTRAL GABAERGIC MEMORY MODULATORY SYSTEMS	04-17-96/04-16-97	UNIVERSITY OF VIRGINIA CHARLOTTESVIL	28,600
5 F32AG05666-03	CLANCY, KEVIN P ISOLATION OF D14Q23 FAMILIAL ALZHEIMER DISEASE LOCUS	09-01-96/08-31-97	ELEANOR ROOSEVELT INST FOR CANCER RE	29,900
5 F32AG05667-03	HAHM, SEUNG W FUNCTION OF THE GROWTH FACTOR INDUCIBLE POLYPETIDE VGF	10-01-96/09-30-97	MOUNT SINAI SCHOOL OF MEDICINE OF CU	29,900
5 F32AG05670-03	BRADBURY, MARGARET J HORMONAL CONTRIBUTIONS TO SLEEP DETERIORATION WITH AGE	09-01-96/11-30-97	STANFORD UNIVERSITY	29,900

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 F32AG05674-02	ANGELL, MICHAEL G CALCINEURIN AND NF/AT ACTIVITY IN AGING T CELLS	02-01-96/01-31-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	28,600
5 F32AG05677-02	RYAN, AIMEE K SKN1 TRANSCRIPTION FACTOR IN NORMAL AND AGING SKIN	08-07-96/06-30-97	UNIVERSITY OF CALIFORNIA SAN DIEGO	28,600
1 F32AG05679-01A2	GALLAGHER, DYMPNA OBESITY TREATMENT IN ELDERLY--PROTEIN/METABOLIC EFFECTS	06-29-96/06-28-97	ST. LUKE'S ROOSEVELT HOSP CTR (NEW Y	31,200
5 P50AG05681-13	BERG, LEONARD ALZHEIMERS DISEASE RESEARCH CENTER	05-01-96/04-30-97	WASHINGTON UNIVERSITY	2,050,906
5 R01AG05683-12	POWELL, HENRY C CEREBROVASCULAR AMYLOID PROTEIN IN ALZHEIMER'S DISEASE	09-01-96/08-31-97	UNIVERSITY OF CALIFORNIA SAN DIEGO	299,815
5 F32AG05684-02	VISICK, JONATHAN E REPAIR OF DAMAGED PROTEIN AND SURVIVAL OF AGING E COLI	04-08-96/01-31-97	UNIVERSITY OF CALIFORNIA LOS ANGELES	31,200
5 F32AG05686-02	GOULD, THOMAS J CATECHOLAMINE RECEPTOR FUNCTION AND AGING	02-20-96/01-31-97	UNIVERSITY OF COLORADO HLTH SCIENCES	28,600
5 F32AG05689-02	SEEGER, MARY A ALZHEIMER AMYLOID PRECURSOR PROTEIN REGULATED CLEAVAGE	02-20-96/01-31-97	ROCKEFELLER UNIVERSITY	28,600
5 F32AG05691-03	SIMONIAN, PHILLIP L BCL-XL AND BCL-XS PROTEINS AND APOPTOSIS	10-01-96/09-30-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	28,600
5 F32AG05693-02	BOHENKAMP, KATHRYN E AGING CENTRAL DOPAMINE CIRCUITS AND GDNF	05-01-96/04-30-97	UNIVERSITY OF COLORADO HLTH SCIENCES	29,900
5 F32AG05694-02	TIAN, GUOLING CHAPERONIN MEDIATED FOLDING OF ALPHA AND BETA TUBULIN	09-01-96/08-31-97	NEW YORK UNIVERSITY MEDICAL CENTER	28,600
5 F31AG05697-02	GAMBOA-PINTO, ANTONIO J MINORITY PREDOCTORAL FELLOWSHIP PROGRAM	01-25-96/11-30-96	UNIVERSITY OF CALIFORNIA SAN DIEGO	15,588
5 F31AG05699-02	ABEYTA, MELANIA R MINORITY PREDOCTORAL FELLOWSHIP PROGRAM	12-16-95/12-15-96	UNIVERSITY OF ALABAMA AT BIRMINGHAM	15,744
5 F31AG05700-02	CONYERS, JACQUELINE R ALZHEIMER PATIENT'S CAPACITIES AND CAREGIVER ASSESSMENTS	03-01-96/01-02-97	UNIVERSITY OF CALIFORNIA IRVINE	17,018
5 F32AG05701-02	RYPMA, BART P SPATIAL COGNITION IN AGING AND ALZHEIMERS DISEASE	02-16-96/02-15-97	STANFORD UNIVERSITY	23,700

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 F32AG05705-02	JONES, PAMELA P SYMPATHETIC NERVE ACTIVITY AND ADIPOSITY IN HUMAN AGING	10-01-96/09-30-97	UNIVERSITY OF COLORADO AT BOULDER	28,600
5 F32AG05707-02	KU, PO-TSAN REGULATION AND ROLE OF REL/NF-KB PROTEINS IN APOPTOSIS	09-01-96/08-31-97	UNIVERSITY OF TEXAS AUSTIN	23,700
5 F32AG05708-02	WYATT, LANCE E CELL/CELL COMMUNICATION IN AGING OSTEOBLAST LIKE CELLS	09-03-96/09-02-97	UNIVERSITY OF CALIFORNIA LOS ANGELES	31,200
5 F32AG05710-02	KIRCHMAN, PAUL A LAG1 HOMOLOG AND YEAST REPLICATIVE LIFE SPAN	09-01-96/08-31-97	LOUISIANA STATE UNIV MED CTR NEW ORL	29,900
5 F32AG05711-02	MC ECHRON, MATTHEW D HIPPOCAMPAL CELLULAR MECHANISMS OF AGING AND LEARNING	08-15-96/08-14-97	NORTHWESTERN UNIVERSITY	23,700
1 F32AG05717-01	TANAKA, HIROFUMI OBESE POSTMENOPAUSAL WOMEN--EFFECTS OF EXERCISE	02-01-96/01-31-97	UNIVERSITY OF COLORADO AT BOULDER	22,608
5 R01AG05717-09	KRISHNARAJ, RAJABATHER AGE-ASSOCIATED ALTERATIONS IN HUMAN NK CELL SYSTEM	07-01-96/06-30-97	UNIVERSITY OF ILLINOIS AT CHICAGO	233,161
1 F32AG05718-01	MORGAN, AMY L ESTROGEN REPLACEMENT THERAPY AND BODY FLUID COMPARTMENTS	09-01-95/	PENNSYLVANIA STATE UNIVERSITY-UNIV P	
1 F32AG05720-01	WILSON, DAVID M INDUCTION OF TAU PATHOLOGY IN CULTURED CELLS	12-01-95/	BETH ISRAEL DEACONESS MEDICAL CENTER	
1 F32AG05721-01	CRESSMAN, CORINNE M DISRUPTION IN HOMEOSTASIS LEADING TO AD NEUROPAT	09-01-95/	UNIVERSITY OF MASSACHUSETTS LOWELL	
1 F32AG05722-01	EIPERS, PETER G AGE RELATED EFFECTS ON HUMAN BONE CELL GENE TRANSFER	09-05-95/	UNIVERSITY OF MICHIGAN AT ANN ARBOR	
1 F32AG05723-01	CHEN, QIN MOL MECHANISM OF H202 INDUCED REPLICATIVE SENESC	12-01-95/11-30-96	UNIVERSITY OF CALIFORNIA BERKELEY	31,200
1 F33AG05724-01	KOVACH, ILDIKO M CHARMM CALCULATIONS OF ACHE INTERACTIONS WITH EF	12-01-95/11-30-96	U.S. DIVISION OF COMPUTER RES & TECH	34,300
1 F32AG05726-01	GOLDSMITH, SARA K CLQ MRNA AND PROTEIN LOCALIZATION IN ALZHEIMER D	08-01-95/	UNIVERSITY OF SOUTHERN CALIFORNIA	
1 F32AG05727-01A1	LEVY, BECCA R SOCIOCULTURAL INFLUENCES ON AFRICAN AMERICAN LONGEVITY	07-01-96/06-30-97	HARVARD UNIVERSITY	23,700

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 F32AG05728-01	KECK, B JANE SEROTONERGIC NEUROPHARMACOLOGY OF THE AGING BRAIN	04-01-96/03-31-97	PENNSYLVANIA STATE UNIV HERSHEY MED	23,700
1 F32AG05730-01	FAVIS, REYNA L CONTROL OF GP-2 GENE EXPRESSION IN DICTYOSTELIUM	09-01-95/	VIRGINIA POLYTECHNIC INST AND ST UNI	
2 R01AG05731-07A2	BONDADA, SUBBARAO AGE ASSOCIATED CHANGES IN B LYMPHOCYTE FUNCTION	08-01-96/07-31-97	UNIVERSITY OF KENTUCKY	215,447
1 F32AG05732-01	BERTRAM, MICHAEL J IDENTIFICATION OF A HUMAN CELLULAR SENESCENE GENE(S)	06-27-96/06-26-97	BAYLOR COLLEGE OF MEDICINE	28,600
7 F32AG05733-02	LI, HONG L REGULATION OF APOPTOSIS BY ICH1S	05-01-96/04-30-97	HARVARD UNIVERSITY	23,700
5 F33AG05735-02	FIELDS, JEREMY Z CONVENTIONAL AND ALTERNATIVE HEALTH PROMOTION	10-01-96/09-30-97	MAHARISHI UNIVERSITY OF MANAGEMENT	35,300
1 F31AG05736-01	MILLER, CHRISTOPHER M MINORITY PREDOCTORAL FELLOWSHIP PROGRAM	09-01-95/	UNIVERSITY OF IOWA	
1 F32AG05737-01	MAXSON, PAMELA J LONGITUDINAL PATTERNS OF HEALTH AND AGING	07-01-96/	DUKE UNIVERSITY	
1 F32AG05738-01	HENRY, SHARON M MULTIDIRECTIONAL POSTURAL CONTROL	03-01-96/02-28-97	RS DOW NEUROLOGICAL SCIENCES INSTITU	28,600
7 F32AG05739-02	REENSTRA, WENDE R THREONINE PHOSPHORYLATION ON EGFR FUNCTION	04-16-96/04-15-97	BOSTON UNIVERSITY	28,600
7 R37AG05739-11	BALL, KARLENE K IMPROVEMENT OF VISUAL PROCESSING IN OLDER ADULTS	05-21-96/01-31-97	UNIVERSITY OF ALABAMA AT BIRMINGHAM	161,385
5 F32AG05740-02	FREUDENREICH, CATHERINE H PIF1 HELICASE AND TELOMERE REPLICATION CONTROL	09-01-96/08-31-97	PRINCETON UNIVERSITY	28,600
1 F32AG05741-01	MEDCALF, ANDREW S C MECHANISM OF REPLICATIVE SENESCENCE IN HUMAN CELLS	01-01-96/	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	
1 F32AG05742-01	WANG, SUYUE MECHANISM AND FUNCTION OF ICH3--ICE/CED3 FAMILY	03-01-96/02-28-97	HARVARD UNIVERSITY	28,600
1 F32AG05743-01	THOMPSON-SCHILL, SHARON L MODELS OF SEMANTIC IMPAIRMENT IN ALZHEIMERS DISEASE	07-01-97/06-30-98	UNIVERSITY OF PENNSYLVANIA	23,700

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 F32AG05744-01	MATSUO, ERIKO S ROLE OF KINASES AND PHOSPHATASES IN NEUROFIBRILLARY	04-01-96/	UNIVERSITY OF CALIFORNIA SAN DIEGO	
1 F32AG05745-01	CHESHIRE, JEANETTE L NF KB AND THE DEVELOPMENT OF ALZHEIMERS DISEASE	04-01-96/03-31-97	UNIVERSITY OF NORTH CAROLINA CHAPEL	28,600
1 F32AG05746-01	KIM, TAE-NAN SYNAPTIC APOE RECEPTORS IN ALZHEIMER AND CONTROL	03-01-96/02-28-97	MASSACHUSETTS GENERAL HOSPITAL	23,700
1 F32AG05747-01	HOLT, SHAWN E LINEAGE SPECIFIC ROLE FOR PRB IN AGING AND CANCER	02-20-96/02-19-97	UNIVERSITY OF TEXAS SW MED CTR/DALLA	23,700
1 F32AG05748-01	DLUGOS, CYNTHIA A AGE-RELATED EFFECTS OF BMPS AND LIF ON NEURONS	06-01-96/	STATE UNIVERSITY OF NEW YORK AT BUFF	
1 F32AG05749-01	MIER, CONSTANCE M EXERCISE, ESTROGEN, AGING--ARTERIAL STIFFNESS IN WOMEN	07-01-96/01-31-97	WASHINGTON UNIVERSITY	15,075
1 F32AG05750-01	PRULL, MATTHEW W FUNCTIONAL MR IMAGING OF MEMORY AND AGING	09-09-96/09-08-97	STANFORD UNIVERSITY	22,608
1 F31AG05752-01	FAIRCLOTH, CHRISTOPHER A PREDOCTORAL FELLOWSHIP PROGRAM (DISABILITY)	08-19-96/08-18-97	UNIVERSITY OF FLORIDA	13,008
1 F32AG05754-01	CHEN, JICHUN AGING IN HEMOPOIETIC STEM CELLS AND ITS GENETIC CONTROL	06-28-96/06-27-97	JACKSON LABORATORY	29,900
1 F32AG05755-01	KRAJNAK, KRISTINE M REPRODUCTIVE AGING AND CIRCADIAN RHYTHMICITY	08-01-96/07-31-97	UNIVERSITY OF KENTUCKY	28,600
1 F32AG05756-01	TURNER, MICHAEL J AGING, EXERCISE, AND BLOOD PRESSURE	08-15-96/08-14-97	WASHINGTON UNIVERSITY	28,600
1 F32AG05758-01	EIPERS, PETER G ACCESSORY CELLS AND BONE PRECURSOR CELL DEVELOPMENT	08-05-96/08-04-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	31,200
1 F32AG05759-01	AMEND, DIANE L MRI AND MRS FOR THE DIAGNOSIS OF ALZHEIMERS DISEASE	05-01-96/04-30-97	NORTHERN CALIFORNIA INSTITUTE RES &	23,700
1 F32AG05762-01	KASHON, MICHAEL L VASOPRESSIN, CIRCADIAN RHYTHMS, AND REPRODUCTIVE AGING	11-01-96/10-31-97	UNIVERSITY OF KENTUCKY	23,700
1 F32AG05766-01	STONE, DAVID J APOLIPOPROTEIN RESPONSE TO STEROIDS--SYNAPTIC REMODELING	12-01-96/11-30-97	UNIVERSITY OF SOUTHERN CALIFORNIA	22,608

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 F32AG05769-01	LI, YONGHONG MOLECULAR ANALYSIS OF AMYLOID BETA TOXICITY	12-01-96/11-30-97	SALK INSTITUTE FOR BIOLOGICAL STUDIE	23,700
1 F32AG05771-01	HASTEN, DEBORAH L RESISTANCE EXERCISE AND PROTEIN SYNTHESIS IN THE ELDERLY	11-01-96/10-31-97	WASHINGTON UNIVERSITY	23,700
1 F31AG05772-01	MCKNIGHT, SPONTANEOUS R GENETIC CHARACTERIZATION OF SPE 21	01-01-97/12-31-97	UNIVERSITY OF ARIZONA	13,008
1 F32AG05774-01	WOTTA, DIANE R DIFFERENTIAL SIGNALING OF M2 AND M4 MUSCARINIC RECEPTORS	11-01-96/10-31-97	UNIVERSITY OF MINNESOTA TWIN CITIES	22,608
1 F32AG05781-01	EPSTEIN, CHARLES B IDENTIFICATION OF COMPONENTS OF YEAST TELOMERASE	10-01-96/09-30-97	UNIVERSITY OF TEXAS SW MED CTR/DALLA	29,900
1 F32AG05782-01	HUANG, XUDONG ZINC AND ALZHEIMERS AMYLOID CHEMISTRY	11-01-96/10-31-97	MASSACHUSETTS GENERAL HOSPITAL	23,700
2 R44AG05783-02A1	CLEGHORN, M ELIZABETH RESEARCH AND DEVELOPMENT OF THE 'STARFLEX' CRUTCH TIP	03-01-96/	STARFLEX, INC.	
5 P01AG05793-12	JOHNSTON, C CONRAD, JR SOME DETERMINANTS OF BONE MASS IN THE ELDERLY	09-01-96/08-31-97	INDIANA UNIV-PURDUE UNIV AT INDIANAP	1,504,978
5 P01AG05842-11	WISE, DAVID A ECONOMICS OF AGING	02-25-96/12-31-96	NATIONAL BUREAU OF ECONOMIC RESEARCH	882,887
3 P01AG05842-11S1	WISE, DAVID A ECONOMICS OF AGING	03-15-96/12-31-96	NATIONAL BUREAU OF ECONOMIC RESEARCH	197,007
5 R37AG05890-12	BUDINGER, THOMAS F CEREBRAL CHEMICAL PATTERNS IN ALZHEIMERS DISEASE	09-15-96/06-30-97	UNIVERSITY OF CALIF-LAWRENC BERKELEY	267,454
5 R01AG05892-14	IQBAL, KHALID ALZHEIMER'S NEUROFIBRILLARY TANGLES--BIOCHEMICAL STUDIES	03-01-96/11-30-96	NEW YORK STATE OFFICE OF MENTAL HEAL	246,316
5 R01AG05893-16	HERSH, LOUIS B CHOLINE ACETYLTRANSFERASE	04-11-96/03-31-97	UNIVERSITY OF KENTUCKY	236,300
5 R37AG05894-24	FINE, RICHARD E NEURONAL CA++ SEQUESTERING COMPARTMENTS PROTECTING ROLE	08-15-96/04-30-97	BOSTON UNIVERSITY	314,513
5 R01AG05917-11	ROTUNDO, RICHARD L REGULATION OF ACETYLCHOLINESTERASE SYNTHESIS & ASSEMBLY	07-01-96/06-30-97	UNIVERSITY OF MIAMI	258,486

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FY: 96				
3 R01AG05917-11S1	ROTUNDO, RICHARD L REGULATION OF ACETYLCHOLINESTERASE SYNTHESIS & ASSEMBLY	07-24-96/06-30-97	UNIVERSITY OF MIAMI	46,711
5 R01AG06036-11	ARNSTEN, AMY F COGNITIVE LOSS WITH AGE--ROLE OF CORTICAL CATECHOLAMINES	07-01-96/06-30-97	YALE UNIVERSITY	219,250
3 R01AG06088-10S1	GAGE, FRED H EMBRYONIC NERVE CELL TRANSPLANTATION IN AGED RAT BRAIN	07-15-96/01-31-97	SALK INSTITUTE FOR BIOLOGICAL STUDIE	210,278
2 R01AG06093-24	NAKAJIMA, YASUKO ULTRASTRUCTURE AND FUNCTION OF NERVE AND MUSCLE	02-01-96/01-31-97	UNIVERSITY OF ILLINOIS AT CHICAGO	205,174
5 R37AG06108-13	HORNSBY, PETER J AGING OF ENDOCRINE CELLS IN CULTURE	04-01-96/03-31-98	BAYLOR COLLEGE OF MEDICINE	276,868
5 R37AG06116-12	DICE, JAMES F, JR PROTEIN DEGRADATION IN AGING HUMAN FIBROBLASTS	04-01-96/03-31-97	TUFTS UNIVERSITY BOSTON	276,991
5 R37AG06127-10	GILDEN, DONALD H NEUROBIOLOGY OF VARICELLA ZOSTER VIRUS	07-01-96/06-30-97	UNIVERSITY OF COLORADO HLTH SCIENCES	357,725
2 R01AG06157-10A1	FAULKNER, JOHN A EXERCISE, INJURY & REPAIR OF MUSCLE FIBERS IN AGED MICE	07-01-96/06-30-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	166,151
5 R37AG06168-11	JAZWINSKI, S MICHAL CELLULAR AGING IN A YEAST MODEL SYSTEM	09-01-96/08-31-97	LOUISIANA STATE UNIV MED CTR NEW ORL	240,475
2 R01AG06170-11	POTTER, LINCOLN T CHOLINERGIC MECHANISMS IN AGING AND AD	05-10-96/04-30-97	UNIVERSITY OF MIAMI	273,023
4 R37AG06173-11	SELKOE, DENNIS J AGING IN THE BRAIN--ROLE OF THE FIBROUS PROTEINS	03-05-96/01-31-97	BRIGHAM AND WOMEN'S HOSPITAL	357,955
2 R01AG06221-10A1	TATE, CHARLOTTE A MYOCARDIAL RESPONSE TO EXERCISE DURING SENESCENCE	04-01-96/	UNIVERSITY OF HOUSTON-UNIVERSITY PAR	
2 R01AG06226-08A1	MEYER, EDWIN M AGING AND BRAIN ACH RELEASE	04-01-96/	UNIVERSITY OF FLORIDA	
5 R01AG06246-11	KELLEY, KEITH W HORMONAL RESTORATION OF A FUNCTIONAL THYMUS DURING AGING	09-01-96/08-31-97	UNIVERSITY OF ILLINOIS URBANA-CHAMPA	296,208
5 R01AG06265-11	PARK, DENISE C CONTEXT EFFECTS ON THE AGING MEMORY	08-15-96/06-30-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	267,048

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FY: 96				
5 R01AG06348-09	GASKIN, FELICIA AUTOANTIBODIES IN ALZHEIMERS DISEASE AND NORMAL AGING	12-20-95/11-30-96	UNIVERSITY OF VIRGINIA CHARLOTTESVIL	216,132
5 R01AG06432-10	DEUTSCH, GEORG PARIETAL AND ROLANDIC RCBF ACTIVATION IN DEMENTIA	08-01-96/07-31-98	UNIVERSITY OF ALABAMA AT BIRMINGHAM	208,122
5 R01AG06434-10	GERHARDT, GREG A AGE-INDUCED CHANGES IN MONOAMINE PRESYNAPTIC FUNCTION	04-04-96/11-30-97	UNIVERSITY OF COLORADO HLTH SCIENCES	195,449
5 R01AG06442-11	PAIGE, GARY D SENSORY-MOTOR ADAPTIVE MECHANISMS IN EQUILIBRIUM CONTROL	06-01-96/05-31-98	UNIVERSITY OF ROCHESTER	246,304
5 R01AG06457-11	HORAK, FAY B PERIPHERAL AND CENTRAL POSTURAL DISORDERS IN THE ELDERLY	09-01-96/08-31-97	GOOD SAMARITAN HOSP & MED CTR(PRTLND	270,912
2 R01AG06528-11	DAVIDSON, JEFFREY M ELASTIN AND COLLAGEN IN THE AGING PROCESS	09-30-96/08-31-97	VANDERBILT UNIVERSITY	201,713
2 R01AG06537-10A1	SEALS, DOUGLAS R SYMPATHETIC NERVOUS SYSTEM ACTIVITY AND HUMAN AGING	04-08-96/03-31-97	UNIVERSITY OF COLORADO AT BOULDER	305,415
2 R01AG06559-09A1	JOHNSON, COLLEEN L TRAJECTORIES OF ADAPTATION OF THE OLDEST OLD	03-01-96/	UNIVERSITY OF CALIFORNIA SAN FRANCIS	
2 P01AG06569-09A1	WYSS, J MICHAEL ALZHEIMERS DISEASE--A MULTIDISCIPLINARY APPROACH	06-20-96/04-30-97	UNIVERSITY OF ALABAMA AT BIRMINGHAM	956,834
3 R01AG06601-09A2S1	KOSIK, KENNETH S PATHOBIOLOGY OF TAU PROTEIN	06-25-96/07-31-96	BRIGHAM AND WOMEN'S HOSPITAL	27,965
5 R01AG06601-10	KOSIK, KENNETH S PATHOBIOLOGY OF TAU PROTEIN	08-26-96/07-31-97	BRIGHAM AND WOMEN'S HOSPITAL	331,826
5 R37AG06605-10	CORKIN, SUZANNE H THEORETICAL ANALYSIS OF LEARNING IN AGE-RELATED DISEASE	04-11-96/01-31-97	MASSACHUSETTS INSTITUTE OF TECHNOLOG	282,400
2 R01AG06647-09	MORRISON, JOHN H CORTICO-CORTICAL LOSS IN ALZHEIMERS DISEASE IN THE AGED	05-10-96/03-31-97	MOUNT SINAI SCHOOL OF MEDICINE OF CU	256,992
5 R01AG06656-10	YOUNKIN, STEVEN G ACHE, CHAT AND CHOLINERGIC NEURONS IN AGING AND AD	09-01-96/08-31-97	MAYO FOUNDATION	213,351
5 R37AG06665-09	HORWITZ, BARBARA A AGING AND GENDER EFFECTS ON RESPONSES TO COLD	08-01-96/07-31-97	UNIVERSITY OF CALIFORNIA DAVIS	249,872

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3 R37AG06665-09S1	HORWITZ, BARBARA A AGING AND GENDER EFFECTS ON RESPONSES TO COLD	08-15-96/07-31-97	UNIVERSITY OF CALIFORNIA DAVIS	32,264
3 U01AG06781-09S1	LARSON, ERIC B CENTRAL AUDITORY DYSFUNCTION IN HEALTHY AGING AND DEMENT	07-01-96/	UNIVERSITY OF WASHINGTON	
5 U01AG06781-10	LARSON, ERIC B ALZHEIMER'S DISEASE PATIENT REGISTRY	07-01-96/06-30-97	UNIVERSITY OF WASHINGTON	711,016
3 U01AG06781-10S1	LARSON, ERIC B ALZHEIMERS DISEASE PATIENT REGISTRY	09-19-96/06-30-97	UNIVERSITY OF WASHINGTON	38,195
5 U01AG06786-11	KOKMEN, EMRE ALZHEIMERS DISEASE PATIENT REGISTRY	09-01-96/08-31-97	MAYO FOUNDATION	862,232
5 U01AG06790-10	HEYMAN, ALBERT CONSORTIUM--ESTABLISH A REGISTRY FOR ALZHEIMERS DISEASE	09-15-96/08-31-98	DUKE UNIVERSITY	683,256
2 P01AG06803-09A1	DAVIES, PETER FUNDAMENTAL STUDIES ON ALZHEIMERS DISEASE	07-15-96/04-30-97	YESHIVA UNIVERSITY	1,201,609
5 R37AG06826-11	SALTHOUSE, TIMOTHY A ADULT AGE DIFFERENCES IN REASONING AND SPATIAL ABILITIES	09-19-96/08-31-97	GEORGIA STATE UNIVERSITY	194,451
5 R01AG06849-09	OSTERGAARD, ARNE L PRIMING DEFICITS & BRAIN SYSTEMS IN DEMENTIA & AMNESIA	08-05-96/06-30-97	UNIVERSITY OF CALIFORNIA SAN DIEGO	95,423
5 R01AG06860-10	CATHCART, EDGAR S AMYLOID, AGING, AND DIET	09-01-96/08-31-98	BOSTON UNIVERSITY	218,572
3 P01AG06872-09S1	CHATTERJEE, BANDANA MOLECULAR GENETIC MECHANISMS OF AGING	07-15-96/04-30-98	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	226,780
5 R01AG06943-10	VLASSARA, HELEN GLYCATION IN DIABETES AND AGING	07-01-96/06-30-97	PICOWER INSTITUTE FOR MEDICAL RESEAR	303,276
5 R01AG06945-10	BLAIR, STEVEN N IMPACT OF PHYSICAL FITNESS AND EXERCISE ON HEALTH	04-01-96/03-31-97	COOPER INSTITUTE FOR AEROBICS RESEAR	449,139
5 R37AG07001-10	LAWTON, M POWELL AFFECT NORMAL AGING AND PERSONAL COMPETENCE	07-01-96/06-30-98	PHILADELPHIA GERIATRIC CTR-FRIEDMAN	137,740
5 R01AG07004-08	KENNEY, WILLIAM L, JR AGE AND CONTROL OF HUMAN SKIN BLOOD FLOW	08-01-96/07-31-97	PENNSYLVANIA STATE UNIVERSITY-UNIV P	255,799

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FY: 96				
5 R37AG07025-10	MANTON, KENNETH G FORECASTING LIFE AND ACTIVE LIFE EXPECTANCY	08-01-96/07-31-97	DUKE UNIVERSITY	237,497
2 R01AG07114-09A1	GILCHREST, BARBARA A AGING: CELL GROWTH AND DIFFERENTIATION	04-01-96/	BOSTON UNIVERSITY	
5 R01AG07137-10	MC ARDLE, J JACK GROWTH CURVE OF ADULT INTELLIGENCE FROM CONVERGENCE DATA	06-14-96/05-31-97	UNIVERSITY OF VIRGINIA CHARLOTTESVIL	158,478
3 R01AG07137-10S1	MC ARDLE, J JACK GROWTH CURVE OF ADULT INTELLIGENCE FROM CONVERGENCE DATA	09-01-96/05-31-97	UNIVERSITY OF VIRGINIA CHARLOTTESVIL	64,998
2 R01AG07146-07	BARON, JOHN A FRACTURE EPIDEMIOLOGY AND OUTCOMES IN THE ELDERL	12-01-95/	DARTMOUTH COLLEGE	
5 R37AG07181-10	BARRETT-CONNOR, ELIZABETH L RISK FACTORS FOR OSTEOPOROSIS IN ELDERLY	08-01-96/07-31-98	UNIVERSITY OF CALIFORNIA SAN DIEGO	249,271
5 R37AG07182-10	MC KINLAY, JOHN B PATHWAYS TO SUCCESSFUL CAREGIVING FOR FRAIL OLDER PERSON	07-01-96/06-30-98	NEW ENGLAND RESEARCH INSTITUTES, INC	230,659
3 R01AG07195-07S1	FORD, AMASA B SERVICES BY BLACK AND WHITE ELDERLY	09-17-96/12-31-97	CASE WESTERN RESERVE UNIVERSITY	36,480
5 R37AG07198-10	MANTON, KENNETH G FUNCTIONAL AND HEALTH CHANGES OF THE ELDERLY	02-15-96/08-31-97	DUKE UNIVERSITY	484,331
3 R37AG07198-10S1	MANTON, KENNETH G FUNCTIONAL AND HEALTH CHANGES OF THE ELDERLY	09-30-96/08-31-97	DUKE UNIVERSITY	603,440
3 R37AG07218-09S1	HERMAN, BRIAN A MECHANISMS OF CELL DEATH IN LIVER CELLS	04-01-96/06-30-96	UNIVERSITY OF NORTH CAROLINA CHAPEL	48,052
5 R37AG07218-10	HERMAN, BRIAN A MECHANISMS OF CELL DEATH IN LIVER CELLS	07-11-96/06-30-97	UNIVERSITY OF NORTH CAROLINA CHAPEL	370,538
5 P01AG07232-08	MAYEUX, RICHARD P EPIDEMIOLOGY OF DEMENTIA	03-15-96/01-31-97	COLUMBIA UNIVERSITY NEW YORK	1,696,521
5 R01AG07367-09	ROGERS, JOSEPH COMPLEMENT MEDIATED MECHANISMS IN ALZHEIMERS DISEASE	09-01-96/08-31-97	SUN HEALTH RESEARCH INSTITUTE	477,998
5 R01AG07369-06	CAI, KANG PROTEIN DEAMIDATION IN PROTEIN TURNOVER AND AGING	02-01-96/11-30-96	VIRGINIA COMMONWEALTH UNIVERSITY	130,144

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FY: 96				
5 R01AG07370-08	STERN, YAAKOV PREDICTORS OF SEVERITY IN ALZHEIMERS DISEASE	07-01-96/06-30-97	COLUMBIA UNIVERSITY NEW YORK	586,681
3 R01AG07424-08S1	ECKENSTEIN, FELIX P NEUROTROPHIC SUPPORT IN AGING AND ALZHEIMERS DISEASE	09-30-96/06-30-97	OREGON HEALTH SCIENCES UNIVERSITY	
5 R01AG07424-09	ECKENSTEIN, FELIX P NEUROTROPHIC SUPPORT IN AGING AND ALZHEIMER'S DISEASE	07-20-96/06-30-97	OREGON HEALTH SCIENCES UNIVERSITY	185,431
3 R01AG07424-09S1	ECKENSTEIN, FELIX P NEUROTROPHIC SUPPORT IN AGING AND ALZHEIMERS DISEASE	09-30-96/06-30-97	OREGON HEALTH SCIENCES UNIVERSITY	35,095
5 R37AG07444-09	WANG, EUGENIA GROWTH CONTROL IN AGING FIBROBLASTS	05-10-96/04-30-97	MC GILL UNIVERSITY	147,307
3 R37AG07444-09S1	WANG, EUGENIA GROWTH CONTROL IN AGING FIBROBLASTS	09-30-96/04-30-97	MC GILL UNIVERSITY	50,000
5 R01AG07449-08	TINETTI, MARY E INJURY AND FUNCTIONAL DECLINE IN ELDERLY FALLERS	07-01-96/12-31-97	YALE UNIVERSITY	258,524
2 R01AG07450-08	MACIAG, THOMAS ENDOTHELIAL CELL SENESCENCE GENES	08-05-96/04-30-97	AMERICAN NATIONAL RED CROSS	239,518
5 R01AG07467-08	OOKHTENS, MURAD EFFECT OF AGING ON INTERORGAN GLUTATHIONE HOMEOSTASIS	05-01-96/04-30-97	UNIVERSITY OF SOUTHERN CALIFORNIA	242,544
5 R01AG07469-09	MANTON, KENNETH G ACTIVE LIFE EXPECTANCY IN OLD AND OLDEST-OLD POPULATIONS	09-01-96/08-31-97	DUKE UNIVERSITY	166,928
2 R01AG07552-07A3	PERRY, GEORGE AMYLOID PRECURSOR IN ALZHEIMER DISEASE	07-01-96/	CASE WESTERN RESERVE UNIVERSITY	
5 R37AG07554-09	WILLOTT, JAMES F AGING AND CENTRAL AUDITORY SYSTEM MORPHOLOGY	05-28-96/04-30-97	NORTHERN ILLINOIS UNIVERSITY	98,328
3 R37AG07554-09S2	WILLOTT, JAMES F AGING AND CENTRAL AUDITORY SYSTEM MORPHOLOGY	08-01-96/04-30-97	NORTHERN ILLINOIS UNIVERSITY	8,738
5 R01AG07562-09	GANGULI, MARY EPIDEMIOLOGY OF DEMENTIA--A PROSPECTIVE COMMUNITY STUDY	08-15-96/03-31-98	UNIVERSITY OF PITTSBURGH AT PITTSBUR	716,783
2 R01AG07569-08	PARASURAMAN, RAJA ATTENTION IN AGING AND EARLY ALZHEIMERS DEMENTIA	06-14-96/03-31-97	CATHOLIC UNIVERSITY OF AMERICA	238,046

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
3 R01AG07569-08S1	PARASURAMAN, RAJA ATTENTION IN AGING AND EARLY ALZHEIMERS DEMENTIA	08-15-96/03-31-97	CATHOLIC UNIVERSITY OF AMERICA	3,017
5 R01AG07592-08	BARNARD, ROY J MECHANISM OF AGING INDUCED INSULIN RESISTANCE	03-05-96/02-28-97	UNIVERSITY OF CALIFORNIA LOS ANGELES	163,282
5 R01AG07607-06	BLANCHARD-FIELDS, FREDDA H ATTRIBUTIONAL PROCESSES IN ADULTHOOD AND AGING	07-01-96/06-30-97	GEORGIA INSTITUTE OF TECHNOLOGY	197,157
5 R01AG07631-07	BRATER, D CRAIG CLINICAL PHARMACOLOGY OF LOOP DIURETICS	09-01-96/08-31-97	INDIANA UNIV-PURDUE UNIV AT INDIANAP	315,413
5 R37AG07637-08	HERMALIN, ALBERT I RAPID DEMOGRAPHIC CHANGE AND WELFARE	04-01-96/03-31-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	389,660
5 R01AG07648-07	GOLD, PAUL E AGING AND MEMORY	08-23-96/06-30-97	UNIVERSITY OF VIRGINIA CHARLOTTESVIL	163,334
5 R01AG07654-08	FISK, ARTHUR D AUTOMATIC AND CONTROLLED PROCESSING AND AGING	09-01-96/08-31-97	GEORGIA INSTITUTE OF TECHNOLOGY	148,864
5 R01AG07657-08	SOHAL, RAJINDAR S CELLULAR AGING AND OXYGEN FREE RADICALS	05-24-96/03-31-97	SOUTHERN METHODIST UNIVERSITY	138,276
5 R01AG07695-09	LAL, HARBANS NEUROBEHAVIORAL AND IMMUNOLOGICAL MARKERS OF AGING	04-01-96/03-31-97	UNIVERSITY OF NORTH TEXAS HLTH SCI C	238,696
5 R01AG07700-09	FRIEDMAN, EITAN AGING, PROTEIN KINASE C, AND SEROTONIN RELEASE	04-01-96/03-31-97	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	238,417
5 R01AG07719-09	MURASKO, DONNA M IMMUNE PARAMETERS AS BIOMARKERS OF AGING	04-01-96/03-31-97	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	364,063
5 R01AG07724-09	WOLF, NORMAN S BIOMARKERS OF AGING--CELLULAR PROLIFERATION AND TURNOVER	04-01-96/03-31-97	UNIVERSITY OF WASHINGTON	203,794
3 R01AG07724-09S1	WOLF, NORMAN S BIOMARKERS OF AGING CELLULAR PROLIFERATION AND TURNOVER	09-30-96/03-31-97	UNIVERSITY OF WASHINGTON	25,193
5 R01AG07735-09	MARKOWSKA, ALICJA L BEHAVIORAL AND PHYSIOLOGICAL BIOMAKERS OF AGING	04-01-96/03-31-97	JOHNS HOPKINS UNIVERSITY	200,846
5 R01AG07747-09	BRONSON, RODERICK T AGE-RELATED LESIONS AS BIOMARKERS OF AGING	04-01-96/03-31-97	TUFTS UNIVERSITY BOSTON	222,854

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 R01AG07752-09	SONNTAG, WILLIAM E GROWTH HORMONE (GH) AND GH-DEPENDENT BIOMARKERS OF AGING	04-01-96/03-31-97	WAKE FOREST UNIVERSITY	181,062
5 R01AG07767-09	LANDFIELD, PHILIP W BIOMARKERS OF BRAIN AGING	04-01-96/03-31-97	UNIVERSITY OF KENTUCKY	241,831
2 R01AG07771-06A3	NORTH, WILLIAM G NEUROPEPTIDES IN CENTRAL DISORDERS: ALZHEIMER'S DISEASE	04-01-96/	DARTMOUTH COLLEGE	
2 R01AG07772-07A1	GUILLEMINAULT, CHRISTIAN SLEEP, CIRCADIAN RHYTHMS, ACTIVITY AND THE HEART	12-01-95/	STANFORD UNIVERSITY	
5 R01AG07793-08	JAGUST, WILLIAM J LONGITUDINAL SPECT AND PET STUDIES OF DEMENTIA	04-01-96/03-31-98	UNIVERSITY OF CALIF-LAWRENC BERKELEY	261,933
5 R37AG07823-08	KAHANA, EVA F ADAPTATION TO FRAILTY AMONG DISPERSED ELDERLY	07-01-96/06-30-97	CASE WESTERN RESERVE UNIVERSITY	190,271
5 R37AG07977-14	BENGTSON, VERN L LONGITUDINAL STUDY OF GENERATIONS AND MENTAL HEALTH	05-21-96/02-28-97	UNIVERSITY OF SOUTHERN CALIFORNIA	630,213
5 R01AG07988-07	BODEN, GUENTHER ETHANOL & FAT INDUCED INSULIN RESISTANCE IN THE ELDERLY	08-01-96/07-31-97	TEMPLE UNIVERSITY	231,765
2 R01AG07991-06A1	MC DOWD, JOAN M ATTENTION AND AGING--UNDERSTANDING NEGATIVE PRIMING	05-28-96/04-30-97	UNIVERSITY OF KANSAS MEDICAL CENTER	165,744
5 R01AG07992-07	WRIGHT, WOODRING E MECHANISMS OF CELLULAR IMMORTALIZATION	02-01-96/12-31-96	UNIVERSITY OF TEXAS SW MED CTR/DALLA	298,962
5 R01AG07998-07	DIVENYI, PIERRE L SPEECH PERCEPTION UNDER NONOPTIMAL CONDITIONS IN AGING	03-20-96/12-31-96	EAST BAY INSTITUTE FOR RESEARCH AND	148,304
5 R01AG08010-08	BURGIO, KATHRYN L BIOFEEDBACK AND TREATMENT OF URINARY INCONTINENCE	04-08-96/03-31-97	UNIVERSITY OF ALABAMA AT BIRMINGHAM	408,336
5 P50AG08012-09	WHITEHOUSE, PETER J UHC/CWRU ADRC COMPETITIVE RENEWAL	06-01-96/05-31-97	CASE WESTERN RESERVE UNIVERSITY	1,714,396
3 P50AG08012-09S1	WHITEHOUSE, PETER J UHC/CWRU ADRC COMPETITIVE RENEWAL	06-01-96/05-31-97	CASE WESTERN RESERVE UNIVERSITY	6,420
5 P30AG08017-07	KAYE, JEFFREY ALZHEIMER DISEASE CENTER	04-01-96/03-31-97	OREGON HEALTH SCIENCES UNIVERSITY	786,979

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 P30AG08031-07	PETERSEN, RONALD C ALZHEIMERS DISEASE CENTER	05-01-96/04-30-97	MAYO FOUNDATION	855,021
5 P30AG08051-07	FERRIS, STEVEN H ALZHEIMERS DISEASE CENTER CORE GRANT	05-01-96/04-30-97	NEW YORK UNIVERSITY MEDICAL CENTER	1,084,311
5 R37AG08055-08	SCHAIE, K WARNER LONGITUDINAL STUDIES OF ADULT COGNITIVE DEVELOPMENT	09-30-96/11-30-96	PENNSYLVANIA STATE UNIVERSITY-UNIV P	557,917
3 R37AG08055-08S1A1	SCHAIE, K WARNER LONGITUDNAL STUDIES OF ADULT COGNITIVE DEVELOPMENT	09-30-96/11-30-96	PENNSYLVANIA STATE UNIVERSITY-UNIV P	300,957
5 R01AG08076-06	IQBAL, KHALID NEURONAL CYTOSKELETAL ALTERATIONS IN ALZHEIMERS DISEASE	03-05-96/01-31-97	INSTITUTE FOR BASIC RES IN DEV DISAB	259,943
5 R01AG08084-08	POTTER, HUNTINGTON AMYLOID DEPOSITION IN AGING AND ALZHEIMER'S DISEASE	02-20-96/01-31-97	HARVARD UNIVERSITY	207,516
5 R01AG08109-11	O'CONNOR, CLARE M METHYLATION OF ATYPICAL PROTEIN ASPARTYL RESIDUES	07-01-96/06-30-97	BOSTON COLLEGE	246,558
2 R01AG08117-07A1	CORKIN, SUZANNE H EFFECTS OF AD ON BASIC AND HIGH ORDER SENSORY CAPACITIES	07-01-96/	MASSACHUSETTS INSTITUTE OF TECHNOLOG	
5 R01AG08122-08	WOLF, PHILIP A EPIDEMIOLOGY OF DEMENTIA IN THE FRAMINGHAM STUDY	07-01-96/06-30-97	BOSTON UNIVERSITY	266,804
5 R37AG08146-08	WISE, DAVID A PENSION PLAN PROVISIONS AND EARLY RETIREMENT EXTENSION	02-05-96/12-31-96	NATIONAL BUREAU OF ECONOMIC RESEARCH	181,691
5 R37AG08155-08	GAMBETTI, PIERLUIGI PRION DISEASES	04-01-96/03-31-97	CASE WESTERN RESERVE UNIVERSITY	344,945
3 R37AG08174-08S1	SIMPSON, EVAN R AROMATASE IN ADIPOSE--RELATIONSHIP TO AGING AND CANCER	04-12-96/06-30-96	UNIVERSITY OF TEXAS SW MED CTR/DALLA	23,913
5 R37AG08174-09	SIMPSON, EVAN R AROMATASE IN ADIPOSE--RELATIONSHIP TO AGING AND CANCER	07-09-96/06-30-97	UNIVERSITY OF TEXAS SW MED CTR/DALLA	359,208
5 R01AG08179-07	ZAUDERER, MAURICE VARIABLE GENE UTILIZATION IN SPECIFIC T CELL RESPONSES	07-25-96/06-30-97	UNIVERSITY OF ROCHESTER	126,883
5 R01AG08193-08	CERNY, JAN REPERTOIRE OF BACTERIAL ANTIBODY IN AGING	02-10-96/12-31-96	UNIVERSITY OF MARYLAND BALT PROF SCH	194,787

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
2 R01AG08200-09	ROBAKIS, NIKOLAOS K PRODUCTION OF CYTOPLASMIC DOMAIN CONTAINING SOLUBLE APP	09-30-96/08-31-97	MOUNT SINAI SCHOOL OF MEDICINE OF CU	244,798
5 R01AG08203-09	MURPHY, CLAIRE L OLFACTORY DYSFUNCTION IN ALZHEIMER'S DISEASE	08-01-96/07-31-97	SAN DIEGO STATE UNIVERSITY	195,565
3 R01AG08205-08S1	THAL, LEON J ALTERED PROTEIN KINASES IN ALZHEIMERS DISEASE	09-20-96/07-31-98	UNIVERSITY OF CALIFORNIA SAN DIEGO	186,700
2 R01AG08205-09	SAITOH, TSUNAO REGULATORY ABNORMALITIES IN ALZHEIMER'S DISEASE	08-01-96/	UNIVERSITY OF CALIFORNIA SAN DIEGO	
5 R01AG08206-09	ARMSTRONG, DAVID M TRANSMITTER NEUROANATOMY IN ALZHEIMERS DISEASE	07-22-96/12-31-97	ALLEGHENY-SINGER RESEARCH INSTITUTE	194,761
5 R01AG08211-06	MAGAZINER, JAY EPIDEMIOLOGY OF DEMENTIA IN AGED NURSING HOME ADMISSIONS	08-01-96/07-31-97	UNIVERSITY OF MARYLAND BALT PROF SCH	608,203
2 R01AG08226-06A2	ABERNETHY, DARRELL R CALCIUM, AGING, AND HYPERTENSION	07-17-96/06-30-97	GEORGETOWN UNIVERSITY	184,258
2 R01AG08235-06	DIXON, ROGER A INDIVIDUAL DIFFERENCES IN MEMORY CHANGE IN THE AGED	02-01-96/11-30-96	UNIVERSITY OF VICTORIA	150,424
5 P01AG08291-07	LILLARD, LEE A SOCIAL AND ECONOMIC FUNCTIONING IN OLDER POPULATIONS	09-23-96/08-31-97	RAND CORPORATION	589,547
2 R01AG08293-06A2	HUMES, LARRY E SPEECH RECOGNITION BY THE HEARING IMPAIRED ELDERLY	09-10-96/06-30-97	INDIANA UNIVERSITY BLOOMINGTON	214,392
5 R37AG08303-08	MARTIN, GEORGE M HOMOZYGOSITY MAPPING OF THE WERNER SYNDROME LOCUS	06-01-96/04-30-98	UNIVERSITY OF WASHINGTON	196,161
5 P01AG08321-06	ZIRKIN, BARRY R AGING AND MALE REPRODUCTIVE TRACT STRUCTURE AND FUNCTION	05-01-96/04-30-97	JOHNS HOPKINS UNIVERSITY	823,107
5 R01AG08324-06	STRUMPF, NEVILLE E MAINTAINING RESTRAINT REDUCTION IN NURSING HOMES	04-01-96/03-31-97	UNIVERSITY OF PENNSYLVANIA	513,805
5 R01AG08325-07	KAWAS, CLAUDIA H RISK FACTORS AND EARLY SIGNS IN ALZHEIMERS DISEASE/BLSA	05-01-96/04-30-97	JOHNS HOPKINS UNIVERSITY	617,383
2 R01AG08332-04A2	KOWAL, JEROME CELLULAR PATHWAYS OF LIPOFUSCIN ACCUMULATION	12-01-95/	CASE WESTERN RESERVE UNIVERSITY	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET START	DATES END	INSTITUTION	TOTAL
FY: 96					
4 R37AG08346-06	LILLARD, LEE A INTERGENRATIONAL TRANSFERS	02-01-96	01-31-97	RAND CORPORATION	135,973
5 R01AG08415-07	ANCOLI-ISRAEL, SONIA SLEEP CONSOLIDATION IN A NURSING HOME POPULATION	07-09-96	06-30-97	UNIVERSITY OF CALIFORNIA SAN DIEGO	199,813
2 R01AG08419-07	RASKIND, MURRAY A PSYCHOPATHOLOGY OF ALZHEIMER'S--PSYCHONEUROENDOCRINOLOGY	05-03-96	03-31-97	UNIVERSITY OF WASHINGTON	228,975
5 R01AG08436-05	EINSTEIN, GILLES O COMPONENTIAL ANALYSIS OF PROSPECTIVE MEMORY AND AGING	04-08-96	03-31-98	FURMAN UNIVERSITY	140,477
2 R01AG08438-05A2	MAJUMDAR, ADHIP N GASTRIC MUCOSAL INJURY AND AGING	09-30-96	08-31-97	WAYNE STATE UNIVERSITY	112,050
5 R01AG08441-07	SCHACTER, DANIEL L AGING MEMORY	03-23-96	12-31-96	HARVARD UNIVERSITY	196,065
5 R01AG08459-08	SOHAL, RAJINDAR S ANTIOXIDANT ENZYMES AND AGING IN TRANSGENIC DROSOPHILA	07-01-96	06-30-98	SOUTHERN METHODIST UNIVERSITY	220,839
2 R01AG08470-08	LANSBURY, PETER T, JR AMYLOID DEPOSITION IN ALZHEIMER'S DISEASE	09-20-96	06-30-97	BRIGHAM AND WOMEN'S HOSPITAL	220,049
2 R01AG08479-05A4	SONSALLA, PATRICIA K DOPAMINERGIC NEUROTOXINS AND AGING	08-01-96	07-31-97	UNIV OF MED/DENT NJ-R W JOHNSON MED	226,008
5 R01AG08487-07	HYMAN, BRADLEY T NEUROPATHOLOGICAL ALTERATIONS IN ALZHEIMERS DISEASE	12-20-95	11-30-96	MASSACHUSETTS GENERAL HOSPITAL	321,090
3 R01AG08487-07S1	HYMAN, BRADLEY T NEUROPATHOLOGICAL ALTERATIONS IN ALZHEIMERS DISEASE	06-11-96	11-30-96	MASSACHUSETTS GENERAL HOSPITAL	46,170
4 R37AG08511-06	DIOKNO, ANANIAS C MESA PROJECT--PREVENTION OF URINARY INCONTINENCE	07-01-96	06-30-97	WILLIAM BEAUMONT HOSPITAL	334,456
4 R37AG08514-09	GAGE, FRED H GRAFTING GENETICALLY MODIFIED CELLS TO THE BRAIN	07-01-96	06-30-97	SALK INSTITUTE FOR BIOLOGICAL STUDIE	339,493
5 R01AG08538-05	BLUM, MARIANN GROWTH FACTORS IN THE ADULT AND AGING BRAIN	05-21-96	04-30-97	MOUNT SINAI SCHOOL OF MEDICINE OF CU	202,300
2 R01AG08549-06A2	BREITNER, JOHN C GENETIC EPIDEMIOLOGY OF ALZHEIMER DISEASE IN TWINS	06-06-96	05-31-97	DUKE UNIVERSITY	981,543

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
4 R37AG08557-06	HAUG, MARIE R STRESSES STRAINS AND ELDERLY PHYSICAL HEALTH	04-15-96/02-28-97	CASE WESTERN RESERVE UNIVERSITY	152,961
3 R37AG08557-06S1	HAUG, MARIE R STRESSES STRAINS AND ELDERLY PHYSICAL HEALTH	04-15-96/02-28-97	CASE WESTERN RESERVE UNIVERSITY	23,873
5 R01AG08573-14	BANDMAN, EVERETT IMMUNOBIOCHEMICAL STUDY OF MUSCLE MYOSIN ISOFORMS	07-25-96/06-30-97	UNIVERSITY OF CALIFORNIA DAVIS	219,953
2 R01AG08575-04A2	ARIEFF, ALLEN I HYPONATREMIC ENCEPHALOPATHY--ROLE OF AGE	02-01-96/12-31-96	UNIVERSITY OF CALIFORNIA SAN FRANCIS	209,828
5 P50AG08664-07	APPEL, STANLEY H ALZHEIMERS DISEASE RESEARCH CENTER	06-01-96/05-31-97	BAYLOR COLLEGE OF MEDICINE	847,944
5 P30AG08665-07	COLEMAN, PAUL D ALZHEIMERS DISEASE CENTER	05-01-96/04-30-97	UNIVERSITY OF ROCHESTER	834,832
5 P50AG08671-08	GILMAN, SID MICHIGAN ALZHEIMERS DISEASE RESEARCH CENTER	06-01-96/05-31-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	1,777,133
5 P50AG08702-08	SMELANSKI, MICHAEL L ALZHEIMERS DISEASE RESEARCH CENTER	06-01-96/05-31-97	COLUMBIA UNIVERSITY NEW YORK	1,311,148
3 P50AG08702-08S2	SMELANSKI, MICHAEL L ALZHEIMERS DISEASE RESEARCH CENTER	09-01-96/05-31-97	COLUMBIA UNIVERSITY NEW YORK	65,632
4 R37AG08707-06	WEKSLER, MARC E AUTOIMMUNE REACTIONS IN AGING	02-10-96/11-30-96	CORNELL UNIVERSITY MEDICAL CENTER	177,110
5 R01AG08710-07	ROBERTS, EUGENE L, JR AGE RELATED CHANGES IN BRAIN METABOLIC NEUROPHYSIOLOGY	09-01-96/07-31-97	UNIVERSITY OF MIAMI	99,673
5 R01AG08721-07	FRANGIONE, BLAS AMYLOID ANGIOPATHY EARLY PLAQUES AND AGING	09-01-96/08-31-97	NEW YORK UNIVERSITY MEDICAL CENTER	242,637
5 R01AG08724-07	GATZ, MARGARET J DEMENTIA IN SWEDISH TWINS	08-01-96/07-31-97	UNIVERSITY OF SOUTHERN CALIFORNIA	318,982
5 P01AG08761-07	VAUPEL, JAMES W OLDEST-OLD MORTALITY--DEMOGRAPHIC MODELS AND ANALYSIS	07-01-96/12-31-96	DUKE UNIVERSITY	872,223
5 R01AG08768-07	SELTZER, MARSHA M AGING MOTHERS OF RETARDED ADULTS--IMPACTS OF CAREGIVING	09-01-96/08-31-97	UNIVERSITY OF WISCONSIN MADISON	345,404

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
3 R01AG08768-07S1	SELTZER, MARSHA M AGING MOTHERS OF RETARDED ADULTS--IMPACTS OF CAREGIVING	09-30-96/08-31-97	UNIVERSITY OF WISCONSIN MADISON	45,000
2 P01AG08777-06	MANN, KENNETH G THE REGULATION OF BONE FORMATION	06-01-96/	UNIVERSITY OF VERMONT & ST AGRIC COL	
2 R01AG08796-06A1	DISTERHOFT, JOHN F CALCIUM REGULATION OF LEARNING IN AGING HIPPOCAMPUS	08-01-96/06-30-97	NORTHWESTERN UNIVERSITY	208,550
5 P60AG08808-08	HALTER, JEFFREY B CLAUDE D PEPPER OLDER AMERICANS INDEPENDENCE CENTER	09-30-96/08-31-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	1,158,050
3 P60AG08808-08S4	HALTER, JEFFREY B CLAUDE D PEPPER OLDER AMERICANS INDEPENDENCE CENTER	09-30-96/08-31-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	69,862
5 P60AG08812-07	WEI, JEANNE Y HARVARD OLDER AMERICANS INDEPENDENCE CENTER	04-01-96/02-28-97	HARVARD UNIVERSITY	842,167
5 R01AG08816-06	CARSTENSEN, LAURA L SOCIAL INTERACTION IN OLD AGE	02-05-96/12-31-96	STANFORD UNIVERSITY	194,494
5 R01AG08825-06	FRIEDMAN, HOWARD S PREDICTORS OF HEALTH AND LONGEVITY	07-01-96/06-30-97	UNIVERSITY OF CALIFORNIA RIVERSIDE	128,524
5 R01AG08834-03	ARKING, ROBERT MUTATIONAL ANALYSIS OF LONGEVITY ASSURANCE GENES	06-01-96/04-30-98	WAYNE STATE UNIVERSITY	196,635
2 R01AG08835-07	BURKE, DEBORAH M MEMORY AND LANGUAGE IN OLD AGE	02-10-96/11-30-96	POMONA COLLEGE	194,336
5 R37AG08861-07	MC CLEARN, GERALD E ORIGINS OF VARIANCE IN THE OLD-OLD--OCTOGENARIAN TWINS	09-01-96/08-31-97	PENNSYLVANIA STATE UNIVERSITY-UNIV P	289,474
2 R01AG08870-04A3	COSLETT, HARRY B NEUROPSYCHOLOGY OF DISORDERED VISUAL COGNITION	04-01-96/	TEMPLE UNIVERSITY	
2 R01AG08932-14A2	CAPLAN, ARNOLD I PROTEOGLYCAN SYNTHESIS DURING DEVELOPMENT AND AGING	12-15-95/11-30-96	CASE WESTERN RESERVE UNIVERSITY	223,588
4 R37AG08937-06	HEYMAN, ALBERT RACE DIFFERENCES IN PREVALENCE AND INCIDENCE OF DEMENTIA	02-01-96/01-31-97	DUKE UNIVERSITY	355,013
5 P01AG08938-12	EPSTEIN, CHARLES J BIOLOGY OF DOWN SYNDROME	08-01-96/07-31-97	UNIVERSITY OF CALIFORNIA SAN FRANCIS	1,009,885

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 R01AG08947-03	ROGERS, JOAN C ASSESSING ELDERS ADL/IADL--EQUALITY OF METHODS AND COSTS	07-01-96/06-30-98	UNIVERSITY OF PITTSBURGH AT PITTSBUR	257,859
2 R01AG08959-06	BELL, THEODORE S RECEPTIVE COMMUNICATION PROBLEMS OF THE ELDERLY	04-01-96/	UNIVERSITY OF CALIFORNIA LOS ANGELES	
5 R35AG08967-07	PRUSINER, STANLEY B LEADERSHIP AND EXCELLENCE IN ALZHEIMERS DISEASE	05-21-96/04-30-97	UNIVERSITY OF CALIFORNIA SAN FRANCIS	804,225
5 R35AG08974-06	PETTEGREW, JAY W MOLECULAR STUDIES IN ALZHEIMERS DISEASE	05-01-96/03-31-97	UNIVERSITY OF PITTSBURGH AT PITTSBUR	651,914
3 R01AG08979-04S1	RYFF, CAROL D COMMUNITY RELOCATION AND HEALTH-PSYCHOSOCIAL LIN	12-01-95/	UNIVERSITY OF WISCONSIN MADISON	
2 R01AG08979-05	RYFF, CAROL D RESILIENCE AND THE CHALLENGES OF AGING	07-01-96/	UNIVERSITY OF WISCONSIN MADISON	
5 R35AG08992-06	GAMBETTI, PIERLUIGI CELLULAR AND MOLECULAR PATHOLOGY OF ALZHEIMER DISEASE	07-11-96/06-30-97	CASE WESTERN RESERVE UNIVERSITY	739,451
7 R01AG09000-06	ENOKA, ROGER M AGING AND TRAINING EFFECTS ON MOTOR UNITS	09-01-96/06-30-97	UNIVERSITY OF COLORADO AT BOULDER	164,233
5 R01AG09006-06	SIPE, JEAN D CELLULAR METABOLISM OF AMYLOID PROTEINS IN AGING	02-01-96/12-31-96	BOSTON UNIVERSITY	213,139
5 R35AG09014-06	BLASS, JOHN P CELL BIOLOGICAL STUDIES IN ALZHEIMERS DISEASE	05-21-96/04-30-97	WINIFRED MASTERSON BURKE MED RES INS	491,046
5 R35AG09016-07	COLEMAN, PAUL D LEADERSHIP AND EXCELLENCE IN ALZHEIMERS DISEASE	06-01-96/04-30-97	UNIVERSITY OF ROCHESTER	629,309
2 R01AG09029-06	FARRER, LINDSAY A GENETIC EPIDEMIOLOGICAL STUDIES OF ALZHEIMERS DISEASE	05-01-96/04-30-97	BOSTON UNIVERSITY	747,965
2 R01AG09127-06A1	REISBERG, BARRY BEHAVIORAL AND PSYCHOTIC SYMPTOMS IN ALZHEIMER'S DISEASE	05-01-96/	NEW YORK UNIVERSITY MEDICAL CENTER	
5 R01AG09140-05	MEYDANI, SIMIN N VITAMIN E AND THE AGING IMMUNE RESPONSE	06-01-96/05-31-97	TUFTS UNIVERSITY BOSTON	73,613
2 R01AG09179-04A1	JAGACINSKI, RICHARD J AUDITORY AIDING FOR PERCEPTUAL-MOTOR DECLINE IN AGING	04-01-96/	OHIO STATE UNIVERSITY	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 R01AG09202-05	GANGULI, MARY INDO-US CROSS NATIONAL DEMENTIA EPIDEMIOLOGY STUDY	02-15-96/01-31-97	UNIVERSITY OF PITTSBURGH AT PITTSBUR	602,644
5 P01AG09215-07	TROJANOWSKI, JOHN Q MOLECULAR SUBSTRATES OF AGING AND NEURON DEATH	05-03-96/04-30-97	UNIVERSITY OF PENNSYLVANIA	1,115,390
2 R01AG09216-07	CRAIN, BARBARA J PATHOLOGY OF ALZHEIMER'S DISEASE	07-01-96/	JOHNS HOPKINS UNIVERSITY	
5 R01AG09219-06	BARNES, CAROL A TRANSCRIPTION FACTOR GENES, NEURONAL PLASTICITY & AGING	06-07-96/05-31-97	UNIVERSITY OF ARIZONA	270,178
2 R01AG09221-04A2	KRAUSE, NEAL M WELL BEING AMONG AGED--PERSONAL CONTROL & SELF ESTEEM	04-29-96/03-31-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	244,430
5 R01AG09235-07	NEBERT, DANIEL W OXIDATIVE STRESS, CELL DEATH AND THE (AH) GENE BATTERY	08-01-96/07-31-97	UNIVERSITY OF CINCINNATI	292,371
5 R01AG09253-06	JOHNSON, MARCIA K AGING EFFECTS ON MEMORY FOR SOURCE OF INFORMATION	09-19-96/08-31-97	PRINCETON UNIVERSITY	302,488
2 R01AG09258-04	KAY, MARGUERITE M IMMUNOCHEMISTRY OF AN AGING ANTIGEN	09-23-96/05-31-97	UNIVERSITY OF ARIZONA	176,225
5 R01AG09278-06	WANG, EUGENIA FIBROBLAST AGING AND PROGRAMMED CELL DEATH	09-01-96/08-31-97	MC GILL UNIVERSITY	182,831
2 R01AG09279-04A2	MILLIS, ALBERT J GENE EXPRESSION IN SENESCENT CELLS	11-01-95/	STATE UNIVERSITY OF NEW YORK AT ALBA	
2 R01AG09300-06	FELSON, DAVID T ESTROGEN, WEIGHTLOSS AND OSTEOARTHRITIS IN THE W.H.I.	04-01-96/	BOSTON UNIVERSITY	
5 R01AG09301-05	SATLIN, ANDREW SENILE CHANGES IN CIRCADIAN RHYTHMS AND BEHAVIOR	02-20-96/12-31-96	MC LEAN HOSPITAL (BELMONT, MA)	243,358
2 R01AG09337-04A3	KLEIN, WILLIAM L MOLECULAR CELL BIOLOGY OF AMYLOID PRECURSOR PROTEIN	07-01-96/	NORTHWESTERN UNIVERSITY	
2 R01AG09341-09	SMAN, GARY E AMBULATORY BLOOD PRESSURE AND COGNITION IN THE ELDERLY	02-25-96/11-30-96	SRI INTERNATIONAL	477,859
5 R01AG09345-03	CAVANAGH, PETER R POSTURE IN THE NEUROPATHIC DIABETIC ELDERLY	09-25-96/08-31-98	PENNSYLVANIA STATE UNIVERSITY-UNIV P	272,062

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
2 R01AG09383-06	GREIDER, CAROL W STRUCTURE AND FUNCTION OF TELOMERES IN MAMMALIAN AGING	08-23-96/07-31-97	COLD SPRING HARBOR LABORATORY	280,651
5 R01AG09388-04	SELTZER, MARSHA M CAREGIVING IMPACT--DURATION AND RELATIONSHIP EFFECTS	04-01-96/02-28-97	UNIVERSITY OF WISCONSIN MADISON	199,301
5 R01AG09389-05	TAGER, IRA B EPIDEMIOLOGY OF AGING AND PHYSICAL PERFORMANCE	07-01-96/06-30-98	UNIVERSITY OF CALIFORNIA BERKELEY	605,980
5 R01AG09400-05	SCHUPF, NICOLE DOWN SYNDROME & ALZHEIMER DISEASE--FAMILIAL AGGREGATION	06-04-96/05-31-98	INSTITUTE FOR BASIC RES IN DEV DISAB	339,333
2 R01AG09411-06	POWELL, HENRY C THE PAIRED HELICAL FILAMENT AND PLAQUE AMYLOID PROTEINS	05-01-96/	UNIVERSITY OF CALIFORNIA SAN DIEGO	-
5 R29AG09425-05	COLE, GREGORY J NEUROENDOCRINE MECHANISMS OF BRAIN AGING	06-01-96/05-31-97	OHIO STATE UNIVERSITY	98,565
5 R01AG09453-06	VLASSARA, HELEN AGING AND VASCULAR DISEASE--ROLE OF GLYCATION	02-15-96/12-31-96	PICOWER INSTITUTE FOR MEDICAL RESEAR	233,863
2 P01AG09464-06A1	GREENGARD, PAUL SIGNAL TRANSDUCTION AND ALZHEIMERS DISEASE	07-01-96/06-30-97	ROCKEFELLER UNIVERSITY	890,466
2 P01AG09466-06	DE TOLEDO-MORRELL, LEYLA ANATOMIC, PHYSIOLOGIC, AND COGNITIVE PATHOLOGY OF AD	07-17-96/03-31-97	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	1,068,296
2 R01AG09468-04A1	SLOAN, FRANK A PUBLIC SUBSIDIES EFFECTS ON USE OF LONGTERM CARE	09-30-96/08-31-97	DUKE UNIVERSITY	179,650
5 R01AG09488-05	MEANEY, MICHAEL J GLUCOCORTICOIDS, STRESS, AND HIPPOCAMPAL AGING	09-19-96/08-31-97	MC GILL UNIVERSITY	118,580
5 R37AG09521-10	BLAU, HELEN M ACTIVATORS OF HUMAN MUSCLE GENES	05-22-96/03-31-97	STANFORD UNIVERSITY	350,943
5 P01AG09524-05	FRISINA, D ROBERT AGING AUDITORY SYSTEM--PRESBYCUSIS AND ITS NEURAL BASES	04-18-96/03-31-98	ROCHESTER INSTITUTE OF TECHNOLOGY	879,204
5 P01AG09525-05	BLUSZTAJN, JAN K AGING OF BRAIN--EFFECTS OF PERINATAL CHOLINE EXPOSURE	03-15-96/11-30-96	BOSTON UNIVERSITY	994,900
3 P01AG09525-05S1A1	BLUSZTAJN, JAN K PERINATAL CHOLINE EXPOSURE AND HIPPOCAMPAL FUNCTION	07-22-96/11-30-96	BOSTON UNIVERSITY	58,935

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 R01AG09531-05	NAIR, SREEKUMARAN K MECHANISM OF MUSCLE WASTING IN AGING MAN	04-01-96/03-31-97	MAYO FOUNDATION	397,809
2 R01AG09550-07	SCHWARTZ, JANICE B REGULATION OF CARDIAC RHYTHM & CONDUCTION WITH AGING	02-01-96/	NORTHWESTERN UNIVERSITY	
2 R01AG09556-03A1	PSATY, BRUCE M TRENDS IN THE USE OF CVD MEDICATIONS IN OLDER ADULTS	09-30-96/08-31-97	UNIVERSITY OF WASHINGTON	156,667
5 R01AG09557-07	STRONG, RANDY MODULATION OF TH GENE EXPRESSION BY RESERPINE AND AGE	07-01-96/06-30-97	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	114,929
3 P20AG09649-05S1	COWARD, RAYMOND T EXPLORATORY CENTER ON THE HEALTH OF RURAL ELDERS	06-01-95/05-31-98	UNIVERSITY OF FLORIDA	125,000
5 R01AG09661-05	CAPLAN, DAVID N PROCESSING RESOURCES AND SENTENCE COMPREHENSION	05-21-96/04-30-97	MASSACHUSETTS GENERAL HOSPITAL	230,488
5 R01AG09663-06	REVES, JOSEPH G AGING AND COGNITION AFTER CARDIAC SURGERY	02-15-96/01-31-97	DUKE UNIVERSITY	359,883
2 R01AG09665-11	POTTER, HUNTINGTON EXPRESSION STUDIES ON ALZHIEMERS DISEASE RELATED GENES	09-30-96/06-30-97	HARVARD UNIVERSITY	189,864
5 U01AG09675-06	WOLFSON, LESLIE I TRAINING PHYSICAL PERFORMANCE TO IMPROVE FUNCTION	09-15-96/08-31-97	UNIVERSITY OF CONNECTICUT HEALTH CEN	505,184
2 R01AG09686-06A1	BAKER, HARRIET D PLASTICITY IN THE AGING OLFACTORY SYSTEM	09-01-96/06-30-97	WINIFRED MASTERSON BURKE MED RES INS	275,910
3 R01AG09690-05S1	FLOYD, ROBERT A AGE INFLUENCE ON ISCHEMIA REPERFUSION IN BRAIN	05-25-96/11-30-96	OKLAHOMA MEDICAL RESEARCH FOUNDATION	40,987
7 R37AG09692-07	WOLINSKY, FREDRIC D PANEL ANALYSIS OF THE AGEDS USE OF HEALTH SERVICES	06-01-96/05-31-97	ST. LOUIS UNIVERSITY	149,470
2 R01AG09693-06	BALOH, ROBERT W DIZZINESS IN OLDER PEOPLE	06-11-96/03-31-97	UNIVERSITY OF CALIFORNIA LOS ANGELES	378,627
5 R01AG09735-15	BRADSHAW, RALPH A STRUCTURE AND FUNCTION OF NERVE GROWTH FACTOR	09-15-96/08-31-97	UNIVERSITY OF CALIFORNIA IRVINE	198,428
5 U01AG09740-07	WILLIS, ROBERT HEALTH AND RETIREMENT STUDY	05-21-96/12-31-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	3,451,014

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
3 U01AG09740-07S1	WILLIS, ROBERT HEALTH AND RETIREMENT STUDY	09-20-96/12-31-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	175,000
3 U01AG09740-07S2	WILLIS, ROBERT HEALTH AND RETIREMENT STUDY	09-30-96/12-31-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	100,000
2 P01AG09743-06	BURKHAUSER, RICHARD V WELL-BEING OF THE ELDERLY IN A COMPARATIVE CONTEXT	09-30-96/08-31-97	SYRACUSE UNIVERSITY AT SYRACUSE	587,998
5 R01AG09755-06	MACKAY, DON G ORIGIN OF COGNITIVE PROCESSES IN OLD AGE	05-03-96/04-30-97	UNIVERSITY OF CALIFORNIA LOS ANGELES	161,815
2 R01AG09761-06A1	GAFNI, ARI LASER SPECTROSCOPY OF TRIPLET STATES IN PROTEINS	12-20-95/11-30-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	232,768
3 R01AG09761-06A1S1	GAFNI, ARI LASER SPECTROSCOPY OF TRIPLET STATES IN PROTEINS	08-01-96/11-30-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	46,299
2 R01AG09769-06	LARSON, ERIC B EPIDEMIOLOGY OF DEMENTIA IN OLDER JAPANESE AMERICANS	06-01-96/04-30-97	UNIVERSITY OF WASHINGTON	958,229
3 R01AG09773-05S1	ESPELAND, MARK A DIETARY INTERVENTION IN THE ELDERLY TRIAL--DIET	06-07-96/02-27-97	WAKE FOREST UNIVERSITY	190,563
5 R01AG09775-05	HAUSER, ROBERT M WISCONSIN LONGITUDINAL STUDY	03-20-96/02-28-97	UNIVERSITY OF WISCONSIN MADISON	199,351
5 R29AG09777-05	WALLSTEN, SHARON M ELDERLY CAREGIVERS, CARE RECEIVERS AND THEIR INTERACTION	09-05-96/07-31-98	DUKE UNIVERSITY	103,423
2 R13AG09787-06	SCHAIE, K WARNER CONFERENCE--STRUCTURE AND AGING	08-01-96/07-31-97	PENNSYLVANIA STATE UNIVERSITY-UNIV P	33,812
2 P01AG09793-06	MC NEILL, THOMAS H DOPAMINERGIC AND BASAL GANGLIA PLASTICITY IN AGING	07-01-96/05-31-97	UNIVERSITY OF SOUTHERN CALIFORNIA	934,961
1 R01AG09798-01A3	LUND, DALE A TIME-USE DURING DAYCARE RESPITE AND CAREGIVER OUTCOMES	07-01-96/	UNIVERSITY OF UTAH	
5 R37AG09801-07	MILLER, RICHARD A ACTIVATION DEFECTS IN AGING T CELLS	08-01-96/07-31-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	262,658
2 R01AG09822-05A1	HOBBS, MONTE V CYTOKINE GENE EXPRESSION BY CD4+ CELLS IN AGING	09-25-96/07-31-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	238,110

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FY: 96				
5 R01AG09825-05	LACROIX, ANDREA Z THIAZIDE DIURETICS AND RATE OF BONE LOSS IN THE ELDERLY	07-01-96/06-30-98	CENTER FOR HEALTH STUDIES	323,515
5 R29AG09837-05	KINOSIAN, BRUCE ASSESSMENT OF MALNUTRITION IN THE HOSPITALIZED ELDERLY	09-23-96/08-31-97	UNIVERSITY OF PENNSYLVANIA	74,628
5 R01AG09857-05	GERBER, JOHN G AGE RELATED CHANGES IN ADRENERGIC CLINICAL PHARMACOLOGY	08-01-96/07-31-98	UNIVERSITY OF COLORADO HLTH SCIENCES	231,025
2 R01AG09862-06	SNOWDON, DAVID A INDEPENDENT AND DEPENDENT LIFE IN THE ELDERLY	09-30-96/04-30-97	UNIVERSITY OF KENTUCKY	895,671
5 R01AG09868-06	PARK, DENISE C AGING, ARTHRITIS AND MEDICATION ADHERENCE	04-22-96/01-31-98	UNIVERSITY OF MICHIGAN AT ANN ARBOR	376,621
3 R01AG09868-06S1	PARK, DENISE C AGING, ARTHRITIS AND MEDICATION ADHERENCE	06-20-96/01-31-98	UNIVERSITY OF MICHIGAN AT ANN ARBOR	23,887
5 R01AG09872-05	NADEL, ETHAN R BODY FLUID REGULATION IN AGING ADULTS WITH EXERCISE	06-01-96/05-31-97	JOHN B. PIERCE LABORATORY, INC.	296,321
5 R01AG09873-05	LONGO, FRANK M NOVEL LAR ISOFORMS--A NEW CLASS OF NEUTROPHIC AGENTS	09-19-96/03-31-97	NORTHERN CALIFORNIA INSTITUTE RES &	167,567
2 R01AG09900-06	EBERWINE, JAMES H GENE EXPRESSION IN SINGLE AGING NEURONS AND GLIA	07-01-96/06-30-97	UNIVERSITY OF PENNSYLVANIA	279,214
5 R01AG09905-05	ABRAHAM, CARMELA R AMYLOIDOGENESIS ROLE OF REACTIVE ASTROCYTES	01-25-96/11-30-96	BOSTON UNIVERSITY	231,329
5 R37AG09909-07	CAMPISI, JUDITH CELLULAR SENESCENCE AND CONTROL OF GENE EXPRESSION	09-01-96/08-31-97	UNIVERSITY OF CALIF-LAWRENC BERKELEY	291,821
2 R01AG09927-06A1	PEACOCKE, MONICA EFFECT OF AGING ON RETINOIC ACID RECEPTOR GENE EXPRESSIO	12-01-95/	COLUMBIA UNIVERSITY NEW YORK	
5 R01AG09931-05	STEWART, ANITA INCREASING PHYSICAL ACTIVITY OF ELDERS IN THE COMMUNITY	03-23-96/01-31-97	UNIVERSITY OF CALIFORNIA SAN FRANCIS	394,376
5 R01AG09952-03	KEMPER, SUSAN SPEECH ACCOMMODATIONS BY AND TO OLDER ADULTS	01-25-96/11-30-96	UNIVERSITY OF KANSAS LAWRENCE	184,225
2 R01AG09956-05A1	HENDRIE, HUGH C INDIANAPOLIS/IBADAN DEMENTIA PROJECT	03-06-96/12-31-96	INDIANA UNIV-PURDUE UNIV AT INDIANAP	872,560

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 R01AG09957-03	MEYER, BONNIE J F MINIMIZING AGE DIFFERENCES IN READING--HOW AND WHY	02-05-96/12-31-96	PENNSYLVANIA STATE UNIVERSITY-UNIV P	162,422
2 P01AG09973-06	GALLAGHER, MICHELA COGNITION AND HIPPOCAMPAL/CORTICAL SYSTEMS IN AGING	09-15-96/08-31-97	JOHNS HOPKINS UNIVERSITY	1,292,335
5 R29AG09986-05	MEANS, KEVIN M FUNCTIONAL PERFORMANCE-BASED REHABILITATION OF FALLERS	08-27-96/06-30-98	UNIVERSITY OF ARKANSAS MED SCIS LTL	87,973
5 R01AG09988-05	FRIEDMAN, DAVID AGE-RELATED ERP MEASURES IN ALZHEIMERS DISEASE	08-01-96/07-31-97	NEW YORK STATE PSYCHIATRIC INSTITUTE	265,768
5 R01AG09997-05	WELSH, KATHLEEN A NEUROPSYCHOLOGICAL STUDY OF ALZHEIMERS DISEASE	07-01-96/06-30-98	DUKE UNIVERSITY	136,744
5 R29AG10025-05	HOUMARD, JOSEPH A GLUCOSE TRANSPORTERS AND THE INSULIN RESISTANCE OF AGING	06-01-96/05-31-98	EAST CAROLINA UNIVERSITY	86,168
5 R29AG10026-05	CARTEE, GREGORY D AGE EFFECTS ON EXERCISE STIMULATION OF GLUCOSE TRANSPORT	05-01-96/04-30-98	UNIVERSITY OF WISCONSIN MADISON	96,479
2 R01AG10034-05A2	DUBINSKY, JANET M INTERACTION OF HYPOXIC AND EXCITOTOXIC NEURONAL	01-25-96/12-31-96	UNIVERSITY OF MINNESOTA TWIN CITIES	212,180
7 N03AG10042-006	PROFESSIONAL AND MEDICAL SUPPORT SERVICES	10-01-95/12-31-95	CHESAPEAKE PHYSICIANS PROFESSIONAL A	28,667
3 N03AG10042-007	PROFESSIONAL AND MEDICAL SUPPORT SERVICES	10-01-95/12-31-95	CHESAPEAKE PHYSICIANS PROFESSIONAL A	
2 N03AG10042-008	PROFESSIONAL AND MEDICAL SUPPORT SERVICES	01-03-96/03-31-96	CHESAPEAKE PHYSICIANS PROFESSIONAL A	4,487
5 N03AG10046-008	PROVIDE UNARMED GUARD SERVICES	10-01-95/12-31-95	SSC SMALL BUSINESS MARYLAND	61,439
3 N03AG10046-009	PROVIDE UNARMED GUARD SERVICES	10-02-95/12-31-95	SSC SMALL BUSINESS MARYLAND	
7 N03AG10046-010	PROVIDE UNARMED GUARD SERVICES	12-29-95/02-29-96	SSC SMALL BUSINESS MARYLAND	
2 N03AG10050-015	PROVIDE CLEARINGHOUSE SERVICES	01-25-96/06-19-96	SSC SMALL BUSINESS INDIANA	386,854

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FY: 96				
2 N03AG10050-016	PROVIDE CLEARINGHOUSE SERVICES	06-12-96/07-10-96	SSC SMALL BUSINESS INDIANA	
1 R01AG10057-01A4	MBAWUIKE, INNOCENT N INFLUENZA NUCLEOPROTEIN AS A PROBE FOR LOW CTL IN AGING	09-30-96/08-31-97	BAYLOR COLLEGE OF MEDICINE	166,795
5 R29AG10059-05	CRISP, TERRIANN AGE RELATED CHANGES IN SPINAL OPIATE INDUCED ANALGESIA	06-01-96/05-31-98	NORTHEASTERN OHIO UNIVERSITIES COLL	108,441
5 R01AG10070-05	BAKER, JOHN R CARTILAGE MATRIX PROTEIN INTERACTIONS--CHANGES WITH AGE	05-24-96/04-30-98	UNIVERSITY OF ALABAMA AT BIRMINGHAM	216,707
2 R01AG10102-06	GORELICK, PHILIP B DEMENTIA IN THE BLACK AGED--AD AND VAD	07-01-96/06-30-97	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	361,305
5 P01AG10120-05	FOGEL, ROBERT W EARLY INDICATORS OF LATER WORK LEVELS, DISEASE AND DEATH	12-01-95/11-30-96	NATIONAL BUREAU OF ECONOMIC RESEARCH	1,076,835
2 R01AG10121-04	BECKLEY, DENNIS J POSTURE IN AGE-RELATED NEURODEGENERATIVE DISEASE	07-01-96/	UNIVERSITY OF CALIFORNIA DAVIS	
2 P30AG10123-06	CUMMINGS, JEFFREY L UCLA ALZHEIMERS DISEASE CENTER	07-01-96/06-30-97	UNIVERSITY OF CALIFORNIA LOS ANGELES	778,015
3 P30AG10123-06S1	CUMMINGS, JEFFREY L UCLA ALZHEIMERS DISEASE CENTER	07-01-96/06-30-97	UNIVERSITY OF CALIFORNIA LOS ANGELES	65,202
2 P30AG10124-06	TROJANOWSKI, JOHN Q ALZHEIMERS DISEASE CENTER CORE	07-01-96/06-30-97	UNIVERSITY OF PENNSYLVANIA	918,554
2 P30AG10129-06	JAGUST, WILLIAM J UC DAVIS ALZHEIMERS DISEASE CENTER CORE	07-01-96/06-30-97	UNIVERSITY OF CALIFORNIA DAVIS	854,383
2 P30AG10130-06	MIRRA, SUZANNE S EMORY ALZHEIMERS DISEASE CENTER	07-01-96/06-30-97	EMORY UNIVERSITY	833,029
5 R01AG10131-04	KAYSER-JONES, VIRGENE S BEHAVIORAL CONTEXT OF EATING AND NUTRITIONAL SUPPORT	06-11-96/05-31-98	UNIVERSITY OF CALIFORNIA SAN FRANCIS	244,830
2 P30AG10133-06	GHETTI, BERNARDINO INDIANA ALZHEIMERS DISEASE CENTER	07-01-96/06-30-97	INDIANA UNIV-PURDUE UNIV AT INDIANAP	1,075,672
3 R01AG10135-04S1	TAYLOR, ROBERT J RELIGION, STRESS AND PHYSICAL MENTAL HEALTH IN BLACKS	03-20-96/08-31-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	40,312

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FY: 96				
5 R01AG10135-05	TAYLOR, ROBERT J RELIGION, STRESS AND PHYSICAL MENTAL HEALTH IN BLACKS	09-01-96/08-31-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	224,960
2 R37AG10143-14A1	CLARK, RICHARD A FIBRONECTIN AND CELL RECRUITMENT	09-26-96/08-31-97	STATE UNIVERSITY NEW YORK STONY BROO	229,140
5 R01AG10147-03	KOEPSELL, THOMAS D CASE CONTROL STUDY OF OLDER PEDESTRIAN INJURY SITES	08-01-96/07-31-97	UNIVERSITY OF WASHINGTON	252,982
5 R01AG10149-04	BAUMGARTNER, RICHARD N BODY COMPOSITION CHANGES IN THE ELDERLY	08-01-96/07-31-97	UNIVERSITY OF NEW MEXICO ALBUQUERQUE	356,787
5 R01AG10154-08	GREENOUGH, WILLIAM T PHYSICAL EXERCISE, MENTAL ACTIVITY, AND BRAIN PLASTICITY	07-01-96/06-30-97	UNIVERSITY OF ILLINOIS URBANA-CHAMPA	105,733
5 R29AG10160-05	BALIN, BRIAN J NEURONAL CYTOSKELETON IN AGING AND ALZHEIMERS DISEASE	04-01-96/03-31-97	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	106,941
2 P30AG10161-06	EVANS, DENIS A ALZHEIMERS DISEASE CORE CENTER	07-01-96/06-30-97	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	1,130,764
2 P30AG10163-06	HARRELL, LINDY E ALZHEIMER'S DISEASE CENTER CORE	07-01-96/	UNIVERSITY OF ALABAMA AT BIRMINGHAM	
5 R37AG10168-05	PRESTON, SAMUEL H AFRICAN-AMERICAN MORTALITY, 1930-1990	04-01-96/01-31-97	UNIVERSITY OF PENNSYLVANIA	229,616
7 R29AG10170-05	MENDES DE LEON, CARLOS F RACE, SOCIAL FACTORS AND COURSE OF DISABILITY	09-15-96/08-31-98	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	102,008
5 R01AG10173-05	SARTER, MARTIN F AGING, ATTENTION AND BENZODIAZEPINE RECEPTOR LIGANDS	04-08-96/03-31-97	OHIO STATE UNIVERSITY	126,527
2 P30AG10182-06	KOLLER, WILLIAM C ALZHEIMER'S DISEASE CORE CENTER GRANT	07-01-96/	UNIVERSITY OF KANSAS MEDICAL CENTER	
5 P01AG10184-05	WEST, SHEILA K VISUAL IMPAIRMENT AND FUNCTIONAL STATUS IN OLDER PERSONS	08-15-96/07-31-98	JOHNS HOPKINS UNIVERSITY	1,869,660
3 P01AG10184-05S1	WEST, SHEILA K VISUAL IMPAIRMENT AND FUNCTIONAL STATUS IN OLDER PERSON	09-30-96/07-31-98	JOHNS HOPKINS UNIVERSITY	80,578
7 N03AG10186-006	JANITORIAL SERVICES FOR GRC IN BALTIMORE	09-10-96/09-27-96	SSC SMALL BUSINESS MARYLAND	14,959

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 R29AG10199-06	DONAHUE, HENRY J AGE RELATED CHANGES IN BONE CELL SIGNAL TRANSDUCTION	02-01-96/12-31-97	PENNSYLVANIA STATE UNIV HERSHEY MED	104,735
7 N03AG10200-005	 LEASE TO OWNERSHIP--MASS SPECTROMETER	09-30-96/09-30-97	SSC SMALL BUSINESS COLORADO	1
2 P01AG10207-05	KELSOE, GARNETT H MECHANISMS OF IMMUNOSENESCENCE	09-30-96/08-31-97	UNIVERSITY OF MARYLAND BALT PROF SCH	530,335
5 P01AG10208-05	AZMITIA, EFRAIN C S-100B--NEURONAL GLIAL LINK TO ALZHEIMERS DISEASE	05-03-96/04-30-98	NEW YORK UNIVERSITY	900,884
5 R01AG10210-05	LEE, VIRGINIA M BIOLOGY OF ALZHEIMER PAIRED HELICAL FILAMENTS	06-01-96/05-31-97	UNIVERSITY OF PENNSYLVANIA	178,630
2 R01AG10213-05	CULP, LLOYD A MATRIX ADHESION OF AGING DERMAL FIBROBLASTS	06-01-96/	CASE WESTERN RESERVE UNIVERSITY	
5 R29AG10215-05	YEOWELL, HEATHER N LYSYL HYDROXYLASE--STRUCTURE AND REGULATORY STUDIES	09-01-96/08-31-98	DUKE UNIVERSITY	119,904
5 R29AG10250-04	LA VEIST, THOMAS A NATIONAL AFRICAN-AMERICAN MORTALITY ANALYSIS	05-06-96/04-30-97	JOHNS HOPKINS UNIVERSITY	117,941
5 R01AG10251-04	KLINE, JENNIE K EPIDEMIOLOGY OF TRISOMY AND AGING	04-01-96/12-31-96	NEW YORK STATE PSYCHIATRIC INSTITUTE	272,869
5 R29AG10264-03	GLICKSMAN, ALLEN CULTURAL AND SOCIAL SOURCES OF WELL-BEING IN NORMAL AGED	02-10-96/12-31-96	PHILADELPHIA GERIATRIC CTR-FRIEDMAN	160,213
5 R01AG10266-05	BUMPASS, LARRY L AGING AND THE FAMILY OVER THE LIFE COURSE	02-20-96/11-30-98	UNIVERSITY OF WISCONSIN MADISON	229,447
5 R29AG10267-05	CRESS, MARIE E PHYSICAL FUNCTION PERFORMANCE AND EXERCISING IN AGING	05-01-96/04-30-97	UNIVERSITY OF WASHINGTON	87,051
5 R01AG10269-05	HEISTAD, DONALD D AGING EFFECTS ON CEREBRAL BLOOD VESSELS	06-01-96/05-31-98	UNIVERSITY OF IOWA	177,182
5 R01AG10279-05	VORBRODT, ANDRZEJ W TRANSPORT OF MODIFIED ALBUMIN ACROSS BLOOD-BRAIN BARRIER	06-01-96/04-30-98	INSTITUTE FOR BASIC RES IN DEV DISAB	151,015
5 R29AG10282-05	GEULA, CHANGIZ CHOLINERGIC SYSTEM IN ALZHEIMERS DISEASE	07-15-96/06-30-97	BETH ISRAEL DEACONESS MEDICAL CENTER	126,932

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
3 R01AG10297-03S1	LAHIRI, DEBOMOY K REGULATION OF BETA AMYLOID GENE PROMOTER IN CELL TYPES	08-01-94/07-31-98	INDIANA UNIV-PURDUE UNIV AT INDIANAP	44,250
5 R01AG10299-05	SCHMIDT, ROBERT E NEUROPATHOLOGY OF THE AGING SYMPATHETIC NERVOUS SYSTEM	05-29-96/04-30-97	WASHINGTON UNIVERSITY	245,266
2 U01AG10304-05A1	LAWTON, M POWELL SPECIAL CARE UNITS FOR ALZHEIMERS DISEASE: ADL TREATMENT	04-01-96/	PHILADELPHIA GERIATRIC CTR-FRIEDMAN	
3 U01AG10317-05S4	LEON, JOEL NATIONAL EVALUATION OF SPECIAL CARE UNITS	05-28-96/06-30-98	PEOPLE-TO-PEOPLE HEALTH FOUNDATION,	124,999
5 R01AG10321-05	BECK, CORNELIA K AFFECT CHANGES AS OUTCOMES OF BEHAVIORAL INTERVENTIONS	06-01-96/05-31-97	UNIVERSITY OF ARKANSAS MED SCIS LTL	94,168
2 U01AG10330-04	HOLMES, DOUGLAS COORDINATING CENTER CONTINUATION	03-01-96/11-30-96	HEBREW HOME FOR THE AGED AT RIVERDAL	201,294
3 U01AG10353-05S1A1	DAWSON-HUGHES, B EFFECT OF CALCIUM AND VITAMIN D ON BONE LOSS FROM THE HI	09-01-95/	TUFTS UNIVERSITY BOSTON	
2 U01AG10353-06	DAWSON-HUGHES, B CALCIUM AND VITAMIN D EFFECTS ON BONE LOSS	09-01-96/08-31-97	TUFTS UNIVERSITY BOSTON	450,330
3 U01AG10373-05S1	GALLAGHER, J CHRISTOPHER TREATMENT FOR OSTEOPOROSIS OF THE HIP-AG10373-SUPPLEMENT	09-01-96/08-31-96	CREIGHTON UNIVERSITY	
3 U01AG10373-05S2	GALLAGHER, J CHRISTOPHER TREATMENT FOR OSTEOPOROSIS OF THE HIP	09-01-95/08-31-96	CREIGHTON UNIVERSITY	
3 U01AG10373-05S3	GALLAGHER, J CHRISTOPHER TREATMENT FOR OSTEOPOROSIS OF THE HIP-SUPPLEMENT	01-25-96/08-31-96	CREIGHTON UNIVERSITY	66,751
2 U01AG10373-06	GALLAGHER, J CHRISTOPHER TREATMENT FOR OSTEOPOROSIS OF THE HIP	09-01-96/08-31-97	CREIGHTON UNIVERSITY	410,672
3 U01AG10382-05S1A1	DALSKY, GAIL P EFFECT OF EXERCISE ON FEMORAL BONE MASS IN OLDER ADULTS	09-01-95/	UNIVERSITY OF CONNECTICUT HEALTH CEN	
2 P60AG10415-06	REUBEN, DAVID B UCLA OLDER AMERICANS INDEPENDENT CENTER	07-10-96/06-30-97	UNIVERSITY OF CALIFORNIA LOS ANGELES	808,666
5 P60AG10418-04	KOWAL, JEROME CLAUDE D PEPPER OLDER AMERICANS INDEPENDENCE CENTER	09-20-96/11-30-96	CASE WESTERN RESERVE UNIVERSITY	963,974

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
2 R01AG10425-04	TUCKER, KATHERINE L NUTRITION AND FRAILTY AMONG ELDERLY HISPANIC GROUPS	02-10-96/11-30-96	TUFTS UNIVERSITY BOSTON	278,839
2 R01AG10444-06	HAZUDA, HELEN P SALSA: SAN ANTONIO LONGITUDINAL STUDY OF AGING	07-01-96/	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	
2 P60AG10463-06	ABRAHAM, GEORGE N ROCHESTER AREA PEPPER CENTER	07-17-96/06-30-97	UNIVERSITY OF ROCHESTER	727,715
5 P60AG10469-05	TINETTI, MARY E CLAUDE D PEPPER OLDER AMERICANS INDEPENDENCE CENTER	08-01-96/07-31-97	YALE UNIVERSITY	831,498
5 P01AG10480-06	KNUSEL, BEAT J THERAPEUTIC POTENTIAL OF NEUROTROPHINS IN ALZHEIMERS	08-01-96/07-31-97	UNIVERSITY OF SOUTHERN CALIFORNIA	430,423
2 U01AG10483-06	THAL, LEON J ALZHEIMERS DISEASE COOPERATIVE STUDY	07-01-96/06-30-97	UNIVERSITY OF CALIFORNIA SAN DIEGO	4,177,886
3 P60AG10484-05S1	ETTINGER, WALTER H, JR CLAUDE D PEPPER OLDER AMERICANS INDEPENDENCE CENTER	07-01-95/06-30-97	WAKE FOREST UNIVERSITY	503,700
2 P01AG10485-06	SIMPKINS, JAMES W DISCOVERY OF NOVEL DRUGS TO ALZHEIMER'S DISEASE	08-01-96/07-31-97	UNIVERSITY OF FLORIDA	848,367
5 R01AG10486-04	ROY, ARUN K AGING AND ANDROGEN RECEPTOR GENE REGULATION	02-01-96/12-31-96	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	181,134
5 R01AG10496-05	ZURIF, EDGAR B COGNITIVE AGING--REAL TIME LANGUAGE PROCESSING	06-01-96/04-30-97	BRANDEIS UNIVERSITY	158,958
5 P01AG10514-05	PAPACONSTANTINOU, JOHN AGING EFFECTS ON MOLECULAR RESPONSES TO STRESS	06-04-96/05-31-97	UNIVERSITY OF TEXAS MEDICAL BR GALVE	854,893
5 R01AG10520-02	GORDON, JON W AGE RELATED NEURODEGENERATION AND TRANSGENIC MOUSE	01-01-96/12-31-96	MOUNT SINAI SCHOOL OF MEDICINE OF CU	224,216
5 R29AG10523-05	PETERSON, CHARLOTTE A ENOLASE GENE REGULATION IN DIFFERENTIATION AND AGING	06-01-96/05-31-98	UNIVERSITY OF ARKANSAS MED SCIS LTL	66,793
5 R01AG10528-03	VATASSERY, GOVIND N NEURONAL MEMBRANE LIPID OXIDATION IN PARKINSONS DISEASE	08-01-96/07-31-97	UNIVERSITY OF MINNESOTA TWIN CITIES	141,909
5 R01AG10530-04	HADJICONSTANTINOU-NEFF, MARIA GM1 GANGLIOSIDE CORRECTS RAT BRAIN CHOLINERGIC DEFICITS	05-29-96/04-30-98	OHIO STATE UNIVERSITY	167,707

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 R01AG10531-04	FERNANDES, GABRIEL AGING, FOOD RESTRICTION AND T-CELL SUBSET FUNCTION	09-01-96/08-31-98	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	180,634
5 R01AG10536-05	WEINDRUCH, RICHARD H CALORIES, FAT, AND SPONTANEOUS PROSTATE CANCER	05-01-96/04-30-98	UNIVERSITY OF WISCONSIN MADISON	139,951
2 R01AG10538-04A1	FITZGERALD, MALINDA E CHOROIDAL BLOOD FLOW & RETINAL PATHOLOGY IN AGING	12-01-95/	UNIVERSITY OF TENNESSEE AT MEMPHIS	
5 P01AG10542-04	SCHULTZ, ALBERT B FUNDAMENTAL ASPECTS OF MOBILITY IN OLD ADULTS	05-25-96/03-31-98	UNIVERSITY OF MICHIGAN AT ANN ARBOR	637,166
5 R01AG10546-03	WENK, GARY L AGING VULNERABILITY TO EXCITATORY AMINO ACIDS	04-09-96/03-31-98	UNIVERSITY OF ARIZONA	136,302
5 R01AG10557-02	GRABINER, MARK D BIOMECHANICS OF STEPPING RESPONSES--EFFECTS OF AGING	09-01-96/08-31-97	CLEVELAND CLINIC FOUNDATION	134,473
5 R01AG10569-04	ZELINSKI, ELIZABETH M LONGITUDINAL ASSESSMENT OF COGNITION IN ADULTS	09-01-96/08-31-97	UNIVERSITY OF SOUTHERN CALIFORNIA	242,910
1 R01AG10583-01A4	MAXWELL, LEO C AGE, ENDURANCE TRAINING & ANTIOXIDANT DEFENSE IN MUSCLE	04-01-96/	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	
5 R29AG10593-05	HARTMAN, MARILYN D AGE DIFFERENCE IN ATTENTION--CONSEQUENCES FOR MEMORY	07-10-96/06-30-98	UNIVERSITY OF NORTH CAROLINA CHAPEL	110,515
2 R01AG10599-06	COOPERMAN, BARRY S ANTICHYMOTRYPSIN INTERACTION WITH SERINE PROTEASES	09-30-96/08-31-97	UNIVERSITY OF PENNSYLVANIA	252,705
7 R01AG10606-06	RAPP, PETER R COGNITIVE FUNCTION IN THE AGED	05-15-97/04-30-98	MOUNT SINAI SCHOOL OF MEDICINE OF CU	67,227
5 R29AG10607-05	MAGNUSSON, KATHY R AGING EFFECTS ON THE NMDA RECEPTOR COMPLEX	07-15-96/04-30-98	COLORADO STATE UNIVERSITY	111,296
5 R01AG10608-05	BENSON, MERRILL D AMYLOID PRECURSOR PROTEIN (APP) AND ALZHEIMER'S DISEASE	07-15-96/06-30-98	INDIANA UNIV-PURDUE UNIV AT INDIANAP	236,406
7 R29AG10620-04	LAPOLT, PHILIP S REGULATION OF GENE EXPRESSION IN THE AGING OVARY	09-01-96/08-31-97	CALIFORNIA STATE UNIVERSITY LOS ANGE	95,203
1 R01AG10629-01A4	ALMON, RICHARD R AGING MUSCLE--DISUSE, GLUCOCORTICOIDS, AND IGF 1	09-25-96/06-30-97	STATE UNIVERSITY OF NEW YORK AT BUFF	221,786

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FY: 96				
5 R01AG10637-05	MABRY, TOM J PLANT TOXINS AND DEMENTIA	07-15-96/04-30-98	UNIVERSITY OF TEXAS AUSTIN	98,185
2 R01AG10642-04A2	COHEN-MANSFIELD, JISKA MANAGEMENT OF SCREAMING IN NURSING HOME RESIDENTS	04-01-96/	HEBREW HOME OF GREATER WASHINGTON	
2 R01AG10643-05A1	BLIWISE, DONALD L SUNDOWN SYNDROME IN A SKILLED NURSING FACILITY	07-11-96/06-30-97	EMORY UNIVERSITY	211,947
2 R01AG10647-04A1	GILLEY, DAVID W LONGITUDINAL STUDY OF AGGRESSIVE BEHAVIORS IN AD	04-01-96/	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	
5 R44AG10650-03	SCHAFER, MARK E ULTRASOUND/COLLAGEN TREATMENT OF FULL THICKNESS WOUNDS	04-01-96/03-31-98	SONIC TECHNOLOGIES	261,681
2 R44AG10659-02A2	LEIRER, VON O COMMUNITY VOICE MAIL FOR ROUTINE AND DISASTER SERVICES	11-01-95/	DECISION SYSTEMS	
2 R01AG10668-05A1	MUFSON, ELLIOTT J GALANIN IN ALZHEIMER'S DISEASE	05-03-96/03-31-97	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	244,751
5 R01AG10669-06	AIKEN, JUDD M PRION PROTEIN IN MINK ENCEPHALOPATHY	07-01-96/06-30-97	UNIVERSITY OF WISCONSIN MADISON	149,555
2 R01AG10671-04A1	BREDESEN, DALE E GENETIC CONTROL OF NEURAL DEGENERATION	12-01-95/	BURNHAM INSTITUTE	
5 R01AG10682-06	STOPA, EDWARD G HEPARIN-BINDING GROWTH FACTORS IN AGING AND ALZHEIMER'S	03-05-96/11-30-98	RHODE ISLAND HOSPITAL (PROVIDENCE, R	250,569
5 R01AG10685-06	FRAUTSCHY, SALLY A B PROTEIN DEPOSITION AND TOXICITY IN THE BRAIN	09-30-96/03-31-97	UNIVERSITY OF CALIFORNIA LOS ANGELES	125,133
2 R01AG10686-04A2	KRUEGER, BRUCE K GLIAL NEURONAL INTERACTIONS IN NEURODEGENERATION	12-20-95/11-30-96	UNIVERSITY OF MARYLAND BALT PROF SCH	232,373
2 R01AG10738-05	KAHANA, EVA F BUFFERS OF IMPAIRMENT DISABILITY CASCADE AMONG OLD	09-30-96/06-30-97	CASE WESTERN RESERVE UNIVERSITY	224,742
5 R44AG10750-03	LETZT, ALAN M MEDICATION COMPLIANCE ASSISTANCE SYSTEM	06-15-96/05-31-98	INNOVATIVE ENTERPRISES INTERNATIONAL	374,988
2 P01AG10770-04	PRUSINER, STANLEY B MOLECULAR PATHOGENESIS OF AGE-DEPENDENT CNS DEGENERATION	07-12-96/03-31-97	UNIVERSITY OF CALIFORNIA SAN FRANCIS	1,575,516

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 R01AG10785-04	STEWART, WALTER F AGE, LEAD EXPOSURE AND NEUROBEHAVIORAL DECLINE	09-01-96/08-31-97	JOHNS HOPKINS UNIVERSITY	561,812
3 R01AG10785-04S1	STEWART, WALTER F AGE LEAD EXPOSURE AND NEUROBEHAVIORAL DECLINE	09-15-96/08-31-97	JOHNS HOPKINS UNIVERSITY	278,165
5 R01AG10791-03	STOLLER, ELEANOR P ETHNICITY IN HELPING NETWORKS--STUDY OF RETIRED MIGRANTS	09-19-96/08-31-98	UNIVERSITY OF FLORIDA	134,664
3 P01AG10794-04S1	SACK, ROBERT L SLEEP, MELATONIN AND THE AGING CIRCADIAN CLOCK	12-01-95/	OREGON HEALTH SCIENCES UNIVERSITY	
5 P01AG10794-05	SACK, ROBERT L SLEEP, MELATONIN AND THE AGING CIRCADIAN CLOCK	07-12-96/06-30-98	OREGON HEALTH SCIENCES UNIVERSITY	867,727
5 R29AG10801-05	FREDMAN, LISA CAREGIVERS TO THE ELDERLY--RISKS AND OUTCOMES OF STRESS	07-01-96/06-30-98	UNIVERSITY OF MARYLAND BALT PROF SCH	80,323
5 R29AG10816-04	CEFALU, WILLIAM T CALORIC RESTRICTION, AGING AND CARDIOVASCULAR DISEASE	09-30-96/08-31-97	WAKE FOREST UNIVERSITY	156,075
5 P01AG10821-04	CARLSON, BRUCE M AGE-RELATED INFLUENCES ON MUSCLE AND NERVE REGENERATION	02-10-96/12-31-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	727,956
5 P01AG10829-04	WEI, JEANNE Y BASIC MECHANISMS OF AGING AND AGE-RELATED DISEASES	07-01-96/06-30-98	BETH ISRAEL DEACONESS MEDICAL CENTER	810,244
5 P01AG10836-05	LANDFIELD, PHILIP W CALICUM REGULATION IN BRAIN AGING AND ALZHEIMERS DISEASE	08-01-96/07-31-98	UNIVERSITY OF KENTUCKY	1,029,412
5 R01AG10837-05	ELBLE, RODGER J GAIT DISTURBANCES IN THE ELDERLY--INITIATION OF GAIT	07-01-96/06-30-98	SOUTHERN ILLINOIS UNIVERSITY SCH OF	122,303
5 R01AG10845-04	TERI, LINDA AGING AND DEMENTIA--REDUCING DISABILITY IN ALZHEIMER'S	07-01-96/06-30-97	UNIVERSITY OF WASHINGTON	285,430
5 R29AG10848-05	OBER, BETH A SEMANTIC & REPETITION PRIMING IN NORMAL & ABNORMAL AGING	09-01-96/07-31-98	UNIVERSITY OF CALIFORNIA DAVIS	99,350
5 R01AG10851-04	COLLIER, TIMOTHY J REGNERATION IN THE AGED AND INJURED DOPAMINE SYSTEM	02-10-96/11-30-96	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	234,352
5 R01AG10853-05	CONLEY, KEVIN E AGE AND EXERCISE--MUSCLE FUNCTION BY NMR AND PERFORMANCE	08-01-96/07-31-98	UNIVERSITY OF WASHINGTON	192,040

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FY: 96				
5 R01AG10868-04	SAHU, ABHIRAM HYPOTHALAMIC NEUROPEPTIDE Y AND REPRODUCTIVE AGING	03-15-96/02-28-97	UNIVERSITY OF PITTSBURGH AT PITTSBUR	190,278
5 R29AG10869-05	UDOM, CELESTINE E NEURONAL AGING AND NEURODEGENERATIVE DISEASES	07-10-96/06-30-98	UNIVERSITY OF NORTH CAROLINA CHARLOT	102,488
5 R29AG10871-03	ALWAY, STEPHEN E MECHANISMS FOR NEW FIBER FORMATION IN AGING MUSCLE	07-01-96/06-30-97	UNIVERSITY OF SOUTH FLORIDA	93,869
5 R29AG10879-05	SANO, MARY MAINTAINING FUNCTIONS IN AGED COMMUNITY RESIDENTS	07-01-96/06-30-98	COLUMBIA UNIVERSITY NEW YORK	84,963
5 R01AG10880-04	CRAFT, SUZANNE GLUCOSE REGULATION AND MEMORY IN ALZHEIMERS DISEASE	04-01-96/03-31-97	UNIVERSITY OF WASHINGTON	139,144
5 R29AG10885-05	EVERS, BERNARD M SURGICAL STUDIES OF ONTOGENY, AGING AND THE GUT	06-01-96/05-31-97	UNIVERSITY OF TEXAS MEDICAL BR GALVE	113,220
5 R01AG10886-03	DE BEER, FREDERICK C SERUM AMYLOID A PROTEIN--ROLE IN ATHEROGENESIS	08-01-96/07-31-97	UNIVERSITY OF KENTUCKY	177,821
5 R29AG10887-04	HURWICZ, MARGO L DECISIONS ABOUT HMO SERVICE USE FOR LATE LIFE ILLNESS	08-01-96/07-31-97	UNIVERSITY OF MISSOURI-ST. LOUIS	94,743
5 R35AG10916-05	NIXON, RALPH A PROTEOLYSIS IN ALZHEIMERS DISEASE PATHOGENESIS	07-12-96/06-30-97	MC LEAN HOSPITAL (BELMONT, MA)	684,843
3 R35AG10917-04S1	MARTIN, GEORGE M LEADERSHIP AND EXCELLENCE IN ALZHEIMER'S DISEASE SUPPLEM	12-01-95/	UNIVERSITY OF WASHINGTON	
5 R35AG10917-05	MARTIN, GEORGE M LEADERSHIP AND EXCELLANCE IN ALZHEIMERS DISEASE AWARD	06-01-96/05-31-97	UNIVERSITY OF WASHINGTON	592,151
5 R01AG10925-03	ARNAUD, CLAUDE D BUILDING BONE IN OSTEOPOROSIS WITH PTH AND ESTROGEN	06-25-96/05-31-97	UNIVERSITY OF CALIFORNIA SAN FRANCIS	253,153
5 R01AG10939-05	MARKIDES, KYRIAKOS S LONGITUDINAL STUDY OF MEXICAN AMERICAN ELDERLY HEALTH	07-01-96/06-30-97	UNIVERSITY OF TEXAS MEDICAL BR GALVE	524,413
5 R01AG10940-05	HAMMAN, RICHARD F HISPANIC HEALTH AND AGING IN SAN LUIS VALLEY, CO	07-01-96/06-30-98	UNIVERSITY OF COLORADO HLTH SCIENCES	330,094
3 R01AG10941-03S3	LINDEMAN, ROBERT D NEW MEXICO SURVEY OF HEALTH IN ELDERLY HISPANICS	03-01-96/03-31-96	UNIVERSITY OF NEW MEXICO ALBUQUERQUE	62,308

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FY: 96				
2 R01AG10941-04A1	LINDEMAN, ROBERT D NEW MEXICO SURVEY OF HEALTH IN ELDERLY HISPANICS	04-22-96/03-31-98	UNIVERSITY OF NEW MEXICO ALBUQUERQUE	307,515
3 R01AG10942-04S1	MACLEAN, DAVID B GROWTH HORMONE AND/OR EXERCISE FOR THE FRAIL ELDERLY	07-01-96/06-30-98	RHODE ISLAND HOSPITAL (PROVIDENCE, R	369,127
2 R01AG10942-05	MACLEAN, DAVID B GROWTH HORMONE AND/OR EXERCISE FOR THE FRAIL ELDERLY	07-01-96/	RHODE ISLAND HOSPITAL (PROVIDENCE, R	
3 R01AG10943-04S1	SCHWARTZ, ROBERT S GROWTH FACTORS AND EXERCISE IN OLDER WOMEN	07-10-95/06-30-96	UNIVERSITY OF WASHINGTON	25,000
5 R01AG10943-05	SCHWARTZ, ROBERT S GROWTH FACTORS AND EXERCISE IN OLDER WOMEN	07-01-96/06-30-98	UNIVERSITY OF WASHINGTON	271,129
5 R35AG10953-05	FRANGIONE, BLAS ALZHEIMERS DISEASE AND AMYLOID PROTEINS	09-01-96/08-31-97	NEW YORK UNIVERSITY MEDICAL CENTER	680,993
5 R01AG10954-04	SNYDER, PETER J WILL TESTOSTERONE INCREASE MUSCLE STRENGTH IN OLDER MEN	07-01-96/06-30-98	UNIVERSITY OF PENNSYLVANIA	169,406
5 R35AG10963-05	MAYEUX, RICHARD P GENE-ENVIRONMENT INTERACTIONS IN ALZHEIMERS DISEASE	06-01-96/05-31-97	COLUMBIA UNIVERSITY NEW YORK	682,351
5 R01AG10997-05	HARTMAN, MARK L GROWTH HORMONE AND PHYSICAL TRAINING IN OLDER PERSONS	07-01-96/06-30-98	UNIVERSITY OF VIRGINIA CHARLOTTESVIL	264,821
3 R01AG10998-03S2	FALANGA, VINCENT STANOZOLOL IN THE ELDERLY WITH VENOUS ULCERS	07-01-96/06-30-97	UNIVERSITY OF MIAMI	18,567
2 R01AG10999-04	HOFFMAN, ANDREW R GH AND IGF-I TREATMENT OF ELDERLY WOMEN	09-01-96/08-31-97	STANFORD UNIVERSITY	177,216
5 R01AG11002-05	BLACKMAN, MARC R GROWTH HORMONE & SEX STEROID EFFECTS ON SKELETAL MUSCLE	07-01-96/06-30-98	JOHNS HOPKINS UNIVERSITY	233,660
5 R01AG11020-02	MEYDANI, MOHSEN VITAMIN E REQUIREMENT OF ELDERLY W/HIGH (N-3) PUFA INTAK	09-01-96/08-31-97	TUFTS UNIVERSITY BOSTON	141,838
5 R01AG11023-04	OOI, WEE L EPIDEMIOLOGY OF ORTHOSTATIC HYPOTENSION IN OLD AGE	08-01-96/07-31-98	HEBREW REHABILITATION CENTER FOR AGE	103,921
5 R01AG11032-03	WILLIS, SHERRY L ALZHEIMERS DISEASE AND EVERYDAY COMPETENCE	05-01-96/04-30-97	PENNSYLVANIA STATE UNIVERSITY-UNIV P	275,788

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 R01AG11037-04	BOOKSTEIN, FRED L STATISTICAL ANALYSIS OF BIOMARKERS OF AGING	04-01-96/03-31-98	UNIVERSITY OF MICHIGAN AT ANN ARBOR	154,261
5 R01AG11047-04	BOULT, CHARLES E TRIAL OF OUTPATIENT GERIATRIC EVALUATION AND MANAGEMENT	09-30-96/08-31-98	UNIVERSITY OF MINNESOTA TWIN CITIES	262,310
5 R29AG11053-04	PERKINS, SHERRIE L VITAMIN D AND CSF-1 REGULATION OF OSTEOCLASTOGENESIS	02-01-96/12-31-96	UNIVERSITY OF UTAH	103,454
5 R01AG11056-04	WOOD, W GIBSON AGING, BRAIN MEMBRANE CHOLESTEROL DOMAINS AND CALCIUM	09-15-96/08-31-98	UNIVERSITY OF MINNESOTA TWIN CITIES	265,634
5 R01AG11060-04	ROBERTS, JAY AGING BIOMARKER--CARDIAC NOREPINEPHRINE	04-01-96/03-31-97	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	193,000
3 R01AG11060-04S1	ROBERTS, JAY AGING BIOMARKER--CARDIAC NOREPINEPHRINE	04-15-96/03-31-97	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	39,250
5 R01AG11067-04	MILLER, RICHARD A IMMUNE AND MUSCLE FUNCTION ASSAYS AS BIOMARKERS OF AGING	04-01-96/03-31-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	255,182
5 R01AG11079-05	WITTEN, MATTHEW STATISTICAL ANALYSIS OF BIOMARKERS OF AGING	04-01-96/04-30-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	153,618
5 R01AG11080-04	SELL, DAVID R PENTOSIDINE AS A BIOMARKER OF AGING	04-01-96/03-31-97	CASE WESTERN RESERVE UNIVERSITY	148,050
5 P01AG11084-04	DEMENT, WILLIAM C CIRCADIAN AND HOMEOSTATIC DETERMINANTS OF SLEEP IN AGING	06-18-96/05-31-97	STANFORD UNIVERSITY	771,261
3 P01AG11084-04S1	DEMENT, WILLIAM C CIRCADIAN AND HOMEOSTATIC DETERMINANTS OF SLEEP IN AGING	09-15-96/05-31-97	STANFORD UNIVERSITY	32,200
5 R01AG11085-04	ELLEDGE, STEPHEN J CELL CYCLE GENES AND CELLULAR SENESCENCE AND AGING	02-01-96/03-31-97	BAYLOR COLLEGE OF MEDICINE	138,831
2 R01AG11087-04A1	MC FADDEN, PHILIP N DETERMINANTS OF LONGEVITY IN NEURONAL CELLS	01-01-96/	OREGON STATE UNIVERSITY	
5 R01AG11098-03	LIU, JAMES H PROGESTOGEN EFFECT ON BONE AND COGNITION IN MENOPAUSE	03-06-96/02-28-97	UNIVERSITY OF CINCINNATI	514,772
5 R01AG11099-04	CRUICKSHANKS, KAREN J EPIDEMIOLOGY OF AGE-RELATED HEARING LOSS	03-01-96/02-28-97	UNIVERSITY OF WISCONSIN MADISON	438,757

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 R01AG11101-04	EVANS, DENIS A RISK FACTORS FOR INCIDENT ALZHEIMERS DISEASE	03-29-96/02-28-97	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	1,562,890
5 R01AG11119-04	GUARENTE, LEONARD P CELL SENESCENCE IN SACCHAROMYCES CEREVISIAE	03-06-96/02-28-97	MASSACHUSETTS INSTITUTE OF TECHNOLOG	157,182
5 R01AG11123-16	WOOD, JOHN G FUNCTIONAL COMPARTMENTALIZATION OF NEURONS AND GLIA	06-01-96/05-31-98	EMORY UNIVERSITY	177,808
5 R01AG11124-04	RIGNEY, DAVID R BIOMATHEMATICS OF CYCLIN DURING CELL SENESCENCE	02-05-96/12-31-96	BETH ISRAEL DEACONESS MEDICAL CENTER	102,594
7 R01AG11130-02	PAPPOLLA, MIGUEL A MUTATIONS OXIDATIVE STRESS AND AMYLOIDOGENSIS	09-30-96/08-31-97	UNIVERSITY OF SOUTH ALABAMA	179,500
2 R01AG11143-05	MC CORMICK, WAYNE C LONGTERM CARE UTILIZATION IN JAPANESE AMERICANS	09-15-96/06-30-97	UNIVERSITY OF WASHINGTON	242,132
3 R01AG11144-03S2	BECKER, GAYLENE CULTURAL RESPONSES TO ILLNESS IN THE MINORITY AGED	08-01-96/08-31-96	UNIVERSITY OF CALIFORNIA SAN FRANCIS	2,473
5 R01AG11144-04	BECKER, GAYLENE CULTURAL RESPONSES TO ILLNESS IN THE MINORITY AGED	09-01-96/08-31-97	UNIVERSITY OF CALIFORNIA SAN FRANCIS	254,450
3 R01AG11152-04S1	CHAPLESKI, ELIZABETH LONG TERM CARE--SOCIAL NETWORKS AND AMERICAN INDIAN AGE	08-28-96/09-30-97	WAYNE STATE UNIVERSITY	40,000
5 R25AG11197-05	RANKIN, ERIC D THREE-TIERED ALZHEIMERS TRAINING FOR WV PROFESSIONALS	07-15-96/06-30-97	WEST VIRGINIA UNIVERSITY	108,000
5 R25AG11213-05	POTTER, JANE F REACHING RURAL COMMUNITIES WITH ALZHEIMERS EDUCATION	07-22-96/06-30-97	UNIVERSITY OF NEBRASKA MEDICAL CENTE	108,000
7 R25AG11216-06	LOMBARDO, NANCY E BOSTON MINORITY DEMENTIA OUTREACH AND EDUCATION PROGRAM	01-20-97/06-30-97	WELLESLEY COLLEGE	84,868
5 R25AG11219-05	CONNELL, CATHLEEN M MICHIGAN ALZHEIMERS DISEASE COMMUNITY EDUCATION	09-20-96/06-30-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	103,515
5 R01AG11220-03	FIELD, DOROTHY RELATIONSHIP PRECURSORS OF WELL BEING IN OLD AGE	09-15-96/08-31-97	PUBLIC HEALTH INSTITUTE	101,740
5 R29AG11223-03	CUTLER, DAVID M PUBLIC POLICY FOR AN AGING SOCIETY	03-15-96/01-31-98	NATIONAL BUREAU OF ECONOMIC RESEARCH	93,774

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
3 R01AG11227-03S1	NESTLER, JOHN E INSULIN REGULATION OF HUMAN ADRENAL ANDROGEN METABOLISM	03-01-96/12-31-97	VIRGINIA COMMONWEALTH UNIVERSITY	47,435
5 R01AG11230-04	RAZ, NAFTALI NEURAL CORRELATES OF AGE-RELATED DIFFERENCES IN MEMORY	07-17-96/06-30-98	UNIVERSITY OF MEMPHIS	112,444
5 R01AG11233-03	RUBINSTEIN, ROBERT L CHRONIC POVERTY AND THE SELF IN LATER LIFE	09-01-96/08-31-97	PHILADELPHIA GERIATRIC CTR-FRIEDMAN	159,595
5 R01AG11234-04	KATZ, IRA R DELIRUM RECONSIDERED--ACUTE COGNITIVE IN THE AGED	03-05-96/02-28-97	UNIVERSITY OF PENNSYLVANIA	247,861
2 R01AG11235-03A1	CRIMMINS, EILEEN M ACTIVE LIFE EXPECTANCY IN THE OLDER POPULATION	08-15-96/05-31-97	UNIVERSITY OF SOUTHERN CALIFORNIA	136,258
5 R29AG11241-04	FISHER, JANE E CLASSIFICATION OF AGITATION IN ALZHEIMER'S DISEASE	09-01-96/08-31-97	UNIVERSITY OF NEVADA RENO	96,498
5 R29AG11248-05	MINTZER, JACOBO E CAREGIVING FOR ALZHEIMERS PATIENTS	06-01-96/05-31-98	MEDICAL UNIVERSITY OF SOUTH CAROLINA	95,874
5 R01AG11249-04	BURKE, DAVID T AGING-RELATED REACTIVATION OF X CHROMOSOME GENES	02-01-96/12-31-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	180,939
3 R01AG11249-04S1	BURKE, DAVID T AGING RELATED REACTIVATION OF X CHROMOSOME GENES	09-30-96/12-31-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	40,409
5 R01AG11255-03	KREBS, DAVID E VESTIBULAR REHAB & STABILITY MODELING FOR OLDER PATIENTS	09-01-96/08-31-97	MASSACHUSETTS GENERAL HOSPITAL	209,675
5 P60AG11268-05	COHEN, HARVEY J CLAUDE D PEPPER OLDER AMERICANS INDEPENDENCE CENTERS	07-17-96/06-30-98	DUKE UNIVERSITY	1,235,060
5 R01AG11290-03	MEHTA, PANKAJ D CYTOKINES IN DOWN SYNDROME--LINK TO AD NEUROPATHOLOGY	09-01-96/08-31-97	INSTITUTE FOR BASIC RES IN DEV DISAB	187,829
5 R01AG11294-05	JOHN, KENNETH R NAVAJO NATION COMPRESHENSIVE LONGTERM CARE STUDY	07-01-96/06-30-98	UNIVERSITY OF NORTH TEXAS	177,406
5 R25AG11325-05	CUMMINGS, JEFFREY L LOS ANGELES AREA ALZHEIMER'S OUTREACH PROGRAM (LAAAOP)	07-22-96/06-30-97	UNIVERSITY OF CALIFORNIA LOS ANGELES	105,787
5 R01AG11331-05	CAPLAN, ARNOLD I EXTRACELLULAR MATRIX AND AGING (SKIN)	06-01-96/05-31-98	CASE WESTERN RESERVE UNIVERSITY	362,949

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 P01AG11337-03	YOUNG, ANNE B METABOLIC & EXCITOTOXIC CASCADE IN AGING & ALZHEIMERS	04-01-96/03-31-97	MASSACHUSETTS GENERAL HOSPITAL	1,099,728
5 U01AG11343-05	FRENCH, FRANK S TRANSCRIPTION REGULATOR MUTATIONS IN PROSTATE CANCER	07-01-96/07-31-97	UNIVERSITY OF NORTH CAROLINA CHAPEL	274,740
5 R01AG11350-04	RUSSELL, MICHAEL J ANIMAL MODEL OF ALZHEIMER'S DISEASE	07-22-96/05-31-98	UNIVERSITY OF CALIFORNIA DAVIS	159,585
5 R29AG11351-04	SKINNER, MICHAEL H COGNITIVE EFFECTS OF ANTIHYPERTENSIVE DRUGS IN AGED RATS	06-01-96/05-31-97	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	98,232
5 R01AG11354-05	ZARIT, STEVEN H MENTAL HEALTH OF CAREGIVERS OF THE ELDERLY	06-11-96/05-31-98	PENNSYLVANIA STATE UNIVERSITY-UNIV P	295,813
5 P01AG11355-02	OLNEY, JOHN W EXCITATORY TRANSMITTERS, MEMORY, AGING AND DEMENTIA	03-15-96/01-31-97	WASHINGTON UNIVERSITY	794,750
5 P01AG11370-02	SONNTAG, WILLIAM E GROWTH HORMONE & IGF-1 IN CNS & CEREBROVASCULAR AGING	04-12-96/03-31-97	WAKE FOREST UNIVERSITY	441,461
5 R37AG11375-04	KAPLAN, GEORGE A HEALTH AND FUNCTION OVER THREE DECADES IN ALAMEDA COUNTY	04-24-96/03-31-97	PUBLIC HEALTH INSTITUTE	403,791
5 R01AG11378-04	JACK, CLIFFORD R MR HIPPOCAMPAL CHANGES IN ALZHEIMER'S DISEASE AND AGING	06-01-96/05-31-97	MAYO FOUNDATION	189,102
3 R01AG11380-02S1	BREITNER, JOHN C EPIDEMIOLOGY OF ALZHEIMER'S DEMENTIA IN CACHE COUNTY, UT	12-01-95/	DUKE UNIVERSITY	
3 R01AG11380-03S2	BREITNER, JOHN C S EPIDEMIOLOGY OF ALZHEIMERS DEMENTIA IN CACHE COUNTY UT	09-30-96/08-31-97	DUKE UNIVERSITY	20,000
5 R01AG11382-05	POLLAK, CHARLES P DISRUPTIVE NOCTURNAL BEHAVIORS IN ELDER-CAREGIVER PAIRS	08-01-96/06-30-98	OHIO STATE UNIVERSITY	181,938
2 R01AG11384-04	POTTER, PAMELA E CHOLINERGIC RECEPTOR CHANGES IN ALZHEIMER MODEL	12-01-95/	MONTEFIORE MEDICAL CENTER (BRONX, NY	
7 R01AG11385-04	MUCKE, LENNART TRANSGENIC MODELS TO STUDY ALZHEIMERS DISEASE	09-30-96/03-31-98	J. DAVID GLADSTONE INSTITUTES	
3 R01AG11385-04S1	MUCKE, LENNART TRANSGENIC MODELS TO STUDY ALZHEIMERS DISEASE	09-30-96/03-31-98	J. DAVID GLADSTONE INSTITUTES	300,000

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
2 R01AG11386-04A1	MONTEIRO, MERVYN J NEUROFILAMENT KINASES	09-15-96/08-31-97	UNIVERSITY OF MARYLAND BALT PROF SCH	217,032
5 R01AG11398-05	GOODMAN, MYRON F DNA ENZYMES IN AGING IN DIVIDING AND NONDIVIDING CELLS	06-01-96/05-31-98	UNIVERSITY OF SOUTHERN CALIFORNIA	343,903
5 R29AG11403-03	FERRARIS, RONALDO P DIETARY REGULATION OF NUTRIENT ABSORPTION IN AGING	03-15-96/02-28-97	UNIVERSITY OF MEDICINE & DENTISTRY O	103,374
5 R29AG11407-04	ZIMMERMAN, SHERYL I AGED WITH DEMENTIA--FACILITY EFFECTS ON HEALTH OUTCOMES	09-01-96/02-28-98	UNIVERSITY OF MARYLAND BALT PROF SCH	67,743
7 R01AG11427-05	PFEFFERBAUM, ADOLF MR SPECTROSCOPIC BRAIN IMAGING IN AGING AND DEMENTIA	06-01-97/06-30-97	SRI INTERNATIONAL	139,304
5 R01AG11441-04	WRONSKI, THOMAS J NOVEL HORMONE DELIVERY SYSTEM FOR TREATING OSTEOPENIA	08-01-96/07-31-97	UNIVERSITY OF FLORIDA	173,122
2 R01AG11451-04	HOYER, WILLIAM J AGING OF VISUAL/COGNITIVE MECHANISMS	08-26-96/06-30-97	SYRACUSE UNIVERSITY AT SYRACUSE	133,965
5 R01AG11465-03	SCARPACE, PHILIP J BROWN FAT THERMOGENESIS RESPONSE TO COLD AND AGE	12-20-95/11-30-96	UNIVERSITY OF FLORIDA	122,570
5 R01AG11472-03	THORPE, SUZANNE R LIPOPROTEIN OXIDATION IN ATHEROSCLEROSIS AND AGING	02-01-96/12-31-96	UNIVERSITY OF SOUTH CAROLINA AT COLU	184,291
5 R01AG11475-04	DAYNES, RAYMOND A PDGF EFFECTS ON T-CELL BEHAVIOR IN AGING	04-01-96/03-31-98	UNIVERSITY OF UTAH	202,957
2 R01AG11480-04A1	VOGT, BRENT A ALZHEIMER'S DISEASE CLASSES AND CINGULATE REORGANIZATION	07-01-96/	WAKE FOREST UNIVERSITY	
5 R01AG11491-04	DOBSON, JAMES G, JR MECHANISMS OF AGING--ENHANCED HEART ADENOSINE	05-01-96/04-30-97	UNIVERSITY OF MASSACHUSETTS MEDICAL	203,720
2 R44AG11507-02A2	CARD, JOSEFINA J ESTABLISHING THE GERONTOLOGY INSTRUMENT ARCHIVE (GINA)	11-01-95/	SOCIOMETRICS CORPORATION	
5 R44AG11517-03	MENKE, STEPHEN A HOMECARE SUITES--A HOMECARE ALTERNATIVE FOR ELDERS	03-01-96/01-31-98	MOBILE CARE, INC.	276,542
2 R01AG11525-04	ANDERSON, STEPHEN STRUCTURAL ASPECTS OF APP FUNCTION AND PATHOLOGY	08-26-96/06-30-97	UNIV OF MED/DENT NJ-R W JOHNSON MED	222,477

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 R01AG11526-05	DAVIES, THERESA A AMYLOID PRECURSOR PROTEIN IN NORMAL/DEMENTIA PLATELETS	07-20-96/06-30-97	BOSTON UNIVERSITY	277,082
5 R01AG11530-04	MC CALLUM, RODERICK E AGING AND TNF-GLUCOCORTICOID INTERACTIONS IN SEPSIS	08-15-96/07-31-98	TEXAS A&M UNIVERSITY HEALTH SCIENCE	162,129
5 P01AG11531-10	WISNIEWSKI, HENRY M CHANGES IN FUNCTION AMONG MENTALLY RETARDED ADULTS	07-12-96/06-30-98	NEW YORK ST OFF OF MR AND DEV DISAB	707,161
3 P01AG11531-10S1	WISNIEWSKI, HENRY M CHANGES IN FUNCTION AMONG MENTALLY RETARDED ADULTS	07-24-96/06-30-98	NEW YORK ST OFF OF MR AND DEV DISAB	43,439
5 R44AG11533-03	TENNSTEDT, SHARON L OLDER PATIENTS AND PHYSICIANS AS PARTNERS	04-01-96/03-31-98	NEW ENGLAND RESEARCH INSTITUTES, INC	286,951
2 R01AG11534-04	AUSTAD, STEVEN N MANIPULATION OF AGING IN OPOSSUMS: DIETARY RESTR	12-01-95/	UNIVERSITY OF IDAHO	
3 R01AG11536-07S2	WEITZMAN, SIGMUND A OXYGEN RADICAL INDUCED MALIGNANT TRANSFORMATION	08-01-96/07-31-97	NORTHWESTERN UNIVERSITY	49,288
5 P01AG11542-04	LEE, VIRGINIA M IN VITRO AND IN VIVO MODELS OF ALZHEIMER'S DISEASE	09-30-96/08-31-97	UNIVERSITY OF PENNSYLVANIA	900,932
5 R01AG11549-03	GILMORE, GROVER C CONTRAST ENHANCEMENT AND READING IN ALZHEIMERS DISEASE	07-01-96/06-30-97	CASE WESTERN RESERVE UNIVERSITY	168,641
2 R01AG11552-04	WILMOTH, JOHN R MEASUREMENT AND ANALYSIS OF OLDEST-OLD MORTALITY	09-30-96/06-30-97	UNIVERSITY OF CALIFORNIA BERKELEY	157,987
1 R01AG11560-01A4	RILEY, PATRICK O SEGMENTAL MOMENTUM ANALYSIS OF RISING FROM SIT TO STAND	04-01-96/	MASSACHUSETTS GENERAL HOSPITAL	
5 R01AG11561-03	VOOGT, JAMES L AGING AND CHANGES IN DOPAMINE NEURONS	09-19-96/08-31-97	UNIVERSITY OF KANSAS MEDICAL CENTER	150,387
5 R29AG11564-03	PAVALKO, ELIZA K WORK AND HEALTH AMONG WOMEN IN MIDLIFE AND BEYOND	04-09-96/03-31-97	INDIANA UNIVERSITY BLOOMINGTON	101,915
5 R01AG11567-03	IDLER, ELLEN L EPIDEMIOLOGY OF SELF-RATED HEALTH AND FUNCTIONAL ABILITY	07-01-96/06-30-98	RUTGERS THE STATE UNIV NEW BRUNSWICK	95,289
2 R13AG11570-04	WISE, DAVID A SUMMER INSTITUTE WORKSHOP IN AGING AND HEALTH CARE	07-01-96/06-30-97	NATIONAL BUREAU OF ECONOMIC RESEARCH	30,000

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 R01AG11577-02	PERLMUTTER, DAVID H SEC RECEPTOR AND ALZHEIMERS DISEASE	12-20-95/11-30-96	WASHINGTON UNIVERSITY	152,301
3 P01AG11585-02S1	GLASER, RONALD M STRESS, AGING, AND NEUROENDOCRINE/IMMUNE CHANGES	05-24-96/07-31-96	OHIO STATE UNIVERSITY	20,294
5 P01AG11585-03	GLASER, RONALD M STRESS, AGING, AND NEUROENDOCRINE/IMMUNE CHANGES	09-01-96/07-31-97	OHIO STATE UNIVERSITY	1,022,506
5 R01AG11595-03	GOLDSTEIN, IRIS B BLOOD PRESSURE, COGNITIVE FUNCTION, AND MRI	04-01-96/03-31-98	UNIVERSITY OF CALIFORNIA LOS ANGELES	378,825
1 R01AG11599-01A4	MC GINN, MICHAEL D MECHANISMS OF AGE-RELATED EXCITOTOXICITY IN BRAINSTEM	07-01-96/	UNIVERSITY OF CALIFORNIA DAVIS	
7 R29AG11602-03	WU, GE AGE, SENSATION AND FALLS--BIOMECHANICS AND PREVENTION	01-01-97/07-31-97	UNIVERSITY OF VERMONT & ST AGRIC COL	102,659
5 R01AG11604-02	AIKEN, JUDD M DIETARY RESTRICTION, MT DNA ABNORMALITIES, AND AGING	07-12-96/06-30-97	UNIVERSITY OF WISCONSIN MADISON	126,158
5 R29AG11605-03	SHARPS, MATTHEW J AGING AND MEMORY FOR RELATIONAL AND IMAGERIC INFORMATION	07-01-96/06-30-97	CALIFORNIA STATE UNIVERSITY FRESNO	92,761
2 R01AG11622-04	MADDEN, DAVID J NEUROIMAGING OF AGE RELATED COGNITIVE CHANGES	09-25-96/08-31-97	DUKE UNIVERSITY	443,082
5 R01AG11623-02	YEUNG, CHO-YAU BRIAN SPECIFIC AMYLOID PLAQUE FORMATION	02-05-96/11-30-96	UNIVERSITY OF ILLINOIS AT CHICAGO	233,752
5 R37AG11624-03	MOR, VINCENT DO GOOD NURSING HOMES ACHIEVE GOOD OUTCOMES?	09-30-96/06-30-97	BROWN UNIVERSITY	265,120
5 R01AG11628-03	VER HOEVE, JAMES NEURAL BASES OF VISUAL DEFICITS DURING AGING	05-21-96/04-30-97	UNIVERSITY OF WISCONSIN MADISON	283,161
5 R01AG11636-04	SCHULTZ, STEVE C THREE-DIMENSIONAL STRUCTURE OF THE ENDS OF CHROMOSOMES	09-01-96/08-31-97	UNIVERSITY OF COLORADO AT BOULDER	187,474
5 R29AG11638-04	SMITH, GLENN E PREDICTORS OF INSTITUTIONALIZATION IN DEMENTIA PATIENTS	09-01-96/08-31-97	MAYO FOUNDATION	97,526
5 R01AG11643-04	HARRISON, DAVID E SELECTING AND IDENTIFYING GENES IMPORTANT IN LONGEVITY	09-01-96/08-31-97	JACKSON LABORATORY	397,244

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FY: 96				
5 R01AG11644-04	TOWER, JOHN G DROSOPHILA LONGEVITY ASSURANCE GENES	09-01-96/08-31-97	UNIVERSITY OF SOUTHERN CALIFORNIA	198,856
5 R01AG11653-04	MOUNTZ, JOHN D CORRECTION OF T-CELL AGING IN TRANSGENIC MICE	09-01-96/07-31-97	UNIVERSITY OF ALABAMA AT BIRMINGHAM	182,759
5 R01AG11658-04	CAMPISI, JUDITH SENESCENCE AND LONGEVITY-MODULATING GENES	09-01-96/08-31-97	UNIVERSITY OF CALIFORNIA BERKELEY	271,804
5 R01AG11659-04	WARD, SAMUEL LIFESPAN ENHANCING MUTATIONS IN C ELEGANS	08-23-96/07-31-97	UNIVERSITY OF ARIZONA	190,898
5 R01AG11660-04	JAZWINSKI, S MICHAL YEAST--A SOURCE AND A TEST SYSTEM FOR MAMMALIAN LAGS	09-01-96/08-31-97	LOUISIANA STATE UNIV MED CTR NEW ORL	278,322
7 P50AG11669-04	JETTE, ALAN M RESEARCH CENTER ON APPLIED GERONTOLOGY	09-30-96/07-31-97	BOSTON UNIVERSITY	392,542
5 P50AG11684-05	BALL, KARLENE K ENHANCING MOBILITY IN THE ELDERLY	09-01-96/07-31-97	UNIVERSITY OF ALABAMA AT BIRMINGHAM	378,904
5 R01AG11687-04	MILLER, RICHARD A GENETIC CONTROL OF LONGEVITY IN MICE	09-01-96/08-31-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	297,954
3 R01AG11687-04S1	MILLER, RICHARD A GENETIC CONTROL OF LONGEVITY	09-30-96/08-31-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	40,409
5 R01AG11703-03	FRIED, LINDA P RISK FACTORS FOR PHYSICAL DISABILITY IN AGING WOMEN	06-01-96/05-31-97	JOHNS HOPKINS UNIVERSITY	386,387
5 R29AG11706-04	MC CLELLAN, MARK B HEALTH TECHNOLOGIES' COSTS AND OUTCOMES IN THE ELDERLY	06-01-96/05-31-97	NATIONAL BUREAU OF ECONOMIC RESEARCH	108,991
3 P50AG11711-03S1	PILLEMER, KARL A CORNELL CENTER ON APPLIED GERONTOLOGY	11-10-95/07-31-96	CORNELL UNIVERSITY ITHACA	77,133
5 P50AG11711-04	PILLEMER, KARL A CORNELL CENTER ON APPLIED GERONTOLOGY	09-15-96/07-31-97	CORNELL UNIVERSITY ITHACA	446,148
3 P50AG11715-03S1	PARK, DENISE C SOUTHEASTERN CENTER FOR APPLIED COGNITIVE AGING RESEARCH	03-15-96/07-31-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	66,267
5 P50AG11715-04	PARK, DENISE C CENTER FOR APPLIED COGNITIVE RESEARCH ON AGING	09-30-96/07-31-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	531,189

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FY: 96				
5 P50AG11719-04	MORRIS, JOHN N CENTER OF RESEARCH ON APPLIED GERONTOLOGY	09-19-96/07-31-97	HEBREW REHABILITATION CENTER FOR AGE	508,908
5 R01AG11722-04	CURTSINGER, JAMES W QTL-MAPPING OF LONGEVITY GENES IN DROSOPHILA	09-01-96/08-31-97	UNIVERSITY OF MINNESOTA TWIN CITIES	211,045
5 R01AG11725-02	BEHRMAN, JERE R INTRAFAMILY RESOURCE ALLOCATIONS AND THEIR CONSEQUENCES	09-01-96/08-31-97	UNIVERSITY OF PENNSYLVANIA	212,481
5 R01AG11728-04	LUNDBLAD, VICTORIA J TELOMERE REPLICATION AND SENESCENCE IN YEAST	09-01-96/08-31-97	BAYLOR COLLEGE OF MEDICINE	182,727
5 P50AG11748-04	CZAJA, SARA J MIAMI CENTER ON HUMAN FACTORS AND AGING RESEARCH	08-01-96/07-31-97	UNIVERSITY OF MIAMI CORAL GABLES	289,464
5 R01AG11755-04	GREENAMYRE, JOHN T ELECTRON TRANSPORT ENZYMES IN ALZHEIMERS DISEASE	07-15-96/04-30-97	EMORY UNIVERSITY	210,341
2 R01AG11758-03A1	HAYWARD, MARK D ACTIVE LIFE EXPECTANCY IN THE OLDER POPULATION	08-15-96/07-31-97	PENNSYLVANIA STATE UNIVERSITY-UNIV P	93,969
5 R01AG11759-05	FUTRELL, NANCY N CALICIFICATION AND LACUNE FORMATION IN AGED RAT BRAIN	03-06-96/01-31-98	MEDICAL COLLEGE OF OHIO AT TOLEDO	178,931
5 R37AG11761-03	LEE, RONALD D ECONOMIC DEMOGRAPHY OF INTER-AGE TRANSFER	04-01-96/03-31-97	UNIVERSITY OF CALIFORNIA BERKELEY	200,774
5 R01AG11762-03	SCHELLENBERG, GERARD D CLONING OF THE CHROMOSOME 14 ALZHEIMERS DISEASE GENE	05-01-96/04-30-97	UNIVERSITY OF WASHINGTON	224,581
5 R44AG11771-03	LANE, STEPHEN S NONINTERACTIVE HOME MONITOR PHASE II	09-01-96/12-31-97	AMRON CORPORATION	429,508
5 R01AG11773-03	MACDONALD, MARYELLEN C SENTENCE PROCESSING IN NORMAL AGING AND DEMENTIA	09-15-96/08-31-98	UNIVERSITY OF SOUTHERN CALIFORNIA	237,519
5 R44AG11787-03	TENNSTEDT, SHARON L PHYSICAL VS MENTAL HEALTH OF OLDER PERSONS--A VIDEO	04-18-96/12-31-97	NEW ENGLAND RESEARCH INSTITUTES, INC	352,728
5 R29AG11805-04	BABB, TONY G NORMAL AGING AND VENTILATORY LIMITS TO PERFORMANCE	04-01-96/03-31-97	UNIVERSITY OF TEXAS SW MED CTR/DALLA	98,998
5 R01AG11810-03	CLARK, FLORENCE A EFFECTIVENESS OF TWO OT TREATMENTS FOR THE ELDERLY	02-22-96/04-30-97	UNIVERSITY OF SOUTHERN CALIFORNIA	279,882

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 R01AG11811-05	EVANS, WILLIAM J PROTEIN, ENERGY & EXERCISE: EFFECTS ON SENESCENT MUSCLE	05-01-96/04-30-97	PENNSYLVANIA STATE UNIVERSITY-UNIV P	263,675
3 R01AG11811-05S1	EVANS, WILLIAM J PROTEIN, ENERGY & EXERCISE--EFFECTS ON SENESCENT MUSCLE	09-15-96/04-30-97	PENNSYLVANIA STATE UNIVERSITY-UNIV P	24,840
5 R01AG11812-04	FIATARONE, MARIA A EXERCISE TRAINING IN FUNCTIONALLY IMPAIRED OLDER WOMEN	05-01-96/04-30-97	TUFTS UNIVERSITY BOSTON	352,489
5 R01AG11814-03	FERAMISCO, JAMES R MECHANISMS OF HUMAN CELL SENESCENCE	09-01-96/08-31-97	UNIVERSITY OF CALIFORNIA SAN DIEGO	194,195
5 R01AG11815-03	WOLF, DOUGLAS A DYNAMIC MICROSIMULATION OF ELDERS' HEALTH AND WELL-BEING	07-01-96/06-30-97	SYRACUSE UNIVERSITY AT SYRACUSE	278,059
5 R01AG11816-03	KENYON, CYNTHIA J GENETIC ANALYSIS OF AGING IN C ELEGANS	04-01-96/03-31-97	UNIVERSITY OF CALIFORNIA SAN FRANCIS	193,309
5 R01AG11833-03	TOWER, JOHN G AGING-SPECIFIC GENE EXPRESSION IN DROSOPHILA	12-05-95/11-30-96	UNIVERSITY OF SOUTHERN CALIFORNIA	176,577
5 R01AG11836-03	GALE, WILLIAM G PUBLIC POLICIES EFFECTS ON SAVING FOR RETIREMENT	08-01-96/07-31-97	BROOKINGS INSTITUTION	103,463
5 R01AG11840-02	HSIAO, KAREN K MOLECULAR PATHOPHYSIOLOGY OF PRP AND APP MUTANTS	09-15-96/08-31-97	UNIVERSITY OF MINNESOTA TWIN CITIES	164,766
1 R01AG11842-01A1	GAUDREAU, PIERRETTE CHARACTERIZATION OF GRF RECEPTORS IN AGING	12-01-95/	NOTRE DAME HOSPITAL	
5 R01AG11850-02	GREENWOOD, MICHAEL J ELDERLY US IMMIGRANTS	02-20-96/01-31-97	UNIVERSITY OF COLORADO AT BOULDER	203,898
5 R01AG11851-02	KIRSH, DAVID COMPUTATIONAL STUDY OF COMPENSATION	05-17-96/03-31-97	UNIVERSITY OF CALIFORNIA SAN DIEGO	146,978
5 R01AG11852-03	MANTYH, PATRICK W AGGREGATION/DEPOSITION OF B AMYLOID IN ALZHEIMER DISEASE	07-11-96/06-30-97	UNIVERSITY OF MINNESOTA TWIN CITIES	132,988
5 R01AG11854-03	GERON, SCOTT M SATISFACTION OF FRAIL ELDERLY WITH HOME BASED SERVICES	09-01-96/08-31-98	BOSTON UNIVERSITY	133,457
5 R01AG11859-03	PEARLSON, GODFREY D AGING, BRAIN IMAGING, AND COGNITION	07-01-96/06-30-98	JOHNS HOPKINS UNIVERSITY	366,960

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 R29AG11862-03	HEBERT, LIESI E EPIDEMIOLOGY OF A D IN WOMEN--RISK AND IMPACT	08-15-96/06-30-97	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	97,566
1 R01AG11864-01A3	BOGDEN, JOHN D MICRONUTRIENTS AND IMMUNITY IN OLDER PEOPLE	12-01-95/	UNIVERSITY OF MEDICINE & DENTISTRY O	
2 R01AG11871-04	HARDY, JOHN A CHROMOSOME 14 ALZHEIMER'S DISEASE	07-01-96/	UNIVERSITY OF SOUTH FLORIDA	
5 R01AG11874-03	WISE, DAVID A FIRM HEALTH INSURANCE PLANS	07-01-96/06-30-97	NATIONAL BUREAU OF ECONOMIC RESEARCH	255,360
5 R01AG11875-03	LI, CHRISTINE BETA-AMYLOID PRECURSOR-LIKE GENE IN C. ELEGANS	09-15-96/08-31-97	BOSTON UNIVERSITY	116,456
7 R29AG11876-03	POWERS, DOUGLAS C AGE AND VACCINE MODULATION OF INFLUENZA IMMUNITY	08-15-96/03-31-97	EASTERN VIRGINIA MED SCH/MED COL HAM	68,020
5 R01AG11886-03	LITVIN, SANDRA GRANDDAUGHTERS' INVOLVEMENT IN FILIAL CAREGIVING	09-01-96/08-31-97	PHILADELPHIA GERIATRIC CTR-FRIEDMAN	127,184
5 R29AG11895-03	GRUBER, JONATHAN H HEALTH INSURANCE REFORM, OLDER WORKERS, AND RETIREMENT	08-01-96/07-31-98	NATIONAL BUREAU OF ECONOMIC RESEARCH	107,635
5 R01AG11899-03	WASCO, WILMA M APP-RELATED GENES AND ALZHEIMER'S DISEASE	02-20-96/12-31-96	MASSACHUSETTS GENERAL HOSPITAL	233,863
5 R01AG11903-03	CUELLO, A CLAUDIO TROPHIC FACTOR-INDUCED SYNAPTIC REGROWTH IN THE CNS	09-15-96/08-31-98	MC GILL UNIVERSITY	84,230
5 R01AG11906-04	STEPHENS, MARY A MULTIPLE ROLES OF MIDDLE GENERATION CAREGIVING WOMEN	09-01-96/08-31-98	KENT STATE UNIVERSITY AT KENT	212,931
5 R01AG11913-02	KRISHNAN, K RANGA ALZHEIMERS DISEASE--ANTEMORTEM MARKERS	04-01-96/03-31-97	DUKE UNIVERSITY	246,559
5 P01AG11915-03	WEINDRUCH, RICHARD H DIETARY RESTRICTION AND AGING	03-05-96/02-28-97	UNIVERSITY OF WISCONSIN MADISON	738,332
3 P01AG11915-03S1	WEINDRUCH, RICHARD H DIETARY RESTRICTION AND AGING	09-23-96/02-28-97	UNIVERSITY OF WISCONSIN MADISON	71,136
1 R01AG11921-01A2	GIBSON, GARY E SIGNAL TRANSDUCTION SYSTEMS IN ALZHEIMERS DISEASE	02-20-96/01-31-97	WINIFRED MASTERSON BURKE MED RES INS	179,385

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 R01AG11925-03	ROHER, ALEX E CHEMISTRY AND BIOLOGY OF ALZHEIMER'S AMYLOID PROTEINS	03-01-96/11-30-96	SUN HEALTH RESEARCH INSTITUTE	183,266
5 R01AG11932-03	SINGH, TOOLSEE J PROLINE DIRECTED KINASES IN ALZHEIMERS DISEASE	08-01-96/07-31-97	INSTITUTE FOR BASIC RES IN DEV DISAB	176,214
5 P01AG11952-03	RAHMAN, OMAR DETERMINANTS OF HEALTHY AGING IN RURAL POPULATIONS	08-01-96/07-31-97	RAND CORPORATION	405,059
5 R25AG11953-04	JONES, JAMES M PREDOCTORAL RESEARCH SCIENTIST PROGRAM IN PSYCHOLOGY	09-01-96/08-31-98	AMERICAN PSYCHOLOGICAL ASSOCIATION	59,443
5 R01AG11957-03	DEATON, ANGUS S AGING AND SAVING IN DEVELOPED AND DEVELOPING COUNTRIES	08-01-96/07-31-97	NATIONAL BUREAU OF ECONOMIC RESEARCH	26,836
5 R01AG11958-03	WYSS, J MICHAEL MECHANISMS OF AGE RELATED PLASTICITY IN THE CORTEX	05-21-96/04-30-97	UNIVERSITY OF ALABAMA AT BIRMINGHAM	179,326
5 R01AG11965-03	BOX, HAROLD C MULTILESIONAL ASSAYS FOR OXIDATIVE DNA DAMAGE	12-05-95/11-30-97	ROSWELL PARK CANCER INSTITUTE	109,072
5 R29AG11966-05	SANDS, LAURA P DETECTING ACUTE COGNITIVE CHANGES IN ALZHEIMERS PATIENTS	09-01-96/08-31-97	MOUNT ZION INSTITUTE ON AGING	99,425
5 R01AG11967-05	CORTOPASSI, GINO A AGING, SOMATIC MUTATION, AND HEART DISEASE	05-01-96/04-30-98	UNIVERSITY OF CALIFORNIA DAVIS	115,140
7 R01AG11970-02	ERSHLER, WILLIAM B INTERLEUKIN 6 AND OSTEOPOROSIS	08-07-96/04-30-97	EASTERN VIRGINIA MED SCH/MED COL HAM	260,548
3 R01AG11970-02S1	ERSHLER, WILLIAM B INTERLEUKIN 6 AND OSTEOPOROSIS	09-30-96/04-30-97	EASTERN VIRGINIA MED SCH/MED COL HAM	55,125
1 R01AG11979-01A3	CHELLURI, LAKSHMIPATHI QUALITY OF LIFE AFTER MECHANICAL VENTILATION IN THE AGED	08-01-96/06-30-97	UNIVERSITY OF PITTSBURGH AT PITTSBUR	226,462
5 R29AG11985-04	MYERS, ELIZABETH R BIOMECHANICS OF VERTEBRAL FRACTURE RISK	08-01-96/07-31-97	BETH ISRAEL DEACONESS MEDICAL CENTER	118,072
7 R01AG11987-03	COLBY, HOWARD D CHANGES IN ADRENAL ALPHA-TOCOPHEROL WITH AGING	03-20-96/12-31-97	ALBANY COLLEGE OF PHARMACY	139,962
1 R01AG11991-01A1	MROZ, THOMAS A SOCIAL CHANGE, LIVING ARRANGEMENTS, AND ELDERLY WELFARE	04-01-96/	UNIVERSITY OF NORTH CAROLINA CHAPEL	

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FY: 96				
5 R01AG11994-03	LILLARD, LEE A HEALTH, MORTALITY, SOCIAL INSURANCE, AND SAVING	08-07-96/07-31-98	RAND CORPORATION	130,446
5 R01AG11995-02	LAWTON, M POWELL QUALITY OF LIFE, HEALTH, AND VALUATION OF LIFE BY ELDERS	02-05-96/12-31-96	PHILADELPHIA GERIATRIC CTR-FRIEDMAN	268,240
3 R01AG11995-02S1	LAWTON, M POWELL QUALITY OF LIFE, HEALTH, AND VALUATION OF LIFE BY ELDERS	04-19-96/12-31-96	PHILADELPHIA GERIATRIC CTR-FRIEDMAN	35,638
5 R01AG12019-03	SCHELLENBERG, GERARD D CLONING OF THE CHROMOSOME 8 WERNERS SYNDROME GENE	09-01-96/08-31-97	UNIVERSITY OF WASHINGTON	193,114
5 R01AG12025-03	GOLDSTEIN, MICHAEL G MEDICAL OFFICE-BASED ACTIVITY COUNSELING OF OLDER ADULTS	03-10-96/01-31-99	MIRIAM HOSPITAL	298,647
5 R01AG12028-03	HARDY, JOHN A APP TRANSFECTION TO STUDY ALPHA- AND BETA- SECRETASES	05-01-96/04-30-97	UNIVERSITY OF SOUTH FLORIDA	137,946
3 P20AG12042-03S1	PROHASKA, THOMAS MINORITY ELDERLY HEALTH PROMOTION CENTER	09-30-96/08-31-98	UNIVERSITY OF ILLINOIS AT CHICAGO	395,000
3 P20AG12044-03S1	HAZUDA, HELEN P HISPANIC HEALTHY AGING CENTER	09-19-96/08-31-98	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	394,999
1 R43AG12051-01A1	KNIERIM, PAMELA W COMPLIANCE ENHANCEMENT: AN EFFECTIVE APPROACH	08-01-95/	COSMOS, INC.	
3 P20AG12057-03S2	LEVKOFF, SUE E HEALTH PROMOTION FOR DEMENTED ETHNIC MINORITY ELDERS	06-01-96/08-31-98	HARVARD UNIVERSITY	7,196
3 P20AG12057-03S3	LEVKOFF, SUE E HEALTH PROMOTION FOR DEMENTED ETHNIC MINORITY ELDERS	09-01-96/08-31-98	HARVARD UNIVERSITY	394,999
3 P20AG12057-03S4	LEVKOFF, SUE E HEALTH PROMOTION FOR DEMENTED ETHNIC MINORITY ELDERS	09-30-96/08-31-98	HARVARD UNIVERSITY	75,108
3 P20AG12058-03S1	WILLIAMS, REDFORD B EXPLORATORY CENTER FOR RESEARCH ON HEALTH PROMOTION	09-19-96/08-31-98	DUKE UNIVERSITY	395,000
3 P20AG12058-03S2	WILLIAMS, REDFORD B EXPLORATORY CENTER FOR RESEARCH ON HEALTH PROMOTION	09-30-96/08-31-98	DUKE UNIVERSITY	68,627
3 P20AG12059-03S1	ALLEN, WALTER R FAMILY AND THE HEALTH OF AFRICAN AMERICAN ELDERLY	09-19-96/08-31-98	RAND CORPORATION	425,000

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FY: 96				
3 P20AG12072-03S1	LEVENTHAL, HOWARD PROMOTING HEALTH IN ELDERLY AFRICAN AMERICANS	09-30-96/08-31-98	RUTGERS THE STATE UNIV NEW BRUNSWICK	394,999
2 R44AG12081-02A1	GERTMAN, PAUL M INTERACTIVE HOME HEALTH COMPUTER SYSTEM FOR THE AGED	04-25-96/11-30-96	LAZO, GERTMAN AND ASSOCIATES, INC.	376,794
2 R44AG12090-02	RAGER, ROBERT CD-I IMPROVES OLDER PERSONS INTENTIONAL MEMORY SKILLS	09-26-96/04-30-97	COMPACT DISC, INC.	217,042
5 N01AG12101-007	MULIVOR, RICHARD A. GENETICALLY MARKED CELLS FOR AGING RESEARCH	02-21-96/02-28-97	CORIELL INSTITUTE FOR MEDICAL RESEAR	776,893
5 N01AG12101-008	MULIVOR, RICHARD A. GENETICALLY MARKED CELLS FOR AGING RESEARCH	09-25-96/02-28-98	CORIELL INSTITUTE FOR MEDICAL RESEAR	807,969
5 R01AG12101-04	DE LEON, MONY J PREDICTORS OF COGNITIVE DECLINE IN NORMAL AGING	09-01-96/08-31-97	NEW YORK UNIVERSITY MEDICAL CENTER	285,462
5 N01AG12102-009	BLAZER, DAN POPULATIONS FOR EPIDEMIOLOGIC STUDIES OF THE ELDERLY	02-05-96/12-31-96	DUKE UNIVERSITY	528,885
1 R01AG12109-01A2	MAJUMDAR, ADHIP N AGING AND INDUCTION OF COLORECTAL NEOPLASIA	12-01-95/	WAYNE STATE UNIVERSITY	
5 N01AG12112-009	FRIED, LINDA P WOMEN'S HEALTH AND AGING	03-25-96/12-31-96	JOHNS HOPKINS UNIVERSITY	319,072
2 N01AG12112-010	FRIED, LINDA P WOMEN'S HEALTH AND AGING	06-13-96/12-31-96	JOHNS HOPKINS UNIVERSITY	
3 N01AG12112-011	FRIED, LINDA P WOMEN'S HEALTH AND AGING	09-30-96/01-31-97	JOHNS HOPKINS UNIVERSITY	100,000
5 R01AG12112-02	CAMPBELL, SCOTT S HOMEOSTATIC FACTORS IN AGE RELATED SLEEP DISTURBANCE	02-01-96/11-30-96	CORNELL UNIVERSITY MEDICAL CENTER	206,885
5 R01AG12113-02	MC AULEY, EDWARD EXERCISE, AGING, AND PSYCHOLOGICAL FUNCTION	09-01-96/08-31-97	UNIVERSITY OF ILLINOIS URBANA-CHAMPA	283,620
3 R01AG12113-02S1	MC AULEY, EDWARD EXERCISE, AGING, AND PSYCHOLOGICAL FUNCTION	09-01-96/08-31-97	UNIVERSITY OF ILLINOIS URBANA-CHAMPA	16,522
5 N01AG12117-006	RUSSELL, ROBERT J MAINTENANCE OF A LONG TERM COLONY OF AGED HYBRID RATS	02-27-96/04-30-97	HARLAN SPRAGUE DAWLEY, INC.	524,406

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FY: 96				
5 N01AG12117-007	RUSSELL, ROBERT J MAINTENANCE OF A LONG TERM COLONY OF AGED HYBRID RATS	09-26-96/12-31-97	HARLAN SPRAGUE DAWLEY, INC.	341,554
5 R01AG12117-03	ATTARDI, GIUSEPPE MITOCHONDRIAL DNA MUTATIONS AND AGING	05-05-96/07-31-98	CALIFORNIA INSTITUTE OF TECHNOLOGY	215,738
1 R01AG12119-01A2	MAUDSLEY, ANDREW A DATA PROCESSING FOR MR SPECTROSCOPIC IMAGING	02-10-96/01-31-97	UNIVERSITY OF CALIFORNIA SAN FRANCIS	166,370
1 R01AG12120-01A1	SCHAFER, IRWIN A GLYCOSYLATION OF KERATINS IN DIFFERENTIATION AND AGING	12-01-95/	CASE WESTERN RESERVE UNIVERSITY	
5 R01AG12122-03	GRANHOLM, ANN-CHARLOTTE E AGED FOREBRAIN CHOLINERGIC NEURONS AND NGF DELIVERY	04-01-96/03-31-97	UNIVERSITY OF COLORADO HLTH SCIENCES	162,477
5 R01AG12131-03	SCHON, ERIC A MITOCHONDRIAL DNA MUTATIONS AND HUMAN AGING	06-14-96/05-31-98	COLUMBIA UNIVERSITY NEW YORK	244,976
5 R01AG12136-02	LICHSTEIN, KENNETH L BIOBEHAVIORAL APPROACH TO INSOMNIA TREATMENT	05-21-96/04-30-97	UNIVERSITY OF MEMPHIS	262,331
5 R37AG12138-02	SCHEFF, STEPHEN W AGE-RELATED CHANGES IN SYNAPTIC DENSITY	02-20-96/12-31-96	UNIVERSITY OF KENTUCKY	146,294
5 R29AG12141-03	ANDERSEN, JULIE MODELS FOR EXPLORING FREE RADICAL DAMAGE	04-08-96/03-31-97	UNIVERSITY OF SOUTHERN CALIFORNIA	115,280
5 R01AG12142-02	PARKER, CHARLES R, JR ADRENAL ANDROGEN PRODUCTION IN AGING	05-01-96/04-30-97	UNIVERSITY OF ALABAMA AT BIRMINGHAM	171,696
1 R29AG12143-01A1	BAGCHI, MANASHI AGE-RELATED OXIDATIVE DAMAGE IN FISHER 344 RATS	01-01-96/	CREIGHTON UNIVERSITY	
1 R01AG12145-01A2	LAMB, ROBERT G ANTI-AGING EFFECTS OF VITAMIN E AND VITAMIN E ESTERS	12-01-95/	VIRGINIA COMMONWEALTH UNIVERSITY	
5 R29AG12160-02	GOTTSCHALL, PAUL E PROTEASES, AGING, AND NEURODEGENERATIVE DISEASES	05-21-96/04-30-97	UNIVERSITY OF SOUTH FLORIDA	92,826
5 R29AG12161-03	SHAPSES, SUE A NUTRITIONAL REGULATION OF BONE TURNOVER	09-01-96/08-31-97	RUTGERS THE STATE UNIV NEW BRUNSWICK	123,969
5 R01AG12163-04	MORROW, DANIEL DESIGNING REMINDER MESSAGES FOR OLDER ADULTS	09-01-96/08-31-97	UNIVERSITY OF NEW HAMPSHIRE	122,168

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FY: 96				
1 R01AG12165-01A2	MC ILROY, WILLIAM E AGING AND PLANTER MECHANORECEPTORS IN POSTURAL CONTROL	07-09-96/06-30-97	SUNNYBROOK HEALTH SCIENCES CENTER	46,858
1 R29AG12168-01A3	BROWN, SUSAN H FACILITATION OF MOTOR FUNCTION THROUGH SENSORY CUEING	09-01-96/08-31-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	120,630
5 R01AG12171-03	BARKER, WILLIAM H HIP FRACTURE AND STROKE TRENDS IN AN AGING POPULATION	09-01-96/08-31-98	KAISER FOUNDATION RESEARCH INSTITUTE	163,524
5 R01AG12179-02	BAVISTER, BARRY D MATERNAL AGE-RELATED OOCYTE/EMBRYO DEFECTS	02-10-96/01-31-97	UNIVERSITY OF WISCONSIN MADISON	199,735
1 R01AG12187-01A2	RASENICK, MARK M G PROTEIN SIGNALING IN AGING AND ALZHEIMER'S DISEASE	12-01-95/	UNIVERSITY OF ILLINOIS AT CHICAGO	
1 R29AG12189-01A3	MUDRYJ, MARIA TRANSCRIPTION FACTORS IN YOUNG, AGED AND SENESCENT CELLS	07-01-96/	DUKE UNIVERSITY	
5 R01AG12203-03	KRAMER, ARTHUR F COGNITIVE PLASTICITY & AGING--DUAL-TASK TRAINING EFFECTS	04-19-96/03-31-99	UNIVERSITY OF ILLINOIS URBANA-CHAMPA	153,689
5 R01AG12210-04	DUTHIE, EDMUND H, JR CAUSES OF LEAN BODY MASS ATROPHY IN AGING MEN	09-01-96/08-31-97	MEDICAL COLLEGE OF WISCONSIN	278,658
1 R15AG12219-01A2	AMANN, JOHN F AGING: MUSCLE FUNCTION AND MYOSIN HEAVY CHAIN EXPRESSIO	04-01-96/	UNIVERSITY OF MISSOURI COLUMBIA	
5 R01AG12222-03	SANTORO, NANETTE F REPRODUCTIVE PHYSIOLOGY OF OVARIAN FAILURE	08-26-96/07-31-97	UNIVERSITY OF MEDICINE & DENTISTRY O	245,240
5 R01AG12227-02	SINOWAY, LAWRENCE I LIMB CONGESTION AND EXERCISE REFLEXES IN HEART FAILURE	01-01-96/12-31-96	PENNSYLVANIA STATE UNIV HERSHEY MED	176,253
5 R01AG12235-02	SPINA, ROBERT J EXERCISE, ESTROGEN AND AGING--CARDIAC FUNCTION IN WOMEN	09-01-96/08-31-97	WASHINGTON UNIVERSITY	199,255
5 R01AG12249-03	KASS, DAVID A VENTRICULAR VASCULAR STIFFENING IN ELDERLY HUMANS	07-25-96/06-30-97	JOHNS HOPKINS UNIVERSITY	201,852
5 R01AG12257-03	KITZMAN, DALANE W EXERCISE TRAINING EFFECT ON DIASTOLIC DYSFUNCTION	07-01-96/06-30-97	WAKE FOREST UNIVERSITY	136,656
5 R01AG12262-02	TOSTESON, ANNA N EVALUATION OF OSTEOPOROSIS PREVENTION IN ELDERLY WOMEN	01-01-96/12-31-96	DARTMOUTH COLLEGE	180,751

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FY: 96				
5 R01AG12264-02	SIDNEY, STEPHEN LOW CHOLESTEROL AND DISEASE IN A LARGE AGING COHORT	01-01-96/12-31-96	KAISER FOUNDATION RESEARCH INSTITUTE	284,800
5 R01AG12268-02	DILWORTH-ANDERSON, PEGGYE STRUCTURE AND OUTCOMES OF CAREGIVING TO BLACK ELDERLY	05-10-96/04-30-97	UNIVERSITY OF NORTH CAROLINA GREENSB	292,664
5 R01AG12271-03	GLOWACKI, JULIANNE MARROW BIOLOGY AND BONE MASS--EFFECTS OF AGE AND HORMONE	09-01-96/08-31-98	BRIGHAM AND WOMEN'S HOSPITAL	348,225
5 R01AG12275-03	BIGELOW, DIANA J OXIDATION AND AGING IN CARDIAC AND SKELETAL MUSCLE	06-01-96/05-31-97	UNIVERSITY OF KANSAS LAWRENCE	151,767
1 R01AG12276-01A1	MC GILLIS, JOSEPH P CELLULAR STRESS, AMYLOID (APP), AND ALZHEIMER'S DISEASE	04-01-96/	UNIVERSITY OF KENTUCKY	
5 R01AG12279-03	TILLY, JONATHAN L APOPTOSIS AND REPRODUCTIVE AGING OF THE FEMALE	02-10-96/12-31-96	MASSACHUSETTS GENERAL HOSPITAL	151,895
3 R01AG12279-03S1	TILLY, JONATHAN L APOPTOSIS AND REPRODUCTIVE AGING OF THE FEMALE	08-05-96/12-31-96	MASSACHUSETTS GENERAL HOSPITAL	50,756
5 R01AG12282-03	BREDESEN, DALE E MECHANISM OF INHIBITION OF NEURODEGENERATION AND AGING	05-29-96/04-30-97	BURNHAM INSTITUTE	238,800
5 R01AG12287-03	HORNSBY, PETER J TYPE II 3BETA HSD GENE REGULATION OF DHEAS SYNTHESIS	09-01-96/08-31-97	BAYLOR COLLEGE OF MEDICINE	158,391
5 R01AG12288-03	SIMON, MELVIN I ANIMAL MODELS OF AGING IN RETINAL DEGENERATION	03-05-96/12-31-96	CALIFORNIA INSTITUTE OF TECHNOLOGY	355,074
5 R01AG12289-03	BENZER, SEYMOUR GENES MAINTAINING NERVOUS SYSTEM INTEGRITY DURING AGING	02-20-96/12-31-96	CALIFORNIA INSTITUTE OF TECHNOLOGY	209,954
5 R01AG12291-03	FREY, WILLIAM H MIGRATION AND REDISTRIBUTION OF THE US ELDERLY	08-01-96/07-31-98	UNIVERSITY OF MICHIGAN AT ANN ARBOR	142,124
5 R01AG12293-02	HEINECKE, JAY W MYELOPEROXIDASE-MEDIATED VASCULAR INJURY	01-01-96/12-31-96	WASHINGTON UNIVERSITY	233,740
5 R01AG12297-02	MORRISON-BOGORAD, MARCELLE STRESS AND THE NEUROPATHOLOGY OF ALZHEIMERS DISEASE	03-26-96/12-31-96	UNIVERSITY OF TEXAS SW MED CTR/DALLA	197,304
5 P30AG12300-03	ROSENBERG, ROGER N NEUROBIOLOGY OF ALZHIMERS DISEASE AND AGING	04-01-96/03-31-97	UNIVERSITY OF TEXAS SW MED CTR/DALLA	1,101,786

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FY: 96				
1 R01AG12302-01A1	GAUBATZ, JAMES W GENE-SPECIFIC DNA DAMAGE AND MODIFYING FACTORS	04-01-96/	UNIVERSITY OF SOUTH ALABAMA	
2 R44AG12306-02	KOHNKEN, RUSSELL E ALZHEIMER'S DISEASE THERAPY BASED ON TAU PATHOLOGY	04-01-96/	MOLECULAR GERIATRICS CORPORATION	
5 R44AG12309-03	BARNEY, HAROLD L CONTINUING CARE RETIREMENT COMMUNITY EXPERIENCE DATA	06-01-96/05-31-98	ACTUARIAL FORECASTING AND RESEARCH	246,932
2 R44AG12311-02	CALKINS, MARGARET P ENVIRONMENTAL ASSESSMENT PROTOCOL FOR SPECIAL CARE UNITS	03-06-96/12-31-96	INNOVATIVE DESIGNS/ENVIRONMENT/AGING	402,514
5 R01AG12316-04	ROSENTHAL, NADIA A TRANSGENIC MOUSE MODELS OF LONGEVITY	09-01-96/08-31-97	MASSACHUSETTS GENERAL HOSPITAL	255,730
1 R43AG12320-01A2	DONEEN, BYRON A DEVICE FOR RAPID IMMUNOASSAY OF SWEAT BONE-LOSS MARKERS	11-01-95/	BIOQUANT, INC.	
2 R44AG12322-02	ERB, JUDITH L FIBER OPTIC SENSOR FOR FEMALE REPRODUCTIVE HORMONES	06-20-96/05-31-97	IA, INC.	414,215
2 R44AG12341-02	AVIS, NANCY E MEDIA TRAINING ON MENOPAUSE FOR HEALTH PROFESSIONALS	09-01-96/04-30-97	NEW ENGLAND RESEARCH INSTITUTES, INC	320,171
5 R44AG12343-03	ZEISEL, JOHN R DESIGN CRITERIA FOR ALZHEIMERS SPECIAL CARE PROGRAMS	08-01-96/06-30-97	HEARTHSTONE ALZHEIMER CARE, LTD	394,308
5 R01AG12345-04	FISHER, ANNE G DEVELOPMENT OF A PERFORMANCE EVALUATION FOR GERONTOLOGY	09-01-96/08-31-98	COLORADO STATE UNIVERSITY	203,361
5 R29AG12350-04	KREGEL, KEVIN C SYMPATHETIC NERVOUS SYSTEM ACTIVITY AND AGING IN THE RAT	09-15-96/08-31-97	UNIVERSITY OF IOWA	100,641
2 R44AG12355-02A1	LYNDS, JAMES S DEVELOPMENT OF A PORTABLE SPEECH RECOGNITION SYSTEM	11-01-95/	WESTEST ENGINEERING CORPORATION	
5 R01AG12358-02	KING, ABBY C EXERCISE, FUNCTIONING, AND STRESS IN WOMEN CAREGIVERS	07-01-96/06-30-97	STANFORD UNIVERSITY	387,444
1 R15AG12363-01A1	DANNEMAN, PEGGY J EFFECTS OF AGING ON PAIN AND ENDOGENOUS OPIOID SYSTEMS	04-01-96/	UNIVERSITY OF TENNESSEE AT MEMPHIS	
3 R01AG12364-02S1	KRIPKE, DANIEL F ILLUMINATION IN HUMAN AGING--SLEEP AND MOOD EFFECTS	05-01-96/06-30-96	UNIVERSITY OF CALIFORNIA SAN DIEGO	2,775

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FY: 96				
5 R01AG12364-03	KRIPKE, DANIEL F ILLUMINATION IN HUMAN AGING--SLEEP AND MOOD EFFECTS	07-01-96/06-30-97	UNIVERSITY OF CALIFORNIA SAN DIEGO	319,587
5 R01AG12366-03	STEEVES, RICHARD H BEREAVEMENT IN AFRICAN AMERICAN AND APPALACHIAN ELDERS	08-01-96/07-31-98	UNIVERSITY OF VIRGINIA CHARLOTTESVIL	147,389
7 R01AG12376-03	KOO, EDWARD H APP INTERNALIZATION--PREREQUISITE FOR AB FORMATION	08-23-96/06-30-98	UNIVERSITY OF CALIFORNIA SAN DIEGO	199,867
5 R01AG12381-03	TAYLOR, THOMAS R PHYSICIANS POLICIES IN PREVENTIVE HORMONE THERAPY	09-01-96/08-31-98	UNIVERSITY OF WASHINGTON	233,439
5 R01AG12387-03	GREENWOOD, PAMELA M SPATIALLY CUED VISUAL PROCESSING OVER THE ADULT LIFESPAN	08-15-96/06-30-97	CATHOLIC UNIVERSITY OF AMERICA	124,399
2 R01AG12388-02	LASSITER, DONALD L EFFECTS OF EXPERTISE AND AGE ON PILOT MENTAL WORKLOAD	09-30-96/	METHODIST COLLEGE	
1 P01AG12391-01A2	VERBRUGGE, LOIS M PHYSICAL ABILITIES, JOB DEMANDS, AND AGING WORKERS	09-01-96/	UNIVERSITY OF MICHIGAN AT ANN ARBOR	
5 R01AG12393-03	MIROWSKY, JOHN AGING, STATUS, AND THE SENSE OF CONTROL	02-05-96/12-31-96	OHIO STATE UNIVERSITY	25,421
5 R37AG12394-02	SMITH, JAMES P WEALTH DISPARITITES AMONG MATURE & OLDER ADULTS	04-29-96/03-31-97	RAND CORPORATION	129,216
5 R01AG12396-03	JOHNSON, GAIL V CALCIUM EFFECTS ON TAU PROTEOLYSIS AND CROSSLINKING	09-01-96/08-31-97	UNIVERSITY OF ALABAMA AT BIRMINGHAM	139,162
1 R29AG12399-01A1	LEE, YEAN-JU A COMPARATIVE STUDY OF FAMILIAL SUPPORT FOR THE ELDERLY	12-01-95/	EAST-WEST CENTER	
5 R29AG12401-02	DE LACALLE, SONSOLES CHOLINERGIC DENERVATION AND REINNERVATION IN AGING	07-01-96/06-30-97	BETH ISRAEL DEACONESS MEDICAL CENTER	108,811
5 R01AG12406-03	HYMAN, BRADLEY T APOLIPOPROTEIN E AND ALZHEIMERS DISEASE	07-11-96/06-30-97	MASSACHUSETTS GENERAL HOSPITAL	241,980
1 R29AG12407-01A2	PERKINSON, MARGARET A DEMENTIA/CARDIAC SYMPTON MANAGEMENT BY FAMILY	04-22-96/03-31-97	PHILADELPHIA GERIATRIC CTR-FRIEDMAN	117,269
7 P01AG12411-02	GRIFFIN, WILMA S EARLY EVENTS IN ALZHEIMERS PATHOGENESIS	09-30-96/05-31-97	UNIVERSITY OF ARKANSAS MED SCIS LTL	701,530

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FY: 96				
5 R01AG12412-03	MULLAN, MICHAEL J APOE LOCUS AND RISK FOR ALZHEIMERS DISEASE	08-15-96/06-30-98	UNIVERSITY OF SOUTH FLORIDA	187,835
5 R01AG12420-02	LILLARD, LEE A ELDERLY HEALTH AND HEALTH CARE UTILIZATION	04-01-96/03-31-97	RAND CORPORATION	164,527
1 R01AG12423-01A2	LINK, CHRISTOPHER D TRANSGENIC C ELEGANS AS AMYLOID DISEASE MODEL	09-01-96/08-31-97	UNIVERSITY OF COLORADO AT BOULDER	204,823
5 P01AG12435-03	CHUI, HELENA CHANG AGING BRAIN--VASCULATURE, ISCHEMIA AND BEHAVIOR	09-01-96/08-31-97	UNIVERSITY OF SOUTHERN CALIFORNIA	1,360,963
5 R01AG12437-02	MC KINLAY, JOHN B VARIABILITY IN MEDICAL DECISIONS WITH OLDER PATIENTS	07-01-96/06-30-97	NEW ENGLAND RESEARCH INSTITUTES, INC	254,578
1 R01AG12441-01A2	MAGAI, CAROL L COPING AND ADAPTATION IN OLDER AFRICAN AMERICANS	07-01-96/	LONG ISLAND UNIVERSITY BROOKLYN CAMP	
5 R01AG12442-02	WILSON, GLENN L AGING EFFECTS ON DNA REPAIR	03-05-96/02-28-97	UNIVERSITY OF SOUTH ALABAMA	201,127
5 R29AG12444-02	LEE, DAVID J SENSORY IMPAIRMENT, FUNCTIONAL STATUS AND AGING	04-11-96/03-31-97	UNIVERSITY OF MIAMI	100,408
5 R01AG12447-03	LESNEFSKY, EDWARD J AGING, CARDIAC MITOCHONDRIA, AND ISCHEMIC INJURY	08-01-96/07-31-97	CASE WESTERN RESERVE UNIVERSITY	79,003
5 R29AG12448-03	SLIWINSKI, MARTIN J AGE-ASSOCIATED CHANGES IN THE SPEED OF COGNITIVE PROCESS	08-01-96/06-30-97	YESHIVA UNIVERSITY	119,964
5 R29AG12449-03	ALLEN, SUSAN MARITAL GENDER ROLES AND DYNAMICS OF SPOUSAL CARE	09-01-96/08-31-97	BROWN UNIVERSITY	111,026
5 R01AG12458-02	SIEGLER, ILENE C MODELS OF PERSONALITY, HEALTH, AND DISEASE IN ADULTHOOD	08-01-96/07-31-97	DUKE UNIVERSITY	216,123
5 R01AG12461-03	FISHER, DONALD L MODELS OF AGING--THE MICROSTRUCTURE OF COGNITION	08-05-96/06-30-98	UNIVERSITY OF MASSACHUSETTS AMHERST	67,245
1 R01AG12464-01A1	COSTA, ERMINIO AMPA RECEPTORS DESENSITIZATION AND NOOTROPIC DRUGS	04-01-95/	NATHAN S. KLINE INSTITUTE FOR PSYCH	
5 R01AG12466-02	ABRAMS, JOHN M MOLECULAR AND GENETIC CONTROL OF PROGRAMMED CELL DEATH	05-05-96/04-30-97	UNIVERSITY OF TEXAS SW MED CTR/DALLA	212,850

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FY: 96				
5 R29AG12467-02	OBEID, LINA M CERAMIDE AND CELL SENESCENCE	05-10-96/04-30-97	DUKE UNIVERSITY	107,800
3 U01AG12495-02S1	MIDGLEY, A REES, JR HORMONAL PREDICTORS OF PERIMENOPAUSAL MORBIDITY	05-29-96/06-30-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	927,259
5 U01AG12495-03	MIDGLEY, A REES, JR MENOPAUSE AND HEALTH IN AGING WOMEN	07-01-96/05-31-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	1,130,354
3 U01AG12505-02S1	POWELL, LYNDA H HORMONAL PREDICTORS OF PERIMENOPAUSAL MORBIDITY	05-06-96/06-30-96	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	63,715
3 U01AG12505-02S2	POWELL, LYNDA H POPULATION STUDY OF MENOPAUSE IN AFRICAN AMERICAN WOMEN	02-20-96/07-31-96	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	86,000
5 U01AG12505-03	POWELL, LYNDA H POPULATION STUDY OF MENOPAUSE IN AFRICAN AMERICAN WOMEN	09-30-96/05-31-97	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	553,002
3 U01AG12505-03S1	POWELL, LYNDA H POPULATION STUDY OF MENOPAUSE IN AFRICAN AMERICAN WOMEN	09-25-96/05-31-97	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	50,000
3 U01AG12505-03S2	POWELL, LYNDA H POPULATION STUDY OF MENOPAUSE IN AFRICAN AMERICAN WOMEN	09-30-96/05-31-97	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	60,000
5 R01AG12527-02	SMITH, DOUGLAS H BRAIN INJURY EFFECTS--AGE RELATED COGNITIVE DYSFUNCTION	05-29-96/04-30-97	UNIVERSITY OF PENNSYLVANIA	197,761
3 U01AG12531-02S1	NEER, ROBERT M MENOPAUSAL TRANSITION IN BLACK AND WHITE WOMEN	05-22-96/06-30-96	MASSACHUSETTS GENERAL HOSPITAL	49,237
5 U01AG12531-03	NEER, ROBERT M MENOPAUSAL TRANSITION IN BLACK AND WHITE WOMEN	09-15-96/05-31-97	MASSACHUSETTS GENERAL HOSPITAL	428,845
3 U01AG12531-03S1	NEER, ROBERT M MENOPAUSAL TRANSITION IN BLACK AND WHITE WOMEN	09-15-96/05-31-97	MASSACHUSETTS GENERAL HOSPITAL	60,000
3 U01AG12531-03S2	NEER, ROBERT M MENOPAUSAL TRANSITION IN BLACK AND WHITE WOMEN	09-15-96/05-31-97	MASSACHUSETTS GENERAL HOSPITAL	50,000
5 R01AG12532-03	STRITTMATTER, WARREN J APOLIPOPROTEIN E/TAU INTERACTIONS IN ALZHEIMERS DISEASE	07-15-96/06-30-97	DUKE UNIVERSITY	190,931
3 U01AG12535-02S1	WEISS, GERSON HORMANAL PREDICTORS OF PERIMENOPAUSAL MORBIDITY	05-06-96/06-30-96	UNIVERSITY OF MEDICINE & DENTISTRY O	138,894

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FY: 96				
5 U01AG12535-03	WEISS, GERSON GYNECOLOGIC IMPACT OF THE MENOPAUSAL TRANSITION	07-01-96/05-31-97	UNIVERSITY OF MEDICINE & DENTISTRY O	605,722
3 U01AG12535-03S1	WEISS, GERSON GYNECOLOGIC IMPACT OF THE MENOPAUSAL TRANSITION	09-23-96/05-31-97	UNIVERSITY OF MEDICINE & DENTISTRY O	60,000
3 U01AG12535-03S2	WEISS, GERSON GYNECOLOGIC IMPACT OF THE MENOPAUSAL TRANSITION	09-19-96/05-31-97	UNIVERSITY OF MEDICINE & DENTISTRY O	90,000
3 U01AG12539-02S1	GREENDALE, GAIL A HORMONAL PREDICTORS OF PERIMENOPAUSAL MORBIDITY	05-06-96/06-30-96	UNIVERSITY OF CALIFORNIA LOS ANGELES	121,762
5 U01AG12539-03	GREENDALE, GAIL A EPIDEMIOLOGY AND BIOLOGY OF THE MENOPAUSAL TRANSITION	07-01-96/05-31-97	UNIVERSITY OF CALIFORNIA LOS ANGELES	507,980
3 U01AG12539-03S1	GREENDALE, GAIL A EPIDEMIOLOGY AND BIOLOGY OF THE MENOPAUSAL TRANSITION	09-15-96/05-31-97	UNIVERSITY OF CALIFORNIA LOS ANGELES	60,000
3 U01AG12539-03S2	GREENDALE, GAIL A EPIDEMIOLOGY AND BIOLOGY OF THE MENOPAUSAL TRANSITION	09-30-96/05-31-97	UNIVERSITY OF CALIFORNIA LOS ANGELES	60,000
5 R01AG12544-02	RUDKIN, LAURA L SOCIAL CHANGE AND INTERGENERATIONAL EXCHANGE	09-01-96/08-31-97	UNIVERSITY OF TEXAS MEDICAL BR GALVE	68,436
3 U01AG12546-02S1	MATTHEWS, KAREN A HORMONAL PREDICTORS OF PERIMENOPAUSAL MORBIDITY	05-06-96/06-30-96	UNIVERSITY OF PITTSBURGH AT PITTSBUR	67,918
5 U01AG12546-03	MATTHEWS, KAREN A MENOPAUSAL TRANSITION IN BLACK/WHITE WOMEN	07-01-96/05-31-97	UNIVERSITY OF PITTSBURGH AT PITTSBUR	486,807
3 U01AG12546-03S1	MATTHEWS, KAREN A MENOPAUSAL TRANSITION IN BLACK AND WHITE WOMEN	09-15-96/05-31-97	UNIVERSITY OF PITTSBURGH AT PITTSBUR	60,000
3 U01AG12546-03S2	MATTHEWS, KAREN A MENOPAUSAL TRANSITION IN BLACK AND WHITE WOMEN	09-15-96/05-31-97	UNIVERSITY OF PITTSBURGH AT PITTSBUR	50,000
1 R01AG12548-01A2	GIULIAN, DANA GLIA MEDIATED BRAIN INJURY IN ALZHEIMERS DISEASE	06-07-96/04-30-97	BAYLOR COLLEGE OF MEDICINE	262,854
5 R01AG12551-02	INOUYE, SHARON K INTERVENTION TRIAL TO PREVENT DELIRIUM IN THE ELDERLY	07-01-96/06-30-97	YALE UNIVERSITY	415,265
3 U01AG12553-02S2	MC KINLAY, SONJA M HORMONAL PREDICTORS OF PERIMENOPAUSAL MORBIDITY	05-15-96/06-30-96	NEW ENGLAND RESEARCH INSTITUTES, INC	120,665

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FY: 96				
3 U01AG12553-02S3	MC KINLAY, SONJA M CARDIOVASCULAR RISK CHANGES DURING PERIMENOPAUSE	05-28-96/06-30-96	NEW ENGLAND RESEARCH INSTITUTES, INC	266,060
3 U01AG12553-02S4	MC KINLAY, SONJA M MENOPAUSE AND HEALTH IN AGING WOMEN	04-01-96/06-30-96	NEW ENGLAND RESEARCH INSTITUTES, INC	84,795
5 U01AG12553-03	MC KINLAY, SONJA M MENOPAUSE AND HEALTH IN AGING WOMEN	07-01-96/05-31-97	NEW ENGLAND RESEARCH INSTITUTES, INC	742,778
3 U01AG12553-03S1	MC KINLAY, SONJA M MENOPAUSE AND HEALTH IN AGING WOMEN	09-30-96/05-31-97	NEW ENGLAND RESEARCH INSTITUTES, INC	330,000
3 U01AG12554-02S1	GOLD, ELLEN B HORMONAL PREDICTORS OF PERIMENOPAUSAL MORBIDITY	05-22-96/06-30-96	UNIVERSITY OF CALIFORNIA DAVIS	109,171
5 U01AG12554-03	GOLD, ELLEN B LIFESTYLE AND OVARIAN FUNCTION IN MID-LIFE WOMEN	09-15-96/05-31-97	UNIVERSITY OF CALIFORNIA DAVIS	695,406
3 U01AG12554-03S2	GOLD, ELLEN B LIFESTYLE AND OVARIAN FUNCTION IN MIDLIFE WOMEN	09-15-96/05-31-97	UNIVERSITY OF CALIFORNIA DAVIS	60,000
1 R01AG12555-01A1	PAGALA, MURALI K EFFECT OF AGING & CALORIC RESTRICTION ON MUSCLE FUNCTION	12-01-95/	MAIMONIDES MEDICAL CENTER (BROOKLYN)	
5 R29AG12556-02	RAAB-CULLEN, DIANE M IN VIVO SKELETAL RESPONSE TO MECHANICAL STIMULATION	04-01-96/03-31-97	CREIGHTON UNIVERSITY	99,157
5 R01AG12557-02	COLE, KELLY J AGING EFFECTS ON GRASP FORCE CONTROL	05-24-96/04-30-97	UNIVERSITY OF IOWA	125,817
1 R01AG12559-01A2	WEINBERG, RICHARD B NUTRIENT ANTIOXIDANT DEFENSE OF HIGH DENSITY LIPOPROTEIN	07-01-96/06-30-97	WAKE FOREST UNIVERSITY	177,937
5 R01AG12561-03	KREBS, DAVID E DOES EXERCISE IMPROVE LOCOMOTION IN DISABLED ELDERS?	07-01-96/06-30-97	MASSACHUSETTS GENERAL HOSPITAL	111,092
1 R01AG12567-01A1	FREDMAN, LISA RACE DIFFERENCES IN CAREGIVER STRESS: CULTURE OR METHODS	04-01-96/	UNIVERSITY OF MARYLAND BALT PROF SCH	
2 R42AG12576-02	SAH, DINAH W HUMAN NEURONS IN VITRO--CHARACTERIZATION OF RECEPTORS	08-15-96/02-28-97	SIGNAL PHARMACEUTICALS, INC.	293,057
2 R01AG12578-23A3	HODOS, WILLIAM MORPHOLOGICAL CORRELATES-VISUAL INFORMATION PROCESSING	05-01-96/	UNIVERSITY OF MARYLAND COLLEGE PK CA	

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FY: 96				
3 P60AG12583-02S1	GOLDBERG, ANDREW P CLAUDE D PEPPER OLDER AMERICANS INDEPENDENCE CENTER	03-10-96/06-30-96	UNIVERSITY OF MARYLAND BALT PROF SCH	60,488
5 P60AG12583-03	GOLDBERG, ANDREW P CLAUDE D PEPPER OLDER AMERICANS INDEPENDENCE CENTER	07-09-96/06-30-97	UNIVERSITY OF MARYLAND BALT PROF SCH	1,149,354
5 R01AG12587-03	ARMBRECHT, HARVEY J INTESTINAL CALCIUM ABSORPTION--EFFECT OF AGE	09-01-96/08-31-97	ST. LOUIS UNIVERSITY	177,497
1 R29AG12588-01A1	STAVROPOULOS, PERICLES EFFECT OF CUZNSOD MIMICS ON AGE-RELATED OXIDATIVE DAMAGE	01-01-96/	BOSTON UNIVERSITY	
5 R44AG12595-03	PANZER, VICTORIA P REALITY BASED MULTISYSTEM BALANCE ASSESSMENT IN THE AGED	07-24-96/06-30-98	BROOKSIDE RESEARCH & DEVELOPMENT COM	297,189
5 R01AG12609-03	BARNES, CAROL A CELL ASSEMBLIES, PATTERN COMPLETION, AND THE AGING BRAIN	04-09-96/03-31-97	UNIVERSITY OF ARIZONA	189,992
5 R01AG12611-03	JANOWSKY, JERI S SEX HORMONES ON COGNITION	04-01-96/03-31-98	OREGON HEALTH SCIENCES UNIVERSITY	133,927
2 R44AG12620-02	INGOLDSBY, ANNE AUTOMATING AND EVALUATING THE LONG TERM CARE RISK MANUAL	02-15-96/12-31-97	LIFEPLANS, INC.	257,573
5 U01AG12642-02	CZEISLER, CHARLES A CLINICAL TRIAL/MELATONIN AS HYPNOTIC FOR NEUROLAB CREW	09-01-96/07-31-97	BRIGHAM AND WOMEN'S HOSPITAL	260,611
2 R44AG12644-02	TOMKINS, EDWARD L MD ACCESS TO DRUG PROFILES TO REDUCE ADVERSE REACTIONS	09-30-96/08-31-97	PROVIDER ADVANTAGE NW, INC.	369,447
5 U01AG12646-02	BRADY, SCOTT T SPACE FLIGHT, STRESS, AND NEURONAL PLASTICITY	08-01-96/07-31-97	UNIVERSITY OF TEXAS SW MED CTR/DALLA	234,834
5 R01AG12653-02	MC KINNEY, MICHAEL GENE EXPRESSION IN AGING CENTRAL CHOLINERGIC NEURONS	09-01-96/07-31-97	MAYO FOUNDATION	215,379
1 R01AG12662-01A2	MATTHEWS, JOHN C GENETIC DETERMINANTS OF AGING-ENHANCED NEUROTOXICITY	07-01-96/	UNIVERSITY OF MISSISSIPPI	
5 R01AG12663-02	COTMAN, CARL W GENETIC AND BIOCHEMICAL EVENTS IN AB-INDUCED APOPTOSIS	02-20-96/12-31-96	UNIVERSITY OF CALIFORNIA IRVINE	151,116
5 R01AG12673-03	NEUNDORFER, MARCIA M DEPRESSION AND AGITATION IN AD--EFFECTS ON CAREGIVERS	09-01-96/08-31-97	CASE WESTERN RESERVE UNIVERSITY	109,045

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 R29AG12674-03	BONDI, MARK W COGNITIVE ABILITIES OF AT RISK ELDERLY FOR DEMENTIA	04-01-96/03-31-97	UNIVERSITY OF CALIFORNIA SAN DIEGO	100,486
5 R01AG12675-02	KOSSLYN, STEPHEN M IMAGERY PROCESSING IN OLD AGE	02-22-96/12-31-96	HARVARD UNIVERSITY	159,019
1 R01AG12678-01A2	SABELHAUS, JOHN E USING THE HRS TO STUDY SAVING AND ECONOMIC WELL-BEING	02-01-96/	URBAN INSTITUTE	
5 R29AG12679-02	WALSH, JOHN P SENESCENCE AND STRIATAL SYNAPTIC PLASTICITY	08-15-96/07-31-97	UNIVERSITY OF SOUTHERN CALIFORNIA	107,269
5 R01AG12685-04	YOUNKIN, STEVEN G FACTORS GOVERNING ALZHEIMERS ABETA PROTEIN	08-24-96/03-31-97	MAYO FOUNDATION	256,016
5 R29AG12686-02	BUSH, ASHLEY ZINC AND ALZHEIMERS DISEASE PATHOPHYSIOLOGY	09-01-96/08-31-97	MASSACHUSETTS GENERAL HOSPITAL	115,352
5 R01AG12689-02	RIDDLE, DONALD L GENES WITH MAJOR EFFECTS ON LIFE SPAN IN C ELEGANS	01-01-96/12-31-96	UNIVERSITY OF MISSOURI COLUMBIA	248,308
5 R29AG12690-02	BRUZDZINSKI, CAROLYN J REGULATION OF PAI I AND LIVER PATHOLOGY IN THE AGED	07-01-96/06-30-97	UNIVERSITY OF ILLINOIS AT CHICAGO	100,731
5 R01AG12694-02	COTMAN, CARL W ANIMAL MODEL OF HUMAN AGING AND DEMENTIA	09-01-96/08-31-97	UNIVERSITY OF CALIFORNIA IRVINE	168,051
3 R01AG12694-02S1	COTMAN, CARL W ANIMAL MODEL OF HUMAN AGING AND DEMENTIA	09-20-96/08-31-97	UNIVERSITY OF CALIFORNIA IRVINE	57,340
5 R01AG12701-02	SLADEK, CELIA D REGULATION OF VASOPRESSIN MESSENGER RNA DURING AGING	12-05-95/11-30-96	FINCH UNIV OF HLTH SCI/CHICAGO MED S	189,954
1 R01AG12707-01A2	VORNOV, JAMES J EXCITATORY NEUROTRNSMITTERS IN REPERFUSION INJURY	04-01-96/	JOHNS HOPKINS UNIVERSITY	
2 R44AG12711-02	OWENS, BOONE B LONG LIFE, RECHARGEABLE HEARING AID	07-15-96/04-30-97	RESEARCH INTERNATIONAL, INC.	357,820
1 R01AG12712-01A2	MC CAFFREY, TIMOTHY A TGF-B1 RECEPTORS IN RESTENOSIS AND AGING	04-12-96/02-28-97	CORNELL UNIVERSITY MEDICAL CENTER	248,537
5 R01AG12713-02	YESAVAGE, JEROME A AGE RELATED LONGITUDINAL CHANGES IN AVIATOR PERFORMANCE	09-01-96/08-31-97	STANFORD UNIVERSITY	168,573

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 R01AG12717-02	ZANNIS, VASSILIS I APOE STRUCTURE FUNCTION AND ALZHEIMERS DISEASE	08-01-96/07-31-97	BOSTON UNIVERSITY	233,527
5 R29AG12718-02	SHAPIRO, I PAUL FUNCTION OF AN APP CYTOPLASMIC DOMAIN BINDING PROTEIN	02-20-96/12-31-96	OREGON HEALTH SCIENCES UNIVERSITY	97,494
1 R01AG12721-01A3	VINCENT, INEZ MITOTIC MECHANISMS IN ALZHEIMERS DISEASE	09-30-96/08-31-97	YESHIVA UNIVERSITY	181,405
5 R29AG12731-02	MARKS, NADINE F SOCIOECONOMIC INEQUALITIES, GENDER, AND MIDLIFE HEALTH	08-01-96/07-31-97	UNIVERSITY OF WISCONSIN MADISON	92,668
1 R01AG12738-01A1	FLYNN, DONNA D NEURON/GLIA COMMUNICATION RELEVANCE FOR AD	05-10-96/04-30-97	UNIVERSITY OF MIAMI	197,962
1 R55AG12741-01A1	RILEY, JAMES C TESTING INSULT ACCUMULATION WITH COMPETING MODELS	09-26-96/08-31-98	INDIANA UNIVERSITY BLOOMINGTON	100,000
1 R01AG12745-01A1	FREEMAN, ELLEN W EPIDEMIOLOGIC STUDY OF THE LATE REPRODUCTIVE YEARS	02-10-96/01-31-97	UNIVERSITY OF PENNSYLVANIA	462,200
1 R01AG12747-01A2	PAPASOZOMENOS, SOZOS C TAU PROTEIN IN HEAT-SHOCKED RATS AND ALZHEIMER DISEASE	04-01-96/	UNIVERSITY OF TEXAS HLTH SCI CTR HOU	
1 R01AG12748-01A2	SU, JOSEPH H ANALYSIS OF EARLY NEURONAL CHANGES LEADING TO CELL DEATH	04-01-96/	UNIVERSITY OF CALIFORNIA IRVINE	
5 R01AG12749-02	SELKOE, DENNIS J PROTEIN/PROTEIN INTERACTIONS IN THE BIOLOGY OF BETA APP	12-20-95/11-30-96	BRIGHAM AND WOMEN'S HOSPITAL	389,768
1 R29AG12750-01A2	LIU, XIAN MODELING AND ANALYZING TRANSITIONS IN HEALTH	05-01-96/	UNIVERSITY OF MICHIGAN AT ANN ARBOR	
5 R01AG12753-02	HASHER, LYNN A AGE, OPTIMAL TIME OF DAY, AND COGNITION	09-01-96/08-31-97	DUKE UNIVERSITY	195,908
5 R01AG12765-02	BLAZER, DAN G, II PHSE TEN YEAR FOLLOW-UP	09-01-96/08-31-97	DUKE UNIVERSITY	461,367
1 R29AG12766-01A1	CRONIN-GOLOMB, ALICE FUNCTIONAL IMPACT OF ALZHEIMER'S DISEASE IMPAIRED VISION	01-01-96/	BOSTON UNIVERSITY	
1 R01AG12769-01A1	LURIE, KEITH G REGULATION OF CARDIAC CONDUCTION WITH AGING	12-01-95/	UNIVERSITY OF MINNESOTA TWIN CITIES	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 R01AG12771-01A2	DA VANZO, JULIE S INFLUENCES ON PARENT-CHILD CORESIDENCE	07-01-96/	RAND CORPORATION	
3 R03AG12786-01S1	SITARAM, MAHESHWARI MOLECULAR BASIS OF LACTOFERRIN/PROTEIN INTERACTIONS	02-20-96/08-31-96	UNIVERSITY OF NOTRE DAME	5,000
5 R03AG12792-02	MOORE, CONSTANCE T ESTROGEN IN THE AGING HYPOTHALAMUS	09-15-96/12-31-97	UNIVERSITY OF NEBRASKA MEDICAL CENTE	14,904
1 R01AG12798-01A1	HEYER, ERIC J CEREBRAL DYSFUNCTION IN ELDERLY PATIENTS:CARDIAC SURGERY	12-01-95/	COLUMBIA UNIVERSITY NEW YORK	
5 R01AG12806-02	COLDITZ, GRAHAM A IMPACT OF WORK ON WOMEN'S HEALTH AND QUALITY OF LIFE	09-01-96/08-31-97	BRIGHAM AND WOMEN'S HOSPITAL	310,136
5 P20AG12810-03	WISE, DAVID A NBER CENTER FOR AGING AND HEALTH RESEARCH	09-15-96/06-30-97	NATIONAL BUREAU OF ECONOMIC RESEARCH	339,007
5 P20AG12815-03	LILLARD, LEE A RAND CENTER FOR THE STUDY OF AGING	09-30-96/06-30-97	RAND CORPORATION	248,552
5 R29AG12819-02	KENT-BRAUN, JANE A SKELETAL MUSCLE FUNCTION IN AGING	09-01-96/08-31-97	UNIVERSITY OF CALIFORNIA SAN FRANCIS	83,693
1 R01AG12822-01A2	EHSANI, ALI A ADAPTATIONS TO EXERCISE IN OLDER HYPERTENSIVE SUBJECTS	09-30-96/07-31-97	WASHINGTON UNIVERSITY	254,979
5 R01AG12829-02	ROBERTS, SUSAN B DIETARY ENERGY RESTRICTION AND METABOLIC AGING IN WOMEN	08-01-96/07-31-97	TUFTS UNIVERSITY BOSTON	340,302
5 R29AG12834-02	KIRWAN, JOHN P AGE, EXERCISE, DIET--EFFECTS ON GLUCOSE/FATTY ACID CYCLE	09-01-96/08-31-97	PENNSYLVANIA STATE UNIVERSITY-UNIV P	100,807
1 R01AG12835-01A1	KISBY, GLEN E THE ROLE OF DNA REPAIR IN NEURODEGENERATIVE DISEASES	12-01-95/	OREGON HEALTH SCIENCES UNIVERSITY	
5 P20AG12836-03	PRESTON, SAMUEL H CENTER ON THE DEMOGRAPHY OF AGING	09-15-96/06-30-97	UNIVERSITY OF PENNSYLVANIA	166,109
5 P20AG12837-03	WOLF, DOUGLAS A CENTER FOR DEMOGRAPHY AND ECONOMICS OF AGING	09-15-96/06-30-97	SYRACUSE UNIVERSITY AT SYRACUSE	254,157
5 P20AG12839-03	LEE, RONALD D CENTER ON THE DEMOGRAPHY AND ECONOMICS OF AGING	09-15-96/06-30-97	UNIVERSITY OF CALIFORNIA BERKELEY	158,596

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FY: 96				
1 R01AG12840-01A2	LAPPE, JOAN M THE EFFECT OF OSTEOPOROTIC FRACTURES ON QUALITY OF LIFE	04-01-96/	CREIGHTON UNIVERSITY	
3 P20AG12844-02S1	NATHANSON, CONSTANCE A HOPKINS CENTER ON THE DEMOGRAPHY OF AGING	03-15-96/08-31-96	JOHNS HOPKINS UNIVERSITY	18,101
5 P20AG12844-03	NATHANSON, CONSTANCE A HOPKINS CENTER ON THE DEMOGRAPHY OF AGING	09-15-96/06-30-97	JOHNS HOPKINS UNIVERSITY	168,548
5 P20AG12846-03	HERMALIN, ALBERT I MICHIGAN EXPLORATORY CENTER ON DEMOGRAPHY OF AGING	09-25-96/06-30-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	396,583
5 R01AG12850-04	FUKUCHI, KEN-ICHIRO EXPRESSION OF PERLECAN & BETA AMYLOID PRECURSOR PROTEIN	09-01-96/08-31-97	UNIVERSITY OF ALABAMA AT BIRMINGHAM	206,996
3 P20AG12852-02S1	MANTON, KENNETH G CENTER FOR LONGITUDINAL ANALYSIS IN MEDICAL DEMOGRAPHY	08-05-96/08-31-96	DUKE UNIVERSITY	50,000
5 P20AG12852-03	MANTON, KENNETH G CENTER FOR LONGITUDINAL ANALYSIS IN MEDICAL DEMOGRAPHY	09-15-96/06-30-97	DUKE UNIVERSITY	338,249
5 R01AG12853-02	MAGGIO, JOHN AMYLOID PEPTIDE CONFORMATION AND AMYLOIDOSIS	02-20-96/12-31-96	HARVARD UNIVERSITY	261,591
5 R01AG12855-02	RUSSO, CARLO OLIGOCLONAL CD8 T CELL EXPANSIONS IN AGING	08-01-96/06-30-97	CORNELL UNIVERSITY MEDICAL CENTER	259,363
5 R01AG12856-02	SAPER, CLIFFORD B MECHANISMS OF NEUROFIBRILLARY DEGENERATION	02-20-96/12-31-96	BETH ISRAEL DEACONESS MEDICAL CENTER	285,845
5 P20AG12857-03	WAITE, LINDA J CENTER ON DEMOGRAPHY AND ECONOMICS OF AGING (CDA)	09-15-96/06-30-97	NATIONAL OPINION RESEARCH CENTER	208,909
3 P20AG12857-03S1	WAITE, LINDA J CENTER ON DEMOGRAPHY AND ECONOMICS OF AGING (CDA)	09-30-96/06-30-97	NATIONAL OPINION RESEARCH CENTER	42,332
7 R01AG12859-03	YUAN, JUNYING CELL DEATH GENES IN TUMORIGENESIS AND DEVELOPMENT	09-01-96/08-31-97	HARVARD UNIVERSITY	271,744
1 R43AG12875-01A2	FETTERMAN, ELSIE ECHO HOUSING: A REVENUE GENERATING OPPORTUNITY FOR RURA	03-01-96/	GLENN H. WOODS CORPORATION	
1 R43AG12892-01A2	BUDNICK, HERMAN D CULTURALLY-ORIENTED MULTIMEDIA ADVANCE DIRECTIVES STUDY	03-01-96/	RSVP INFORMATION, INC.	

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FY: 96				
1 R43AG12893-01A1	WU, JYA-CHANG C PERFORMANCE DETECTION OF CNS IMPAIRMENT IN AGING	09-01-96/	PSYBIO HEALTHMETRIC SYSTEMS, INC.	
5 R01AG12899-03	SILVERMAN, MYRNA HEALTH CARE RESPONSES OF OLDER AFRICAN AMERICANS/WHITES	09-01-96/08-31-98	UNIVERSITY OF PITTSBURGH AT PITTSBUR	290,378
7 R01AG12900-03	BRUCE, MARTHA L PSYCHOSOCIAL FACTORS IN PHYSICAL AND SOCIAL DISABILITY	10-25-96/11-30-97	CORNELL UNIVERSITY MEDICAL CENTER	53,354
5 R01AG12907-03	GOLDSCHNEIDER, IRVING THYMUS INVOLUTION AND RECENT THYMIC EMIGRANTS	08-15-96/07-31-98	UNIVERSITY OF CONNECTICUT HEALTH CEN	201,067
5 R01AG12910-07	MULLAN, JOSEPH T STRESS AND COPING AMONG AIDS CAREGIVERS	09-01-96/08-31-97	UNIVERSITY OF CALIFORNIA SAN FRANCIS	397,716
5 R01AG12914-06	YESAVAGE, JEROME A TREATMENTS FOR INSOMNIA	06-01-96/05-31-98	STANFORD UNIVERSITY	198,849
5 R01AG12915-03	PRINZ, PATRICIA N SLEEP & MENTAL FUNCTION IN THE AGED--ANABOLIC INFLUENCE	09-15-96/08-31-98	UNIVERSITY OF WASHINGTON	161,186
1 R01AG12916-01A1	JOPE, RICHARD S IMPAIRED SIGNAL TRANSDUCTION BY AD AND GLUCOCORTICOIDS	12-01-95/	UNIVERSITY OF ALABAMA AT BIRMINGHAM	
5 R13AG12917-02	MILLER, RICHARD A SUMMER TRAINING COURSES IN EXPERIMENTAL AGING RESEARCH	04-01-96/03-31-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	30,324
1 R01AG12921-01A1	HURD, MICHAEL D USING SUBJECTIVE INFORMATION TO EXPLAIN SAVING DECISIONS	08-15-96/03-31-97	NATIONAL BUREAU OF ECONOMIC RESEARCH	102,928
1 R01AG12923-01A1	VIJG, JAN MUTATION ACCUMULATION IN AGING DNA REPAIR DEFICIENT MICE	01-01-96/	BETH ISRAEL DEACONESS MEDICAL CENTER	
5 R01AG12925-02	HARRIS, DAVID A PROPERTIES OF CELLULAR PRION PROTEINS	05-21-96/04-30-97	WASHINGTON UNIVERSITY	210,286
5 R01AG12926-02	GUNDERSEN, GREGG G PHOSPHATASE TARGETING AND ALZHEIMERS DISEASE TAU	05-01-96/04-30-97	COLUMBIA UNIVERSITY NEW YORK	213,678
1 R01AG12927-01A1	TOPP, ROBERT EFFECT OF EXERCISE ON ABILITIES & HEALTH CARE OF ELDERS	07-01-96/	INDIANA UNIV-PURDUE UNIV AT INDIANAP	
5 R01AG12928-08	MALENKA, ROBERT C MECHANISMS OF SYNAPTIC PLASTICITY IN THE HIPPOCAMPUS	09-15-96/08-31-97	UNIVERSITY OF CALIFORNIA SAN FRANCIS	250,903

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 R01AG12943-01A1	HIRSCH, HENRY R NON-GOMPERTZIAN SURVIVAL IN EXTREME OLD AGE	05-01-96/	UNIVERSITY OF KENTUCKY	
5 R01AG12945-02	LE BOEUF, RENEE C MODELING ALZHEIMERS DISEASE--BY AMYLOID AND APOE	09-01-96/08-31-97	UNIVERSITY OF WASHINGTON	240,023
1 R01AG12946-01A1	VOLKOW, NORA D BRAIN DOPAMINE ACTIVITY IN NORMAL AGING	12-01-95/	ASSOCIATED UNIV-BROOKHAVEN NATL LAB	
5 R37AG12947-02	JOHNSON, EUGENE M, JR MECHANISM OF PROGRAMMED NEURONAL DEATH	05-21-96/04-30-97	WASHINGTON UNIVERSITY	212,610
1 R29AG12948-01A1	GREGORI, LUISA MECHANISM OF AMYLOID B INHIBITION OF PROTEIN DEGRADATION	12-01-95/	STATE UNIVERSITY NEW YORK STONY BROO	
1 R01AG12949-01A1	MORGAN, DAVID G AMYLOID DEPOSITS IN AGED RAT BRAIN	07-01-96/	UNIVERSITY OF SOUTH FLORIDA	
5 R01AG12951-03	BLAIR, HARRY C CALMODULIN AND OSTEOCLAST CONTROL	09-01-96/08-31-98	UNIVERSITY OF ALABAMA AT BIRMINGHAM	179,781
5 R01AG12953-03	SNOW, ALAN D RAT MODEL TO STUDY BETA/A4 AMYLOID DEPOSITION IN BRAIN	07-01-96/06-30-97	UNIVERSITY OF WASHINGTON	125,237
5 R01AG12954-06	NEVE, RACHAEL L MOLECULAR BIOLOGY OF ALZHEIMER DISEASE NEURODEGENERATION	09-01-96/06-30-97	MC LEAN HOSPITAL (BELMONT, MA)	181,435
5 R01AG12959-02	CHAPMAN, HAROLD A CATHEPSIN S AND ALZHEIMERS DISEASE	08-01-96/07-31-97	BRIGHAM AND WOMEN'S HOSPITAL	209,324
1 R01AG12961-01A1	JERNIGAN, TERRY L MRI CORRELATES OF MEMORY IN AGING AND DEMENTIA	12-01-95/	UNIVERSITY OF CALIFORNIA SAN DIEGO	
1 R01AG12962-01A1	HERMAN, JAMES P GLUCOCORTICOID RECEPTOR MECHANISMS STRESS AND AGING	05-06-96/04-30-97	UNIVERSITY OF KENTUCKY	174,617
5 R01AG12963-03	SALMON, DAVID P COGNITIVE STUDIES OF THE LEWY BODY VARIANT OF AD	07-01-96/06-30-97	UNIVERSITY OF CALIFORNIA SAN DIEGO	181,190
5 R01AG12976-02	POTTER, LINCOLN T DISCOVERY AND EXPRESSION OF NEW ANTICHOLINERGIC TOXINS	09-15-96/08-31-97	UNIVERSITY OF MIAMI	189,651
1 R01AG12978-01A2	GARNER, CRAIG C BRAIN GUANYLATE KINASES--SYNAPTIC STABILITY MODULATORS	08-01-96/05-31-97	UNIVERSITY OF ALABAMA AT BIRMINGHAM	175,038

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FY: 96				
1 R01AG12979-01A1	SAVORY, JOHN MECHANISMS OF ABNORMAL TAU-NF INTERACTIONS IN NEURONS	12-01-95/	UNIVERSITY OF VIRGINIA CHARLOTTESVIL	
5 U01AG12980-02	WILLIS, ROBERT ASSET AND HEALTH DYNAMICS AMONG THE OLDEST OLD	01-01-96/12-31-96	UNIVERSITY OF MICHIGAN AT ANN ARBOR	1,842,129
5 R01AG12981-03	KINDY, MARK S STRUCTURAL PREREQUISITES FOR AMYLOID FIBRILLOGENESIS	07-22-96/06-30-97	UNIVERSITY OF KENTUCKY	166,620
5 R01AG12985-02	RUST, JOHN P ANALYSIS OF DYNAMIC MODELS OF RETIREMENT/SAVINGS	03-26-96/02-28-97	UNIVERSITY OF WISCONSIN MADISON	103,880
1 R01AG12986-01A1	SCHEFF, STEPHEN W QUANTIFICATION OF SYNAPSE DENSITY IN ALZHEIMERS DISEASE	08-01-96/07-31-97	UNIVERSITY OF KENTUCKY	178,768
5 R29AG12987-02	CLARK, DANIEL O FUNCTIONAL STATUS, EXERCISE, SES, & RACE AMONG THE AGED	09-15-96/08-31-97	INDIANA UNIV-PURDUE UNIV AT INDIANAP	121,955
5 P01AG12992-02	BROWN, ROBERT H, JR SUPEROXIDE DISMUTASE IN AGING AND NEURODEGENERATION	04-12-96/03-31-97	MASSACHUSETTS GENERAL HOSPITAL	788,763
5 P01AG12993-02	MICHAELIS, ELIAS K REACTIVE OXYGEN SPECIES AND AGING	08-01-96/07-31-97	UNIVERSITY OF KANSAS LAWRENCE	882,668
3 P01AG12993-02S1	MICHAELIS, ELIAS K REACTIVE OXYGEN SPECIES AND AGING	09-30-96/07-31-97	UNIVERSITY OF KANSAS LAWRENCE	29,315
5 R01AG12995-02	GABRIELI, JOHN D FUNCTIONAL MRI ANALYSIS OF MEMORY IN AGING AND AMNESIA	05-29-96/04-30-97	STANFORD UNIVERSITY	298,037
5 R01AG12996-02	HALE, SANDRA S PROCESSING SPEED, WORKING MEMORY AND COGNITION IN DAT	08-15-96/06-30-97	WASHINGTON UNIVERSITY	90,900
1 R01AG12998-01A1	ERDMANS, MARY P THE BLACK MARKET CARE OF THE ELDERLY	06-01-96/	UNIVERSITY OF NORTH CAROLINA GREENSB	
1 R01AG12999-01A1	ALWIN, DUANE F AGING, COHORTS, AND INTERGENERATIONAL EQUITY	01-01-96/	UNIVERSITY OF MICHIGAN AT ANN ARBOR	
1 R01AG13001-01A1	ANDERSON, DEAN F HEALTH PROMOTION STRATEGIES FOR THE RURAL MIDDLE AGED	01-01-96/	IOWA STATE UNIVERSITY OF SCIENCE & T	
1 R01AG13004-01A2	STELMACH, GEORGE E AGING: FINE MOTOR CONTROL IMPAIRMENTS	01-01-96/	ARIZONA STATE UNIVERSITY	

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FY: 96				
1 R01AG13006-01A1	ALDWIN, CAROLYN M MENTAL AND PHYSICAL HEALTH TRAJECTORIES IN ADULTHOOD	09-15-96/08-31-97	UNIVERSITY OF CALIFORNIA DAVIS	133,000
5 R01AG13007-02	COTMAN, CARL W MECHANISMS AND MOLECULAR PROFILES OF DEGENERATION IN AD	05-01-96/04-30-97	UNIVERSITY OF CALIFORNIA IRVINE	207,084
3 R01AG13007-02S1	COTMAN, CARL W MECHANISMS AND MOLECULAR PROFILES OF DEGENERATION IN AD	09-25-96/04-30-97	UNIVERSITY OF CALIFORNIA IRVINE	11,287
7 R01AG13008-02	BOURGEOIS, MICHELLE S INCREASING EFFECTIVE COMMUNICATION IN NURSING HOMES	09-19-96/03-31-97	FLORIDA STATE UNIVERSITY	324,672
1 R01AG13009-01A1	PETERSON, CHARLOTTE A MYOBLAST GROWTH AND DIFFERENTIATION DURING MUSCLE AGING	02-10-96/01-31-97	UNIVERSITY OF ARKANSAS MED SCIS LTL	107,787
5 R01AG13013-02	SCHNELLE, JOHN F MOBILITY AND INCONTINENCE MANAGEMENT EFFECTS ON SICKNESS	09-01-96/08-31-97	UNIVERSITY OF CALIFORNIA LOS ANGELES	425,806
1 R15AG13014-01A1	SOMANI, SATU M OLD AGE/EXERCISE:ANTIOXIDANT ENZYME ACTIVATION/INDUCTION	04-01-96/	SOUTHERN ILLINOIS UNIVERSITY SCH OF	
1 R01AG13016-01A1	HEIDRICH, SUSAN M HEALTH AND WELL-BEING: GENDER AND SELF-SYSTEM LINKAGES	09-01-96/	UNIVERSITY OF WISCONSIN MILWAUKEE	
5 R29AG13018-02	FLEISCHMAN, DEBRA A AGING AND IMPLICIT MEMORY--EVIDENCE FROM LESION STUDIES	05-29-96/04-30-97	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	109,867
7 R29AG13019-02	CORCORAN, MARY A CAREGIVING STYLES OF SPOUSES WHO PROVIDE DEMENTIA CARE	04-01-97/07-31-97	GEORGE WASHINGTON UNIVERSITY	59,057
1 R29AG13020-01A2	MADRIAN, BRIGITTE C HEALTH INSURANCE AND THE LABOR MARKET--REVISED	07-01-96/06-30-97	NATIONAL BUREAU OF ECONOMIC RESEARCH	108,027
1 R01AG13024-01A1	ZAGORSKI, MICHAEL G STRUCTURES OF THE B-PEPTIDES FOUND IN HCHWA-D	12-01-95/	CASE WESTERN RESERVE UNIVERSITY	
1 R01AG13026-01A1	APPEL, LAWRENCE J VITAL RECRUITMENT AND RETENTION GRANT	01-01-96/	JOHNS HOPKINS UNIVERSITY	
5 R01AG13027-02	JONIDES, JOHN AGE & WORKING MEMORY--NEUROIMAGING & BEHAVIORAL STUDIES	08-15-96/06-30-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	272,048
1 R01AG13028-01A1	APPEL, LAWRENCE J VITAL CHAIR'S OFFICE	01-01-96/	JOHNS HOPKINS UNIVERSITY	

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FY: 96				
1 R01AG13032-01A1	KLAG, MICHAEL J VITAMINS, TEACHERS AND LONGEVITY STUDY - - OUTCOMES	01-01-96/	JOHNS HOPKINS UNIVERSITY	
1 R15AG13033-01A1	SPELLBRING, ANNMARIE FALLS IN THE ELDERLY: DECREASING POSITIONAL INSTABILITY	06-01-96/	UNIVERSITY OF MARYLAND BALT PROF SCH	
1 R01AG13036-01A1	AMICK, BENJAMIN C, III WORKING LIVES AND MORTALITY IN AGING	05-01-96/04-30-97	NEW ENGLAND MEDICAL CENTER	395,278
1 R01AG13037-01A1	COX, DONALD DEMONSTRATION EFFECT IN INTERGENERATIONAL TRANSFERS	02-25-96/01-31-97	BOSTON COLLEGE	162,782
1 R01AG13038-01A2	SEALS, DOUGLAS R EXERCISE IN HYPERTENSIVE POSTMENOPAUSAL WOMEN	07-25-96/06-30-97	UNIVERSITY OF COLORADO AT BOULDER	249,742
3 R01AG13038-01A2S1	SEALS, DOUGLAS R EXERCISE IN HYPERTENSIVE POSTMENOPAUSAL WOMEN	08-01-96/06-30-97	UNIVERSITY OF COLORADO AT BOULDER	63,008
1 R01AG13046-01A1	ELAHI, DARIUSH METABOLIC EFFECTS OF EXERCISE & DIET IN OLDER DIABETICS	12-01-95/	UNIVERSITY OF MARYLAND BALT PROF SCH	
2 R44AG13051-02	BOAN, DAVID M HEALTH-LINK: AN ONLINE HEALTH INFORMATION CLEARINGHOUSE	01-01-96/	BOAN AND ASSOCIATES	
5 R01AG13056-03	SHEA, THOMAS B EXACERBATION OF AD NEUROPATHOLOGY BY ASTROGLIAL FACTORS	07-01-96/06-30-98	UNIVERSITY OF MASSACHUSETTS LOWELL	145,653
1 R01AG13058-01A1	ADES, PHILIP A DISABILITY IN OLDER CORONARY PATIENTS	04-01-96/	UNIVERSITY OF VERMONT & ST AGRIC COL	
5 R01AG13059-03	HASLAM, SANDRA Z HORMONAL RESPONSIVENESS OF POSTMENOPAUSAL MAMMARY GLAND	09-01-96/08-31-97	MICHIGAN STATE UNIVERSITY	170,937
1 R01AG13062-01A1	FLOOD, PATRICK M DECLINE OF EFFECTIVE ANTI-TUMOR IMMUNITY WITH AGE	12-01-95/	UNIVERSITY OF NORTH CAROLINA CHAPEL	
1 R01AG13063-01A1	BUSBEE, DAVID L AGE RELATED CHANGES IN INITIATION OF DNA SYNTHESIS	12-01-95/	TEXAS A&M UNIVERSITY HEALTH SCIENCE	
5 R01AG13069-02	GREENSPAN, SUSAN L FEMORAL OSTEOPOROSIS IN ELDERLY WOMEN	05-01-96/04-30-97	BETH ISRAEL DEACONESS MEDICAL CENTER	466,780
1 R01AG13070-01A1	WELLE, STEPHEN L NUTRITION AND MYOFIBRILLAR PROTEIN METABOLISM IN OLD AGE	02-01-96/01-31-97	UNIVERSITY OF ROCHESTER	176,587

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 R01AG13071-01A1	GALILI, URI MOLECULAR CHANGES IN ANTIBODY AFFINITY IN THE ELDERLY	02-20-96/01-31-97	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	220,864
1 R29AG13074-01A1	ARJMANDI, BAHRAM H IPRIFLAVONE: MECHANISMS OF ACTION ON BONE	01-01-95/	UNIVERSITY OF ILLINOIS AT CHICAGO	
1 R01AG13076-01A1	EFFROS, RITA B IMMUNODEFICIENCY OF AGING: ROLE OF SENESCENT T-CELLS	04-01-96/	UNIVERSITY OF CALIFORNIA LOS ANGELES	
1 R29AG13077-01A1	LOTZ, JEFFREY C VERTEBRAL STRESS DISTRIBUTIONS IN AGE-RELATED FRACTURES	04-01-96/	UNIVERSITY OF CALIFORNIA SAN FRANCIS	
5 R01AG13078-09	FINK, PAMELA J SELECTION OF THE T CELL RECEPTOR REPERTOIRE	09-01-96/08-31-97	UNIVERSITY OF WASHINGTON	203,366
1 R01AG13079-01A1	INOUYE, MASAYORI ANTIOXIDANT ENZYMES AND AGING IN MICE	12-01-95/	UNIV OF MED/DENT NJ-R W JOHNSON MED	
1 R01AG13081-01A2	PONNAPPAN, USHA TRANSCRIPTION FACTOR NFKB AND IMMUNE SENESCENCE	08-01-96/07-31-97	UNIVERSITY OF ARKANSAS MED SCIS LTL	118,078
5 R01AG13087-03	DONAHUE, HENRY J GAP JUNCTIONS AND BONE CELL RESPONSE TO PHYSICAL SIGNALS	09-01-96/08-31-97	PENNSYLVANIA STATE UNIV HERSHEY MED	170,382
5 P20AG13094-03	WICHA, MAX S BREAST CANCER IN ELDERLY WOMEN	09-01-96/08-31-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	138,353
5 P20AG13095-03	GANZ, PATRICIA A BREAST CANCER PREVENTION AND CONTROL IN OLDER WOMEN	09-01-96/08-31-97	UNIVERSITY OF CALIFORNIA LOS ANGELES	150,092
1 R43AG13097-01A1	COWLEY, TOM J AMBULARM II FALL INCONTINENCE WANDER PREVENTION ALARM	10-01-95/	ALERT CARE, INC.	
1 R43AG13102-01A1	NASHNER, LEWIS M FALL RISK ASSESSMENT TO ENHANCE CARE AND REDUCE COSTS	09-01-95/	NEUROCOM INTERNATIONAL, INC.	
5 R01AG13108-12	ROTHENBERG, ELLEN V ANALYSIS OF FUNCTION IN THYMOCYTE DIFFERENTIATION	02-05-96/12-31-96	CALIFORNIA INSTITUTE OF TECHNOLOGY	262,446
1 R43AG13109-01A1	DYER, CHARLES ALONZO MULTIMEDIA DELIVERY OF COGNITIVE ACTIVITIES TO THE AGED	04-01-96/	RH POSITIVE COMPUTER SYSTEMS	
1 R43AG13111-01A1	SILVERMAN, BARRY G GERICASE: A SIMULATOR FOR CLINICAL GERIATRIC CARE TRAINI	12-09-95/	INTELLITEK, INC.	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 R43AG13119-01A1	ROMAN, LIDA L INTERACTIVE MEDICAL MONITORING FOR ELDERS AT HOME	11-15-95/	H.E.L.P. INNOVATIONS, L.C.	
1 R43AG13125-01A1	CHRISTIAN, JAMES G IMPROVING HEALTHY LIFESTYLE BEHAVIORS IN OLDER ADULTS	03-01-96/	PREVENTIVE HEALTH CONCEPTS COMPANY	
5 R01AG13132-02	DORSHKIND, KENNETH A LYMPHOPOIESIS DURING THYMIC INVOLUTION AND REGENERATION	05-30-96/04-30-97	UNIVERSITY OF CALIFORNIA RIVERSIDE	185,931
1 R01AG13137-01A1	GUBRIUM, JABER F CONSTRUCTING FAMILY ADAPTATIONS TO INSTITUTIONALIZATION	07-01-96/	UNIVERSITY OF FLORIDA	
1 R01AG13145-01A1	IRWIN, IAN T MPTP & AGING: ENHANCED SENSITIVITY IN SQUIRREL MONKEYS	07-01-96/	PARKINSON'S INSTITUTE	
5 R01AG13148-02	HERTZOG, CHRISTOPHER K AGING METAMEMORY AND STRATEGY USE DURING LEARNING	07-01-96/06-30-97	GEORGIA INSTITUTE OF TECHNOLOGY	127,224
1 R29AG13150-01A1	BLACK, RONALD S UBIQUITIN-TAU INTERACTIONS IN ALZHEIMER'S DISEASE	04-01-96/	WINIFRED MASTERSON BURKE MED RES INS	
1 R01AG13153-01	KELNER, MICHAEL J ALTERATION OF ERCC GENE EXPRESSION IN VITRO AND IN VIVO	08-01-96/07-30-97	UNIVERSITY OF CALIFORNIA SAN DIEGO	240,609
5 R01AG13154-02	WALLACE, DOUGLAS C MITOCHONDRIAL GENETICS AND AGING	07-01-96/06-30-97	EMORY UNIVERSITY	202,298
1 R01AG13156-01A2	FOSTER, THOMAS C NEURAL MECHANISMS OF SNYAPTIC PLASTICITY AND MEMORY	07-01-95/	UNIVERSITY OF VIRGINIA CHARLOTTESVIL	
1 R01AG13159-01A1	KOTLIKOFF, LAURENCE J ADEQUACY OF SAVING AND INSURANCE OF AMERICANS APPROACH	09-30-96/08-31-97	NATIONAL BUREAU OF ECONOMIC RESEARCH	175,000
5 R01AG13165-02	TURNER, DENNIS A NEURONAL AND POST LESION PLASTICITY IN AGING HIPPOCAMPUS	08-25-96/07-31-97	DUKE UNIVERSITY	203,948
1 R29AG13166-01A1	MC CANN, JUDITH J COMMUNITY STUDY: CAREGIVING IN AN OLDER BIRACIAL COHORT	04-01-96/	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	
1 R01AG13170-01A1	MORRIS, MARTHA C VITAMINS E/C & INCIDENT AD-BIRACIAL COMMUNITY STUDY	05-22-96/04-30-97	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	375,000
1 R01AG13176-01A1	SORRELL, J MICHAEL HUMAN SKIN DEVELOPMENT, AGING AND REGENERATION	04-01-96/	CASE WESTERN RESERVE UNIVERSITY	

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FY: 96				
1 R01AG13181-01	STOLNITZ, GEORGE J A NEW MORTALITY-AGE LINKAGES APPROACH: A 6-NATION STUDY	11-01-95/	INDIANA UNIVERSITY BLOOMINGTON	
1 R01AG13182-01A1	LINDEMAN, DAVID A ALZHEIMER'S ADULT DAY CARE: OUTCOMES AND EFFECTIVENESS	07-01-96/	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	
5 R44AG13183-03	WALKER, BONNIE L INJURY PREVENTION FOR THE ELDERLY	06-11-96/05-31-98	BONNIE WALKER AND ASSOCIATES	289,115
5 R01AG13185-02	LIEM, RONALD K NEUROFILAMENT KINASES AND ALZHEIMERS DISEASE TAU	08-01-96/07-31-97	COLUMBIA UNIVERSITY NEW YORK	320,567
1 R01AG13189-01A1	BENNETT, DAVID A MILD COGNITIVE IMPAIRMENT--LONGITUDINAL POPULATION STUDY	04-01-96/	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	
1 R01AG13192-01	SPREITZER, ELMER A GRANDPARENTS WHO PARENT THEIR GRANDCHILDREN	09-01-96/	BOWLING GREEN STATE UNIV BOWLING GRE	
5 R01AG13194-02	FROST, J JAMES DOPAMINE TRANSPORTER IMAGING BY PET IN AGING AND DISEASE	07-01-96/06-30-97	JOHNS HOPKINS UNIVERSITY	314,988
3 R01AG13194-02S1	FROST, J JAMES DOPAMINE TRANSPORTER IMAGING BY PET IN AGING AND DISEASE	09-15-96/06-30-97	JOHNS HOPKINS UNIVERSITY	65,000
1 R01AG13196-01A1	MARMOT, MICHAEL G CHANGES IN HEALTH--SOCIOECONOMIC STATUS AND PATHWAYS	04-01-96/03-31-97	U OF L UNIVERSITY COLLEGE LONDON	107,850
1 R29AG13204-01A1	VOYTKO, MARY L COGNITION AND ESTROGEN IN MENOPAUSE	05-01-96/04-30-97	WAKE FOREST UNIVERSITY	109,027
1 R01AG13207-01A1	BILLINGSLEY, MELVIN L PROTEIN PHOSPHATASES AND ALZHEIMER'S DISEASE	07-01-96/	PENNSYLVANIA STATE UNIV HERSHEY MED	
5 R29AG13208-02	BOWSER, ROBERT NOVEL ANTIGEN IN DEVELOPING BRAIN AND ALZHEIMERS DISEASE	08-01-96/07-31-97	UNIVERSITY OF PITTSBURGH AT PITTSBUR	100,784
1 R01AG13222-01A1	CHEN, LINDA H VITAMIN E, ANTIOXIDANT DEFENSE AND LIFE SPAN	04-01-96/	UNIVERSITY OF KENTUCKY	
1 R01AG13223-01A1	PREUSS, HARRY G NUTRITIONAL EFFECTS ON AGING & CHRONIC DISORDERS	04-01-96/	GEORGETOWN UNIVERSITY	
1 R01AG13224-01A1	JEN, K-L CATHERINE DIET, AGING AND BODY WEIGHT REGULATION IN RATS	07-01-96/	WAYNE STATE UNIVERSITY	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 R01AG13225-01A1	TAYLOR, ALLEN AGING CALORIE RESTRICTION, UBIQUITIN DEPENDENT PROTEOLYS	04-01-96/	TUFTS UNIVERSITY BOSTON	
1 R01AG13228-01A1	DWYER, JEFFREY W RECIPROCITY, FAMILY LONG TERM CARE AND ELDER WELL BEING	09-30-96/08-31-97	WAYNE STATE UNIVERSITY	199,652
1 R01AG13230-01	FIELD, TERRY S PREDICTORS OF MORBIDITY AND MORTALITY IN THE ELDERLY	07-01-95/	BRIGHAM AND WOMEN'S HOSPITAL	
1 R01AG13231-01A1	FINCH, CALEB E NEUROENDOCRINOLOGY OF GLIAL AGING & ALZHEIMER DISEASE	04-01-96/	UNIVERSITY OF SOUTHERN CALIFORNIA	
5 R29AG13237-02	SILVERSTEIN, MERRIL GRANDPARENT/ADULT GRANDCHILD RELATIONS & PSYCHOLOGICAL	09-30-96/08-31-97	UNIVERSITY OF SOUTHERN CALIFORNIA	164,584
1 R01AG13238-01A1	GLIK, DEBORAH C UTILIZATION OF ALTERNATIVE CARE & WELL ROLE ADHERENCE	07-01-96/	UNIVERSITY OF CALIFORNIA LOS ANGELES	
5 R01AG13240-02	SULLIVAN, DENNIS H ONSEPHF TRIAL--PILOT PHASE	09-01-96/08-31-98	UNIVERSITY OF ARKANSAS MED SCIS LTL	107,212
5 R01AG13241-02	HALL, JANET E AGING AND THE HYPOTHALAMIC-PITUITARY REPRODUCTIVE AXIS	08-25-96/07-31-97	MASSACHUSETTS GENERAL HOSPITAL	278,199
7 R01AG13243-03	LOTZ, MARTIN K NITRIC OXIDE AND CELLULAR AGING	02-15-97/06-30-97	SCRIPPS RESEARCH INSTITUTE	22,000
5 R01AG13251-02	TAFFET, GEORGE E LIPID MODIFICATION OF THE SENESCENT HEART	01-01-96/12-31-96	BAYLOR COLLEGE OF MEDICINE	172,157
1 R01AG13254-01A1	MANTON, KENNETH G POPULATION EFFECT OF CHRONIC DISEASE AND MORTALITY	05-28-96/04-30-97	DUKE UNIVERSITY	571,201
3 R01AG13254-01A1S1	MANTON, KENNETH G POPULATION EFFECT OF CHRONIC DISEASE AND MORTALITY	09-30-96/04-30-97	DUKE UNIVERSITY	75,000
5 U01AG13255-02	MAHONEY, DIANE M TLC TELEPHONE SYSTEM FOR ALZHEIMERS FAMILY CAREGIVERS	09-19-96/08-31-97	BOSTON UNIVERSITY	363,999
1 R01AG13263-01A1	NEZU, ARTHUR M PROBLEM SOLVING FOR CAREGIVERS OF ALZHEIMERS' PATIENTS	01-01-96/	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	
1 U01AG13265-01A1	GITLIN, LAURA N HOME ENVIRONMENTAL SKILL BUILDING PROGRAM FOR CAREGIVERS	09-30-96/08-31-97	THOMAS JEFFERSON UNIVERSITY	350,497

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FY: 96				
5 P30AG13280-02	RABINOVITCH, PETER S BASIC BIOLOGY OF AGING	07-01-96/06-30-97	UNIVERSITY OF WASHINGTON	451,817
1 P30AG13282-01	CRISTOFALO, VINCENT J DYSREGULATION DURING AGING--MOLECULES, CELLS AND TISSUES	07-01-96/06-30-97	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	431,997
5 P30AG13283-02	FAULKNER, JOHN A BIOLOGY OF AGING	07-01-96/06-30-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	353,343
3 P30AG13283-02S1	FAULKNER, JOHN A BIOLOGY OF AGING	09-10-96/06-30-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	31,048
5 U01AG13289-02	GALLAGHER-THOMPSON, DOLORES E TREATMENT OF DISTRESS IN HISPANIC AND ANGLO CAREGIVERS	09-19-96/08-31-97	PALO ALTO INSTITUTE FOR RES & EDU	375,130
3 U01AG13289-02S1	GALLAGHER-THOMPSON, DOLORES E TREATMENT OF DISTRESS IN HISPANIC AND ANGLO CAREGIVERS	09-30-96/08-31-97	PALO ALTO INSTITUTE FOR RES & EDU	35,273
3 U01AG13297-01S1	EISDORFER, CARL FAMILY-BASED INTERVENTIONS FOR CAREGIVERS	06-01-96/08-31-96	UNIVERSITY OF MIAMI	12,254
5 U01AG13297-02	EISDORFER, CARL FAMILY-BASED INTERVENTIONS FOR CAREGIVERS	09-19-96/08-31-97	UNIVERSITY OF MIAMI	441,413
1 R29AG13300-01A1	DOU, QUING-PING FUNCTIONS OF RB PROTEASE(S) IN APOPTOSIS	04-15-96/02-28-97	UNIVERSITY OF PITTSBURGH AT PITTSBUR	97,487
5 U01AG13305-02	SCHULZ, RICHARD COORDINATING CENTER FOR ENHANCING ADRD CAREGIVING	09-01-96/08-31-97	UNIVERSITY OF PITTSBURGH AT PITTSBUR	465,152
5 R01AG13308-02	SMALL, GARY W FUNCTIONAL MRI FOR EARLY DIAGNOSIS OF ALZHEIMER DISEASE	07-01-96/06-30-97	UNIVERSITY OF CALIFORNIA LOS ANGELES	261,991
5 R01AG13309-02	KALU, DIKE N ESTROGEN AND AGE RELATED DECLINE IN CALCIUM ABSORPTION	07-01-96/06-30-97	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	221,200
1 R01AG13311-01A1	KALMUSS, DEBRA S HRT: DETERMINANTS OF INITIATION AND CONTINUATION	04-01-96/	COLUMBIA UNIVERSITY NEW YORK	
5 U01AG13313-02	BURNS, ROBERT PROVIDERS AND ALZHEIMERS CAREGIVERS TOGETHER (PACT)	09-15-96/08-31-97	UNIVERSITY OF TENNESSEE AT MEMPHIS	412,455
1 P30AG13314-01	VIJG, JAN HARVARD NATHAN SHOCK CENTER IN BASIC BIOLOGY OF AGING	07-01-96/06-30-97	BETH ISRAEL DEACONESS MEDICAL CENTER	450,000

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FY: 96				
5 R44AG13317-03	MILBURY, PAUL E A COMPARITIVE BEAR MODEL FOR IMMOBILITY OSTEOPENIA	03-15-96/01-31-98	ESA, INC.	267,478
5 R29AG13318-02	NIEMINEN, ANNA-LIISA MITOCHONDRIAL FUNCTION IN OXIDATIVE INJURY	02-01-96/12-31-96	CASE WESTERN RESERVE UNIVERSITY	106,400
5 P30AG13319-02	RICHARDSON, ARLAN G NATHAN SHOCK AGING CENTER	07-01-96/06-30-97	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	479,058
5 R03AG13320-02	SIERRA, MARK A OXIDATIVE MODIFICATION OF MEMBRANE ASSOCIATED PROTEINS	08-01-96/11-30-97	UNIVERSITY OF NORTH DAKOTA	16,200
5 R44AG13322-03	COTTERMAN, ROBERT F COMPILING AND DOCUMENTING THE CPS ON COMPACT DISC	04-01-96/03-31-97	UNICON RESEARCH CORPORATION	236,491
5 R03AG13324-02	KEARNS, CECILIA M NEUROPROTECTIVE EFFECTS OF GDNF AGAINST 6-OHDA IN VIVO	08-15-96/07-31-97	UNIVERSITY OF KENTUCKY	16,200
5 P01AG13329-02	ROSENTHAL, NADIA A MECHANISMS OF MUSCLE AGING--ANALYSIS AND INTERVENTION	08-01-96/06-30-97	MASSACHUSETTS GENERAL HOSPITAL	834,491
2 R01AG13333-08A1	HAYES, WILSON C HIP FRACTURE RISK PREDICTION BY QDR	05-02-96/04-30-97	BETH ISRAEL DEACONESS MEDICAL CENTER	230,235
5 R01AG13338-02	OBLINGER, MONICA M ESTROGENIC REGULATION OF GENE EXPRESSION DURING NEURONAL	02-01-96/01-31-97	FINCH UNIV OF HLTH SCI/CHICAGO MED S	154,972
1 R43AG13358-01A1	VON STRANDTMANN, MAXIMILLIAN TREATMENT OF GLUTATHIONE DEFICIENCY SYNDROME	03-15-96/	MEDEA RESEARCH LABORATORIES, INC.	
1 R43AG13369-01A1	LINSKENS, MAARTEN H REPLICATIVE SENESCENCE: A MOLECULAR TARGET IN SKIN AGING	11-01-95/	GERON CORPORATION	
1 R43AG13372-01A1	NORMAN, ERIC J LOW COST SCREENING FOR B12 DEFICIENCY USING SPOT URINE	11-01-95/	NORMAN CLINICAL LABORATORY	
1 R01AG13373-01A1	MURASKO, DONNA M AGE-RELATED EFFECTS ON PERSISTENT RETROVIRUS INFECTION	07-01-96/	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	
1 R01AG13379-01A1	SIEGEL, KAROLYNN LATE MIDDLE AGE AND OLDER ADULTS LIVING WITH HIV/AIDS	07-01-96/06-30-97	SLOAN-KETTERING INSTITUTE FOR CANCER	187,640
1 R01AG13385-01	CHIANG, PETER K 3-DEAZA-ADENOSINE ANALOGS AS NOVEL INDUCERS OF APOPTOSIS	10-01-95/	HENRY M. JACKSON FDN FOR THE ADV MIL	

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FY: 96				
1 R01AG13387-01A1	JOHNSON, MITZI M THE COLLABORATIVE COGNITION OF OLDER ADULT COUPLES	08-01-96/	UNIVERSITY OF KENTUCKY	
1 R01AG13388-01	GORODESKI, GEORGE I EFFECTS OF AGING AND ESTROGEN ON TRANSVAGINAL TRANSPORT	02-01-96/	CASE WESTERN RESERVE UNIVERSITY	
1 R01AG13391-01	KOTLIKOFF, LAURENCE J SUSTANINING AND IMPROVING GENERAL ACCOUNTING IN THE US	01-01-96/	BOSTON UNIVERSITY	
1 R13AG13392-01	HERSH, LOUIS B SUMMER NEUROPEPTIDE CONFERENCE	05-01-95/	UNIVERSITY OF KENTUCKY	
1 R01AG13393-01	JEYASEELAN, LAKSHMANAN LONGITUDINAL STUDY ON THE PROBLEMS OF THE AGED	01-01-96/	CHRISTIAN MEDICAL COLLEGE	
1 R01AG13395-01	MULHOLLAND, JOY EFFECTS OF STEROID HORMONES ON AMYLOID EXPRESSION IN THE	12-01-95/	THOMAS JEFFERSON UNIVERSITY	
1 R01AG13396-01	MONK, TIMOTHY H PHASE SHIFT TOLERANCE IN OLDER PEOPLE	02-10-96/01-31-97	UNIVERSITY OF PITTSBURGH AT PITTSBUR	151,501
1 R01AG13400-01	RONAI, ZEEV A DEREGULATED ACTIVATION OF JUN-N-KINASE IN AGING	12-01-95/	AMERICAN HEALTH FOUNDATION	
1 R01AG13402-01	TARIOT, PIERRE N TREATING ALZHEIMER'S & OTHER DEMENTIAS IN NURSING HIOMES	12-01-95/	UNIVERSITY OF ROCHESTER	
1 R01AG13405-01	UHLENBERG, PETER R TRAJECTORIES OF FUNCTIONAL DECLINE IN LATER LIFE	01-01-96/	UNIVERSITY OF NORTH CAROLINA CHAPEL	
5 R01AG13406-02	BLAU, DAVID M HEALTH INSURANCE, HEALTH, AND RETIREMENT DYNAMICS	09-01-96/08-31-97	UNIVERSITY OF NORTH CAROLINA CHAPEL	120,920
1 R01AG13407-01A1	KREGEL, KEVIN C AGING AND HSP RESPONSES TO STRESS: INTEGRATED MECHANISMS	07-01-96/	UNIVERSITY OF IOWA	
5 R01AG13408-02	PEACOCK, MUNRO COMPARISON OF BONE STRENGTH AND MUSCLE STRENGTH AT HIP	09-01-96/08-31-97	INDIANA UNIV-PURDUE UNIV AT INDIANAP	250,241
1 R29AG13409-01A1	CAMPBELL, WAYNE W WEIGHT LOSS AND RESISTANCE TRAINING IN OLDER WOMEN	07-01-96/06-30-97	PENNSYLVANIA STATE UNIVERSITY-UNIV P	99,445
1 R01AG13410-01	HUGHES, CLAUDE L, JR PERIMENOPAUSAL OC EFFECTS ON BONES AND ARTERIES	12-01-95/	WAKE FOREST UNIVERSITY	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 R01AG13411-01A1	COTMAN, CARL W ACTIVITY DEPENDENT PLASTICITY IN THE AGING BRAIN	09-30-96/06-30-97	UNIVERSITY OF CALIFORNIA IRVINE	219,717
1 R01AG13412-01	LEVIN, EDWARD D NICOTINE-INDUCED MEMORY IMPROVEMENT IN AGING	12-01-95/	DUKE UNIVERSITY	
1 R01AG13413-01	MONTO, ARNOLD S VIRAL RESPIRATORY INFECTIONS IN NURSING HOME RESIDENTS	12-01-95/	UNIVERSITY OF MICHIGAN AT ANN ARBOR	
1 R01AG13414-01	SNYDER, RONALD D MOLECULAR GENETIC CORRELATES WITH AGE IN THE PROSTATE	12-01-95/	HOOD HUDSON CANCER RESEARCH LAB, INC	
1 R01AG13415-01	HARDY, JOHN A IDENTIFICATION OF GENES & MUTATIONS AT THE AD3 LOCUS	12-01-95/	UNIVERSITY OF SOUTH FLORIDA	
1 R01AG13416-01	LEE, SAM W GENES INVOLVED IN MAMMARY CELL SENESCENCE AND CANCER	01-01-95/	BETH ISRAEL DEACONESS MEDICAL CENTER	
1 R01AG13417-01	BARBER, B J AGE RELATED CHANGES IN PERIVASCULAR EXTRACELLULAR MATRIX	12-01-95/	UNIVERSITY OF KENTUCKY	
1 R01AG13418-01A1	DUNCAN, MARILYN J NEURAL MECHANISMS RESETTING THE AGED CIRCADIAN PACEMAKER	07-17-96/05-31-97	UNIVERSITY OF KENTUCKY	178,754
1 R01AG13419-01	ANDERSEN, GEORGE J AGING AND PERFORMANCE OF COGNITIVE AND PERCEPTUAL TASKS	06-24-96/05-31-97	UNIVERSITY OF CALIFORNIA RIVERSIDE	146,710
1 R01AG13420-01	GOLDMAN, WILLIAM F EFFECTS OF AGING ON SR FUNCTION IN ARTERIAL MYOCYTES	12-01-95/	UNIVERSITY OF MARYLAND BALT PROF SCH	
1 R01AG13421-01A1	GHISO, JORGE A FIBRILLOGENESIS, APOLIPOPROTEINS AND ALZHEIMER'S DISEASE	07-01-96/	NEW YORK UNIVERSITY MEDICAL CENTER	
1 R01AG13423-01A1	GLICKSMAN, ALLEN REFUGEE WOMEN: AGE, COHORT, & SYMPTOMS OF HEART DISEASE	07-01-96/	PHILADELPHIA GERIATRIC CTR-FRIEDMAN	
1 R01AG13424-01A1	JAGADEESWARAN, PUDUR FACTOR IX GENE TRANSCRIPTION DURING AGING	07-01-96/	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	
1 R01AG13425-01A1	WISE, PHYLLIS M NEUROPEPTIDES AND CARCADIAN RHYTHMS DURING AGING	07-17-96/05-31-97	UNIVERSITY OF KENTUCKY	181,241
1 R01AG13426-01A1	MC MAHON, DOUGLAS G CELLULAR MECHANISMS OF CIRCADIAN PACEMAKER AGING	07-17-96/05-31-97	UNIVERSITY OF KENTUCKY	158,090

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 R01AG13428-01	FRASER, COSMO L EFFECTS OF AGE AND SEX STEROIDS ON ISCHEMIC BRAIN DAMAGE	12-01-95/	UNIVERSITY OF CALIFORNIA SAN FRANCIS	
1 R01AG13429-01	SMITH, CHARLES D ALZHEIMER'S DISEASE: BRAIN PHOSPHATES, ESTROGEN & APOE	12-01-95/	UNIVERSITY OF KENTUCKY	
1 R29AG13430-01A1	GRIGORIEV, VITALII G WS3-10 PROTEIN: ROLE IN SENESCENCE	07-01-96/	UNIVERSITY OF ARKANSAS MED SCIS LTL	
1 R01AG13433-01	SU, JOSEPH H ANATOMICAL ANALYSIS OF NEURONAL APOPTOSIS IN AD.	12-01-95/	UNIVERSITY OF CALIFORNIA IRVINE	
1 R01AG13434-01	SALAND, LINDA C AGING AND PLASTICITY IN THE MAMMALIAN PITUITARY	12-01-95/	UNIVERSITY OF NEW MEXICO ALBUQUERQUE	
1 R01AG13436-01	WU, JOSEPH M PROCESSING OF PROTEIN TAU IN ALZHEIMER'S DISEASE	12-01-95/	NEW YORK MEDICAL COLLEGE	
1 R01AG13437-01A1	POPKIN, BARRY M SOCIAL CHANGE AND DIETARY TRENDS OF OLDER AMERICANS	07-01-96/	UNIVERSITY OF NORTH CAROLINA CHAPEL	
1 R01AG13438-01	GAYLORD, SUSAN A OLDER PEOPLE'S BELIEFS ABOUT LONGEVITY, HEALTH AND AGING	12-01-95/	UNIVERSITY OF NORTH CAROLINA CHAPEL	
1 R01AG13439-01	FRIEDMANN, ERIKA CARDIOVASCULAR BENEFITS: COMPANION ANIMALS FOR ELDERLY	01-01-96/	BROOKLYN COLLEGE	
1 R01AG13440-01	GARBER, CAROL E EXERCISE TRAINING IN PRE & POST MENOPAUSAL WOMEN	12-01-95/	MEMORIAL HOSPITAL OF RHODE ISLAND	
1 R01AG13441-01	GLOTH, F MICHAEL, III VITAMIN D DEFICIENCY IN HOMEBOUND ELDERLY	07-01-95/	UNION MEMORIAL HOSPITAL (BALTIMORE)	
1 R01AG13442-01	HAGBERG, JAMES M AGING, TESTOSTERONE, PHYSICAL ACTIVITY AND CHD RISK	12-01-95/	UNIVERSITY OF PITTSBURGH AT PITTSBUR	
1 R01AG13443-01	WARD, WALTER F AGING, FOOD RESTRICTION AND INSULIN RECEPTOR FUNCTION	12-01-95/	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	
1 R01AG13444-01A1	JENNES, LOTHAR H GNRH AND ITS CNS RECEPTORS AND REPRODUCTIVE AGING	07-17-96/05-31-97	UNIVERSITY OF KENTUCKY	167,634
1 R01AG13445-01	MONTEIRO, MERVYN J ALZHEIMER PHF-ASSOCIATED KINASES	09-15-96/08-31-97	UNIVERSITY OF MARYLAND BALT PROF SCH	214,500

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 R29AG13446-01	FILION, DIANE L SENSORY GATING IN SELECTIVE ATTENTION AND AGING	12-01-95/	UNIVERSITY OF KANSAS MEDICAL CENTER	
1 R29AG13447-01	HARRINGTON MEYER, MADONNA DETERMINANTS OF MEDICAID USE AMONG THE FRAIL ELDERLY	01-01-96/	UNIVERSITY OF ILLINOIS URBANA-CHAMPA	
1 R01AG13451-01	ALOIA, JOHN F PREVENTION OF BONE LOSS IN POSTMENOPAUSAL BLACK WOMEN	12-01-95/	WINTHROP-UNIVERSITY HOSPITAL	
1 R01AG13452-01	LYLES, KENNETH W IMPAIRMENTS AND BONE REMODELING IN PAGET'S DISEASE	12-01-95/	DUKE UNIVERSITY	
1 R01AG13454-01A1	LEGAN, SANDRA J NEURAL CONTROL OF LUTEINIZING HORMONE SECRETION IN AGING	07-16-96/06-30-97	UNIVERSITY OF KENTUCKY	210,397
1 R01AG13455-01A1	STERNBERG, ROBERT J ASSESSING AND ENHANCING MENTAL ABILITY IN OLDER ADULTS	07-01-96/	YALE UNIVERSITY	
1 R01AG13456-01	KOH, EUNSOOK T ROLE OF NUTRIENT INTAKE IN IMMUNE FUNCTIONS OF ELDERS	06-01-95/	UNIVERSITY OF OKLAHOMA HLTH SCIENCES	
1 R01AG13457-01A1	CARMEN, CASTANEDO-SCEPPA EXERCISE EFFECTS ON PROTEIN NUTRITION IN RENAL FAILURE	08-01-96/07-31-97	TUFTS UNIVERSITY BOSTON	324,236
1 R01AG13458-01	ABRASS, ITAMAR B WOUND REPAIR IN AGING	10-01-93/	UNIVERSITY OF WASHINGTON	
1 R01AG13459-01	ORR, WILLIAM C REGULATION OF ANTIOXIDATIVE GENES AND AGING	08-01-96/07-31-97	SOUTHERN METHODIST UNIVERSITY	163,315
1 R01AG13460-01	REGESTEIN, QUENTIN R EFFECTS OF HYPNOTIC DRUGS IN COMMUNITY-DWELLING ELDERLY	12-01-95/	BRIGHAM AND WOMEN'S HOSPITAL	
1 R01AG13461-01	EVANS, DENIS A TRIAL OF VITAMINS E AND C IN PRIMARY PREVENTION OF AD	12-01-95/	RUSH-PRESBYTERIAN-ST LUKES MEDICAL C	
1 R01AG13462-01	FIELD, TERRY S TRIAL OF ANTIOXIDANTS AND CVD IN THE ELDERLY	12-01-95/	BRIGHAM AND WOMEN'S HOSPITAL	
1 R29AG13464-01A1	BRIAN, JOHNNY E, JR ENDOTOXIN AND CEREBRAL ARTERIOLES	07-01-96/	UNIVERSITY OF IOWA	
1 R01AG13465-01	DALE, GEORGE L FUNCTIONAL CHARACTERISTICS OF AGED PLATELETS	12-01-95/	UNIVERSITY OF OKLAHOMA HLTH SCIENCES	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 R01AG13466-01	BAYLES, KATHRYN A INTERVENTIONS FOR ALZHEIMER'S PATIENTS AND CAREGIVERS	12-01-95/	UNIVERSITY OF ARIZONA	
1 R01AG13468-01	FINCH, CALEB E OVARIAN STEROIDS, NEUROENDOCRINE GENES, AND AGING	12-01-95/	UNIVERSITY OF SOUTHERN CALIFORNIA	
1 R01AG13469-01A1	QUANDT, SARA A UNDER NUTRITION IN RURAL ELDERLY--PREDICTORS AND PROCESS	09-30-96/08-31-97	WAKE FOREST UNIVERSITY	221,266
1 R01AG13471-01	AZHAR, SALMAN STEROL TRAFFICKING IN STEROIDOGENESIS: EFFECT OF AGING	12-01-95/	PALO ALTO INSTITUTE FOR RES & EDU	
1 R01AG13472-01	HUGHES, SUSAN L INCIDENCE AND IMPACT OF ARTHRITIS IN OLDER WOMEN	01-01-96/	NORTHWESTERN UNIVERSITY	
1 P01AG13473-01	WIEDERHOLT, WIGBERT C AGING AND NEURODEGENERATIVE DISEASES IN MICRONESIA	12-01-95/	UNIVERSITY OF CALIFORNIA SAN DIEGO	
1 R01AG13474-01A1	BATES, ELIZABETH A AGING AND BILINGUALISM	09-01-96/06-30-97	UNIVERSITY OF CALIFORNIA SAN DIEGO	197,878
1 R01AG13476-01	SOROFMAN, BERNARD A AGE, ENVIRONMENTAL CUES & MEDICATION COUNSELING	12-01-95/	UNIVERSITY OF IOWA	
1 R01AG13477-01	HUTCHENS, ROBERT M SOCIAL INSURANCE AND EMPLOYER INDUCED EARLY RETIREMENT	01-01-96/	CORNELL UNIVERSITY ITHACA	
1 R01AG13478-01A1	SMITH, KEN R KINSHIP AND SOCIO-DEMOGRAPHIC DETERMINANTS OF MORTALITY	09-30-96/08-31-97	UNIVERSITY OF UTAH	274,514
1 R01AG13479-01	WOODRUFF-PAK, DIANA S EARLY DETECTION OF ALZHEIMER'S DISEASE	12-01-95/	PHILADELPHIA GERIATRIC CTR-FRIEDMAN	
1 R01AG13480-01	KEMPER, SUSAN PRESERVATION OF A SECOND LANGUAGE IN LATE LIFE	12-01-95/	UNIVERSITY OF KANSAS LAWRENCE	
1 R29AG13482-01A1	GRODSTEIN, FRANCINE PROSPECTIVE STUDY OF COGNITIVE FUNCTION IN WOMEN	07-01-96/06-30-97	BRIGHAM AND WOMEN'S HOSPITAL	109,817
1 R01AG13483-01A1	D'ESPOSITO, MARK WORKING MEMORY IN PARKINSONS DISEASE AND AGING	09-01-96/06-30-97	UNIVERSITY OF PENNSYLVANIA	214,457
1 R29AG13484-01	SHELTON, JEAN F THE ECONOMICS OF INTERGENERATIONAL INTERACTION	12-01-95/	UNIVERSITY OF SOUTHERN CALIFORNIA	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 R01AG13487-01A1	ALNEMRI, EMAD S CYSTEINE PROTEASES IN APOPTOSIS AND CANCER	08-15-96/07-31-97	THOMAS JEFFERSON UNIVERSITY	227,892
1 R01AG13488-01	CASALI, PAOLO THE ANTIBODY RESPONSE IN AGING	12-01-95/	CORNELL UNIVERSITY MEDICAL CENTER	
1 R01AG13489-01A1	KOCH, TIMOTHY R NUTRIENT DEPLETION AND ENTERIC NERVES IN THE AGING COLON	07-01-96/	MEDICAL COLLEGE OF WISCONSIN	
1 R01AG13490-01A1	ANTONUCCI, TONI C CONVOYS OF SUPPORT IN OLD AGE--A CROSS NATIONAL STUDY	08-01-96/07-31-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	137,000
1 R29AG13493-01	HAMEED, ARIF HUMAN LYMPHOCYTE GRANZYME 3 AND THE BIOLOGY OF AGING	12-01-95/	OHIO STATE UNIVERSITY	
1 R01AG13495-01	SCHMUCKER, DOUGLAS L GUT MUCOSAL IMMUNE RESPONSE IN AGING RHESUS MACAQUES	12-01-95/	NORTHERN CALIFORNIA INSTITUTE RES &	
1 R01AG13497-01	BLACK, RONALD S UBIQUITIN-TAU INTERACTIONS IN AD: IN-VITRO STUDIES	12-01-95/	WINIFRED MASTERSON BURKE MED RES INS	
1 R01AG13498-01A1	DE JONG, GORDON F ELDERLY DISABILITY, MIGRATION, & H S AVAILABILITY	07-01-96/	PENNSYLVANIA STATE UNIVERSITY-UNIV P	
1 R01AG13499-01	FINCH, CALEB E APOJ (CLUSTERIN) IN ALZHEIMER DISEASE AND AGING	07-17-96/03-31-97	UNIVERSITY OF SOUTHERN CALIFORNIA	436,081
1 R29AG13500-01	EBERLING, JAMIE L TROPHIC FACTORS & PET STUDIES IN THE AGING PRIMATE BRAIN	12-01-95/	UNIVERSITY OF CALIF-LAWRENC BERKELEY	
1 R01AG13501-01	GOTTLIEB, ROBERTA A MECHANISMS OF APOPTOSIS IN BLOOD CELLS	02-10-96/01-31-97	SCRIPPS RESEARCH INSTITUTE	190,792
1 R01AG13502-01A1	FIFKOVA, EVA AGING AND DENTATE FASCIA IN AN EPILEPSY MODEL	07-01-96/	UNIVERSITY OF COLORADO AT BOULDER	
1 P01AG13504-01	LIPSCHITZ, DAVID A STUDIES ON THE CELLULAR AND MOLECULAR BIOLOGY OF AGING	12-01-95/	UNIVERSITY OF ARKANSAS MED SCIS LTL	
1 R01AG13505-01	TENNSTEDT, SHARON L HEALTH AND WORK IMPACTS OF ADULT DEPENDENT CARE	01-01-96/	NEW ENGLAND RESEARCH INSTITUTES, INC	
1 R01AG13506-01	KITANO, HARRY H RURAL AND URBAN CHINESE, JAPANESE AND WHITE ELDERLY	01-01-96/	SPECIAL SERVICE FOR GROUPS	

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FY: 96				
1 R01AG13507-01	RIBAYA-MERCADO, JUDY D NIACIN STATUS AND COGNITIVE FUNCTIONING IN OLDER PERSONS	12-01-95/	TUFTS UNIVERSITY BOSTON	
1 R01AG13508-01A1	BERRY, JANE M MEMORY SELF EFFICACY AND MEMORY PERFORMANCE IN ADULTHOOD	09-30-96/08-31-97	UNIVERSITY OF RICHMOND	282,970
1 R01AG13510-01	POLITOFF, ALBERTO L ELECTROPHYSIOLOGICAL RISK FACTORS FOR ALZHEIMERS DISEASE	01-01-96/	NEUROPSYCHIATRIC RESEARCH INSTITUTE	
1 R01AG13511-01A1	LOEWENSTEIN, DAVID A ETHNICITY AND STAGING OF FUNCTIONAL DECLINE IN DEMENTIA	07-01-96/	UNIVERSITY OF MIAMI	
1 R01AG13512-01	SCHWARZMAN, ALEXANDER L TRANSTHYRETIN VARIANTS IN ALZHEIMER'S DISEASE	12-01-95/	STATE UNIVERSITY NEW YORK STONY BROO	
1 R01AG13513-01	KUMAR, VIJAYA B C3B BINDING PROTEINS IN ALZHEIMER'S DISEASE	07-31-95/	ST. LOUIS UNIVERSITY	
1 R01AG13514-01	SADOVNICK, ADELE D THE ROLE OF APOE IN THE AGING POPULATION	07-01-95/	UNIVERSITY OF BRITISH COLUMBIA	
1 R01AG13516-01A1	PATTERSON, MARIAN B FUNCTIONAL & BEHAVIOR CONCOMMITANTS OF EXEC FUNCT IN AD	07-01-96/	CASE WESTERN RESERVE UNIVERSITY	
5 R01AG13519-02	GLOWACKI, JULIANNE AGE AND HORMONES ON BONE MARROW BIOLOGY	09-01-96/08-31-97	BRIGHAM AND WOMEN'S HOSPITAL	259,694
5 R01AG13523-02	LONG, MICHAEL W AGE RELATED CHANGES IN HUMAN OSTEOPROGENITOR CELLS	04-15-96/03-31-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	190,005
1 R01AG13527-01	GAY, CAROL V EVALUATION OF BONE CELL FUNCTION BY CONFOCAL IMAGING	09-01-96/08-31-97	PENNSYLVANIA STATE UNIVERSITY-UNIV P	178,740
5 R01AG13534-02	PACIFICI, ROBERTO MENOPAUSE AND HUMAN OSTEOCLASTOGENESIS	06-10-96/05-31-97	BARNES-JEWISH HOSPITAL	216,013
1 R01AG13536-01	NELSON, JAMES F DYNAMICS OF OVARIAN FOLLICULAR DISAPPEARANCE AT MIDLIFE	12-01-95/	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	
1 R01AG13537-01	CHODOBSKI, ADAM ROLE OF AVP IN AGING OF THE CHOROID PLEXUS - CSF SYSTEM	12-01-95/	RHODE ISLAND HOSPITAL (PROVIDENCE, R	
1 R01AG13538-01	DI FABIO, RICHARD P AGING AND ADAPTATION OF HEAD CONTROL	01-01-96/	UNIVERSITY OF MINNESOTA TWIN CITIES	

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 R01AG13539-01A1	COHN, JAY N ARTERIAL COMPLIANCE CHARACTERISTICS IN ATHEROSCLEROSOS	07-01-96/	UNIVERSITY OF MINNESOTA TWIN CITIES	
1 R01AG13540-01	SZABO, PAUL IMPAIRED B CELL DEVELOPMENT IN OLD AND ATHYMIC MICE	12-01-95/	CORNELL UNIVERSITY MEDICAL CENTER	
1 R01AG13541-01A1	STOLLAR, BERNARD D MECHANISMS OF AUTOANITBODY FORMATION IN HUMAN AGING	08-15-96/07-31-97	TUFTS UNIVERSITY BOSTON	202,925
1 R01AG13543-01	FELDMAN, LAWRENCE T HSV VECTORS FOR NEURODEGENERATIVE DISEASES	12-01-95/	UNIVERSITY OF CALIFORNIA LOS ANGELES	
5 R03AG13545-02	FAULKNER, BILLIE L NEUROBIOLOGY OF AGING AMYGDALA/PERIRHINAL AREA	09-15-96/12-31-97	YALE UNIVERSITY	16,200
5 R03AG13547-02	MARCELINO, JOSE IRON INDUCED CHANGES IN OA CARTILAGE	09-01-96/08-31-97	CLEVELAND STATE UNIVERSITY	16,726
1 R03AG13548-01	FAGAN, PEBBLES SOCIAL CONTROL, COMPLIANCE AND RURAL ELDERLY BLACKS	09-01-95/	TEXAS A&M UNIVERSITY HEALTH SCIENCE	
5 R03AG13549-02	DUHON, STACEY A MAPPING AND CHARACTERIZATION OF AGE MUTANTS	09-01-96/08-31-97	UNIVERSITY OF COLORADO AT BOULDER	10,426
1 R03AG13550-01	MILAN, RAMIRO GLUCOSE UTILIZATION RATES IN CEREBROVASCULAR ACC	09-01-95/	PONCE SCHOOL OF MEDICINE	
1 R01AG13555-01	MARKESBERY, WILLIAM R BRAIN OXIDATIVE AND TRACE ELEMENT STUDIES IN AD	12-01-95/	UNIVERSITY OF KENTUCKY	
5 R01AG13560-02	WALTER, CHRISTI A DNA REPAIR PROTEINS TARGETED TO THE MITOCHONDRIAL MATRIX	07-01-96/06-30-97	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	178,715
1 R01AG13563-01A1	SOHAL, RAJINDAR S DIETARY MODULATION OF CELLULAR OXIDATIVE STRESS IN AGING	04-01-96/03-31-97	SOUTHERN METHODIST UNIVERSITY	177,820
5 R01AG13566-02	NAPOLI, JOSEPH L RETINAL DEHYDROGENASES	07-01-96/06-30-97	STATE UNIVERSITY OF NEW YORK AT BUFF	173,945
1 R43AG13568-01	PUSKAS, ROBERT S IDENTIFICATION OF DNA PROBES INDICATIVE OF AGING	11-01-95/	BIOPROFILE, INC.	
1 R43AG13569-01	SARTORI, H E STRATEGIES FOR TREATMENT OF ALZHEIMERS DISEASE	11-01-95/	CENTER FOR PREVENTIVE THERAPY & REHA	

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 R43AG13571-01	PANTON, LYNN B ENHANCEMENT OF MUSCLE FUNCTION IN ELDERLY MEN AND WOMEN	12-15-95/	METABOLIC TECHNOLOGIES, INC.	
1 R43AG13571-01A1	PANTON, LYNN B ENHANCEMENT OF MUSCLE FUNCTION IN ELDERLY MEN AND WOMEN	08-15-96/	METABOLIC TECHNOLOGIES, INC.	
1 R43AG13574-01	ELBAUM, DANEK A SUPER IRMA FOR ALZHEIMER DISEASE MARKERS	12-01-95/	BIOTRACES	
1 R43AG13575-01	WADE, ALICE H LONG RANGE POPULATION PROJECTION BY DISABILITY STATUS	02-15-96/12-14-96	ACTUARIAL RESEARCH CORPORATION	99,184
1 R43AG13576-01	TURNER, LISA M AGING/DEVELOPMENTAL DISABILITIES TRAINING FOR STAFFS	11-01-95/	TURNER ASSOCIATES	
1 R43AG13577-01A1	MALONE, THOMAS B ERGONOMIC ENVIRONMENTAL ASSESSMENT PROTOCOL	07-01-96/	CARLOW INTERNATIONAL INC.	
1 R43AG13578-01	BEAHAN, SUSAN N VIDEO-MUSIC PRODUCT INTERVENTION FOR DEMENTIA PATIENTS	12-01-95/	STB PRODUCTIONS	
1 R43AG13579-01	MURPHY, PHILLIP J ENHANCING DECISIONS OF FAMILY CARE PROVIDERS WITH CDP ME	10-01-95/	SYGENEX INCORPORATED	
1 R43AG13580-01	BLACKSHEAR, PATSY B USER-DIRECTED DATA COLLECTION/INFORMATION RETRIEVAL	10-01-95/	ASSOCIATED ENTERPRISES, INC.	
1 R43AG13581-01	MATHEIS-KRAFT, CAROL E IMPLEMENTATION CURRICULUM FOR A RESIDENT-CENTERED MODEL	01-01-96/	NOR-ROL GROUP, LLC	
1 R43AG13581-01A1	MATHEIS-KRAFT, CAROL E IMPLEMENTATION CURRICULUM FOR A RESIDENT-CENTERED MODEL	08-01-96/	NOR-ROL GROUP, LLC	
1 R43AG13583-01A1	STOIL, MICHAEL J WORK SITE PROGRAMS TO ENCOURAGE LONG-TERM CARE PLANNING	05-30-96/	CONWAL, INC.	
1 R43AG13584-01	MILLER, VANESSA G USING CRITICAL PATHWAYS TO MANAGE HOME CARE PATIENTS	01-15-96/	WHOLELISTIC CARE, INC.	
5 R01AG13586-02	SHAY, NEIL F ZINC DEFICIENCY AND HYPOTHALAMIC DYSFUNTION	08-15-96/07-31-97	UNIVERSITY OF ILLINOIS URBANA-CHAMPA	198,843
1 R41AG13587-01A1	COLE, NEIL M DEVICE FOR TESTING LEG MUSCLE POWER IN THE ELDERLY	09-30-96/08-31-97	BIO LOGIC ENGINEERING, INC.	100,000

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 R43AG13588-01A1	JOHNSON, ROBERT E MEMBRANE ANCHORED ANTI-OXIDANT THERAPEUTICS	07-01-96/	OXIS INTERNATIONAL, INC.	
1 R43AG13589-01A1	STERNS, RONNI S SOFTWARE FOR EFFECTIVE PUBLIC TRANSPORTATION INFORMATION	03-01-96/	LIFESPAN ASSOCIATES	
1 R43AG13590-01A1	CATRON, LINDA S ELDERCARE AMERICA	07-01-96/	PARALLEL LINES	
1 R43AG13591-01	LENDERKING, WILLIAM R SELF MANAGEMENT AND PREVENTION PROGRAMS IN OLDER PERSONS	01-01-96/	PHASE V TECHNOLOGIES, INC.	
1 R43AG13592-01A1	NELSON, DIANE L INTERACTIVE COMPUTER ANIMATIONS TO PREVENT OSTEOPOROSIS	06-01-96/	BIOMEDIA CORPORATION	
1 R43AG13593-01A1	HUNT, GAIL G GRANDMA'S TOOL BOX	03-01-96/	GIBSON-HUNT ASSOCIATES, LTD.	
1 R43AG13595-01	LOEFFLER, NEIL L PHYSIOLOGICAL AND HEALTH EXPERT TELEMETRY (PHEET)	11-01-95/	TESCO, INC.	
1 R43AG13596-01A1	PLISKE, REBECCA M DESCRIBING INVESTMENT DECISION MAKING IN OLDER ADULTS	07-01-96/	KLEIN ASSOCIATES, INC.	
1 R43AG13597-01	KENNEDY, ROBERT S TESTS OF TRANSIENT VISUAL FUNCTIONING AND AGE	11-01-95/	ESSEX CORPORATION	
1 R43AG13598-01	WILSON, DOUGLAS B PROPOSAL FOR AN INTERACTIVE CD-ROM PARENTCARE GUIDE	11-01-95/	WILSON INTERACTIVE MEDIA, INC.	
1 R43AG13599-01A1	CALLAWAY, ENOCH THIAMINE AND CHOLINE SYNERGISM IN CHOLINERGIC ENHANCEMEN	07-01-96/	NEUROBIOLOGICAL TECHNOLOGIES, INC.	
1 R43AG13601-01	BROCK, BRUCE M AN INNOVATIVE GERIATRIC UNIT FOR COMMUNITY HOSPITALS	12-01-95/	INFORMATION TRANSFER SYSTEMS, INC.	
1 R43AG13602-01	SWARTZ, PAUL D GERONTOLOGY RESEARCH: DATA QUERY SYSTEM PROTOTYPE	10-01-95/	ARCHIMEDES LABORATORY, INC.	
1 R43AG13603-01	WAGNER, DONNA L ADULT DAY CARE INDUSTRY SURVEY	11-01-95/	NATIONAL COUNCIL ON AGING DEVELOP CO	
1 R43AG13604-01	SPREHE, J TIMOTHY INTERACTIVE MULTIMEDIA DELIVERY OF RETIREMENT PLANNING	11-01-95/	NATIONAL COUNCIL ON AGING DEVELOP CO	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 R43AG13605-01	DEC, KATHLEEN M PARENT CARE PLANNING PROGRAM	10-15-95/	CONNECTIONS UNLIMITED	
1 R43AG13607-01	STONE, JAMES A JUST CALL AGING & DD INFORMATION AND REFERRAL SERVICES	11-01-95/	JAS, INC.	
1 R43AG13609-01	COOK, CHERYL F EEG/STIMULATOR TO SLOW COGNITIVE DECLINE IN ALZHEIMER'S	11-01-95/	QUIESCE, INC.	
1 R43AG13610-01A1	SONCRANT, TIMOTHY T A NOVEL TRANSDERMAL THERAPEUTIC FOR ALZHEIMER'S DISEASE	07-01-96/	CURE, INC.	
1 R43AG13611-01	PINZON, GUILLERMO A ALZHEIMER'S DISEASE IN HISPANICS & RESPONSE WITH TACRINE	07-01-95/	DOCTOR PINZON RESEARCH FACILITY	
5 R01AG13612-02	MAJUMDAR, SHARMILA NON-INVASIVE ASSESSMENT OF TRABECULAR ARCHITECTURE	09-01-96/08-31-97	UNIVERSITY OF CALIFORNIA SAN FRANCIS	198,127
5 R01AG13613-02	RYFF, CAROL D LIFE HISTORIES AND MENTAL HEALTH IN MIDLIFE	09-01-96/08-31-97	UNIVERSITY OF WISCONSIN MADISON	219,872
1 R29AG13614-01	TUN, PATRICIA A AGING AND SPEECH COMPREHENSION IN DISTRACTING CONDITIONS	02-20-96/01-31-97	BRANDEIS UNIVERSITY	108,037
3 R01AG13616-08S1	DE LEON, MONY J CLINICAL CORRELATES OF LONGITUDINAL PET CHANGES IN AD	02-15-96/08-31-96	NEW YORK UNIVERSITY MEDICAL CENTER	42,426
5 R01AG13616-09	DE LEON, MONY J CLINICAL CORRELATES OF LONGITUDINAL PET CHANGES IN AD	09-01-96/08-31-97	NEW YORK UNIVERSITY MEDICAL CENTER	289,245
5 R01AG13617-02	YOUNG, ANNE B METABOTROPIC GLUTAMATE RECEPTORS IN NEURODEGENERATION	08-01-96/07-31-97	MASSACHUSETTS GENERAL HOSPITAL	215,335
5 R01AG13619-02	PITAS, ROBERT E APOE3 AND APOE4 EFFECTS ON CELLULAR PATHOBIOLOGY	07-17-96/06-30-97	J. DAVID GLADSTONE INSTITUTES	300,654
5 R01AG13620-10	ZIFF, EDWARD B DYNAMICS OF C-FOS PROTEIN INTERACTIONS	08-01-96/07-31-97	NEW YORK UNIVERSITY MEDICAL CENTER	156,978
5 R01AG13621-05	EFANGE, S MBUA-NGALE NEW RADIOTRACERS FOR MAPPING CHOLINERGIC INNERVATION	07-01-96/06-30-97	UNIVERSITY OF MINNESOTA TWIN CITIES	220,760
5 R01AG13622-02	SILVA, ALCINO J GENE TARGETING APPROACHES TO LEARNING AND MEMORY STUDIES	07-01-96/06-30-97	COLD SPRING HARBOR LABORATORY	250,286

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 R29AG13623-03	LIPPA, CAROL F	09-15-96/08-31-97	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	104,794
5 R01AG13625-10	ROODMAN, GARSON D DEVELOPMENTAL ASPECTS OF OSTEOCLAST FORMATION IN VITRO	08-01-96/07-31-97	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	168,555
5 P60AG13629-02	HOLLOSZY, JOHN O WASHINGTON UNIVERSITY CLAUDE D PEPPER OAIC	09-30-96/08-31-97	WASHINGTON UNIVERSITY	1,197,901
1 P60AG13631-01	BESDINE, RICHARD W CLAUDE PEPPER OLDER AMERICANS INDEPENDENCE CENTER	09-15-96/08-31-97	UNIVERSITY OF CONNECTICUT HEALTH CEN	1,119,491
1 R01AG13637-01	HERMAN, BRIAN A MECHANISMS OF HYPOXIC/REPERFUSION INJURY IN ENDOTHELIUM	08-01-96/07-31-97	UNIVERSITY OF NORTH CAROLINA CHAPEL	191,510
1 R01AG13638-01	REED, DWAYNE M EPIDEMIOLOGY OF HEALTHY AGING	07-01-96/	BUCK CENTER FOR RESEARCH IN AGING	
1 R01AG13639-01	HUGHES, CLAUDE L PERIMENOPAUSAL OVARIAN TOXICITY OF GALACTOSE	04-01-96/	WAKE FOREST UNIVERSITY	
1 R01AG13640-01	WILSON, DAVID L AGING: THE ANALYSIS OF LONG-LIVED MUTANTS	05-16-96/	UNIVERSITY OF MIAMI CORAL GABLES	
1 R13AG13641-01	IQBAL, KHALID FIFTH INTL CONF ON ALZHEIMER DISEASE & RELATED DISORDERS	05-21-96/04-30-97	INSTITUTE FOR BASIC RES IN DEV DISAB	24,000
5 R01AG13645-02	KIEL, DOUGLAS P GENETIC EPIDEMIOLOGY OF OSTEOPOROSIS	09-01-96/08-31-98	HEBREW REHABILITATION CENTER FOR AGE	188,238
1 R01AG13646-01	WIENER, CAROLYN L EFFECT ON ELDERS' CARE OF HOSPITAL QUALITY ASSURANCE	04-01-96/	UNIVERSITY OF CALIFORNIA SAN FRANCIS	
1 R01AG13647-01	DAWSON-HUGHES, B VDR GENOTYPE AND ABSORPTION ADAPTATION TO CA RESTRICTION	04-01-96/	TUFTS UNIVERSITY BOSTON	
1 R29AG13648-01	PRESTWOOD, KAREN M EFFECT OF ESTROGEN ON BONE IN OLDER WOMEN	04-01-96/	UNIVERSITY OF CONNECTICUT HEALTH CEN	
1 R01AG13649-01	REGESTEIN, QUENTIN R ESTROGEN REPLACEMENT AND PSYCHOLOGICAL FUNCTION	04-01-96/	BRIGHAM AND WOMEN'S HOSPITAL	
1 R01AG13650-01	SANTERRE, REXFORD E THE LOCATION DECISION OF NURSING HOMES	07-01-96/	BENTLEY COLLEGE	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 R01AG13652-01	BYLSMA, FREDERICK W WORKING CAREGIVERS OF ALZHEIMER'S DISEASE PATIENTS	04-01-96/	JOHNS HOPKINS UNIVERSITY	
1 R01AG13653-01	GOLAND, ROBIN S AGING AND NEUROENDOCRINE-CYTOKINE INTERACTIONS	04-01-96/	COLUMBIA UNIVERSITY NEW YORK	
1 R01AG13654-01	TURNER, CHARLES H STRATEGIES FOR RETARDING SKELETAL AGING	04-01-96/	INDIANA UNIV-PURDUE UNIV AT INDIANAP	
1 R01AG13655-01	MELCHIOR, DONALD L A NOVEL DSC STUDY OF MEMBRANE STRUCTURE CHANGE WITH AGE	04-01-96/	UNIVERSITY OF MASSACHUSETTS MEDICAL	
1 R01AG13657-01	HALBRENDT, CATHERINE MALNUTRITION & FOOD INSECURITY IN THE HOMEBOUND ELDERLY	04-01-96/	UNIVERSITY OF DELAWARE	
1 R29AG13659-01	GHADIALLY, RUBY CYTOKINE EXPRESSION AND SIGNALLING IN AGED EPIDERMIS	04-01-96/	UNIVERSITY OF CALIFORNIA SAN FRANCIS	
1 R29AG13660-01	KOCEJA, DAVID SPINAL CONTROL OF BALANCE IN THE ELDERLY	09-30-96/06-30-97	INDIANA UNIVERSITY BLOOMINGTON	96,000
1 R01AG13661-01	GOLANT, STEPHEN M DEPENDENT U S ELDERLY: UNEQUAL AND DISSIMILAR BURDENS O	05-01-96/	UNIVERSITY OF FLORIDA	
1 P01AG13663-01	SMITH, JAMES R CONTROL OF GENE EXPRESSION IN CELLULAR SENESCENCE	04-11-96/03-31-97	BAYLOR COLLEGE OF MEDICINE	1,025,104
1 R01AG13664-01	FASMAN, GERALD D 'STUDIES ON SYNTHETIC MODELS OF ALZHEIMER PROTEINS'	07-01-96/	BRANDEIS UNIVERSITY	
1 R01AG13665-01	SMITH, JAMES R CDK INHIBITORS IN CELLULAR SENESCENCE	04-01-96/	BAYLOR COLLEGE OF MEDICINE	
1 R01AG13666-01	WITTEN, MATTHEW INTERACTING GENDER AND AGE EFFECTS ON ALZHEIMER SURVIVAL	05-01-96/	UNIVERSITY OF MICHIGAN AT ANN ARBOR	
1 R01AG13667-01	WURTMAN, RICHARD J AGING AND SLEEP--ROLE OF MELATONIN	05-02-96/04-30-97	MASSACHUSETTS INSTITUTE OF TECHNOLOG	305,991
1 R01AG13668-01	SCHWARTZ, ELAINE TRANSLATIONAL CONTROL OF ELASTIN SYNTHESIS IN PHOTOAGING	06-01-96/	MOUNT SINAI SCHOOL OF MEDICINE OF CU	
1 R01AG13669-01	BECKER, JAMES T FUNCTIONAL NEUROIMAGING OF SEMANTIC MEMORY IN AD	06-06-96/03-31-97	UNIVERSITY OF PITTSBURGH AT PITTSBUR	183,152

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FY: 96				
1 R01AG13670-01	MOORADIAN, ARSHAG D AGE RELATED CHANGES IN APOA1 EXPRESSION	04-01-96/	ST. LOUIS UNIVERSITY	
1 R01AG13671-01	DIXIT, VISHVA M FAS ASSOCIATED DEATH DOMAIN (FADD)	04-11-96/02-28-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	174,919
1 R01AG13672-01	KAMBOH, M ILYAS RISK GENES IN ALZHEIMERS DISEASE	05-29-96/04-30-97	UNIVERSITY OF PITTSBURGH AT PITTSBUR	355,967
1 R01AG13674-01	SATTERFIELD, SUZANNE NONTRADITIONAL EXERCISE FOR POSTMENOPAUSAL WOMEN	04-04-96/	UNIVERSITY OF TENNESSEE AT MEMPHIS	
1 R01AG13675-01	ANDERSON, JOHN J VITAMIN D SUPPLEMENTATION IN BLACK AND WHITE ELDERLY	07-01-96/	UNIVERSITY OF NORTH CAROLINA CHAPEL	
1 R29AG13676-01	PALMER, HELEN J INDUCTION OF ANTIOXIDANT ENZYMES BY OXIDANTS WITH AGE	04-01-96/	TUFTS UNIVERSITY BOSTON	
1 R01AG13677-01	WOODS, VIRGIL L, JR ROLE OF AV INTEGRINS IN AGEING OF CARTILAGE	04-01-96/	UNIVERSITY OF CALIFORNIA SAN DIEGO	
1 R29AG13679-01	ADKISSON, HUSTON D, IV REGULATORY ROLE OF FATTY ACIDS IN CHONDROCYTE BIOLOGY	04-01-96/	WASHINGTON UNIVERSITY	
1 R13AG13682-01A1	MORGAN, RUSSELL E, JR FIRST INTERNATIONAL CONFERENCE ON IMMUNOLOGY AND AGING	05-22-96/04-30-97	INSTITUTE ADVANCED STUDIES/IMMUNO/AG	33,090
1 R01AG13683-01	CREW, MARK D FUNCTIONAL ANALYSES OF H-2T24, AN MHC CLASS IB PROTEIN	04-01-96/	UNIVERSITY OF ARKANSAS MED SCIS LTL	
1 R01AG13684-01	RUBENSTEIN, RICHARD OVEREXPRESSING BAPP AND PRPC IN ACCELERATED AGING MICE	04-01-96/	INSTITUTE FOR BASIC RES IN DEV DISAB	
1 R01AG13686-01	SNYDER, DAVID L AGING AND NEUROTRANSMITTER RELEASE IN THE SPLEEN	04-01-96/	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	
1 R01AG13688-01	MEDRANO, ESTELA E TERMINAL DIFFERENTIATION IN HUMAN MELANOCYTES	04-01-96/	BAYLOR COLLEGE OF MEDICINE	
1 R29AG13689-01	GEARING, MARLA ALZHEIMER'S DISEASE-RELATED PROTEINS IN ANIMAL SPECIES	04-01-96/	EMORY UNIVERSITY	
1 R29AG13690-01	PERIDES, GEORGE BRAIN EXTRACELLULAR MATRIX AND ENZYMES IN AGING	04-01-96/	NEW ENGLAND MEDICAL CENTER	

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FY: 96				
1 R01AG13692-01	DRAGANICH, LOUIS F EFFECTS OF PHYSICAL PERFORMANCE AND EXERCISE ON TRIPPING	04-01-96/	UNIVERSITY OF CHICAGO	
1 R01AG13694-01	WILKINSON, CHARLES W ADRENOCORTICAL STRESS RESPONSES AND FEEDBACK IN AGING	04-01-96/	UNIVERSITY OF WASHINGTON	
1 R01AG13695-01	CEDARS, MARCELLE I PREMENOPAUSAL DYSFUNCTION OF THE GH/REPRODUCTIVE AXES	04-01-96/	UNIVERSITY OF CINCINNATI	
1 R01AG13698-01	BARBER, B J AGE RELATED CHANGES IN MICROVASCULAR TRANSPORT	04-01-96/	UNIVERSITY OF KENTUCKY	
1 R01AG13699-01	RAMPINO, NICHOLAS J OXIDATIVE DAMAGE & GENETIC REPAIR IN CELLULAR AGING	04-01-96/	CALIFORNIA INSTITUTE OF BIOLOGICAL R	
1 R01AG13700-01	ALLEN, RONALD E SKELETAL MUSCLE SATELLITE CELL REGULATION DURING AGING	04-01-96/	UNIVERSITY OF ARIZONA	
1 R01AG13701-01	SIERRA, LUIS F THE CONTROL OF HEPATIC GENE EXPRESSION DURING AGING	04-01-96/	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	
1 R01AG13704-01	KOSMAN, DANIEL J CELL CYCLE ARREST IN CHRONIC OXIDATIVE STRESS AND AGING	04-01-96/	STATE UNIVERSITY OF NEW YORK AT BUFF	
1 R01AG13705-01A1	LEVY, EFRAT CEREBRAL AMYLOID ANGIOPATHY--CYSTATIN C DEPOSITION	09-30-96/08-31-97	NEW YORK UNIVERSITY MEDICAL CENTER	231,926
1 R01AG13706-01	GOLDGABER, DMITRY Y INHIBITION OF AMYLOID FORMATION BY TRANSTHYRETIN & APOE	04-29-96/03-31-97	STATE UNIVERSITY NEW YORK STONY BROO	248,219
1 R01AG13709-01	VERBRUGGE, LOIS M MUSCULOSKELETAL DISABLEMENT IN AGING ADULTS	03-01-96/	UNIVERSITY OF MICHIGAN AT ANN ARBOR	
1 R01AG13710-01	RUBIN, DAVID C COGNITIVE FUNCTIONING ACROSS THE LIFESPAN	05-01-96/	DUKE UNIVERSITY	
1 R01AG13711-01	MILLER, RICHARD A MILD DERIVED MOUSE STOCKS--NEW MODELS FOR AGING RESEARCH	09-15-96/08-31-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	227,135
1 R01AG13712-01	WOODS, MARGO N ESTROGENIC EFFECTS OF DIETARY SOY VERSUS HRT	01-01-96/	TUFTS UNIVERSITY BOSTON	
1 R01AG13717-01	GOODWIN, JAMES S EFFECT OF VITAMIN E ON INFECTIONS IN THE ELDERLY	04-01-96/	UNIVERSITY OF TEXAS MEDICAL BR GALVE	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 R01AG13718-01	HALL, STEPHEN D AGING EFFECT ON DRUG BIOAVAILABILITY	07-20-96/06-30-97	INDIANA UNIV-PURDUE UNIV AT INDIANAP	261,020
1 R01AG13721-01	ALLEN, LINDSAY H VITAMIN B-12 MALABSORPTION AND GASTRITIS IN THE ELDERLY	05-01-96/	UNIVERSITY OF CALIFORNIA DAVIS	
1 R43AG13722-01A1	LEVITAN, KAREN B MULTIMEDIA RESOURCE FOR MENOPAUSE	07-01-96/	MANTECH INTERNATIONAL CORPORATION	
1 R01AG13724-01	MARES-PERLMAN, JULIE A DIET AND MORBIDITY AND MORTALITY IN OLDER ADULTS	04-01-96/	UNIVERSITY OF WISCONSIN MADISON	
1 R01AG13725-01	SCHIFFER, RANDOLPH B DEMENTIA CAREGIVER COPING METHODS & HEA. SELF-PERCEPT	04-01-96/	UNIVERSITY OF ROCHESTER	
1 R01AG13727-01	KLINE, JENNIE K TRISOMY RISK AND BIOLOGIC AGE: AN EPIDEMIOLOGIC STUDY	04-01-96/	NEW YORK STATE PSYCHIATRIC INSTITUTE	
1 R01AG13729-01	JOHNSON, EUGENE M, JR BIOLOGY AND PHARMACOLOGY OF THE GDNF HOMOLOG NEURTURIN	04-25-96/03-31-97	WASHINGTON UNIVERSITY	322,877
1 R01AG13730-01	MILBRANDT, JEFFREY D PHYSIOLOGY AND GENETICS OF THE GDNF HOMOLOG NEURTURIN	07-01-96/05-31-97	WASHINGTON UNIVERSITY	328,037
1 R01AG13732-01	ALLARD, JOHANE MULTIVITAMINS IN LONG-TERM CARE: EFFECT ON INFECTIONS	07-01-96/	TORONTO HOSPITAL	
1 R29AG13733-01	GREENWELL, LISA AGING, POVERTY, AND FAMILY: NEIGHBORHOOD EFFECTS	04-01-96/	UNIVERSITY OF SOUTHERN CALIFORNIA	
1 P01AG13734-01	CARP, RICHARD I PROCESSES UNDERLYING ACCELERATED AGING IN A MOUSE MODEL	04-01-96/	INSTITUTE FOR BASIC RES IN DEV DISAB	
7 R01AG13736-02	ROTHMAN, JOEL H REGULATION OF PROGRAMMED CELL DEATH IN C ELEGANS	11-15-96/03-31-97	UNIVERSITY OF CALIFORNIA SANTA BARBA	180,349
1 R01AG13737-01	SAYRE, LAWRENCE M STRUCTURAL BASIS OF NEURONAL PROTEIN OXIDATIVE DAMAGE	04-01-96/	CASE WESTERN RESERVE UNIVERSITY	
1 R01AG13740-01	DE VOS, SUSAN M CHANGING HOUSEHOLD OF THE ELDERLY IN LATIN AMERICA	04-01-96/	UNIVERSITY OF WISCONSIN MADISON	
1 P01AG13742-01	POPKIN, BARRY M NUTRITION, HEALTH, AND AGING DYNAMICS	04-01-96/	UNIVERSITY OF NORTH CAROLINA CHAPEL	

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FY: 96				
5 R01AG13743-02	LETOVSKY, STANLEY I SPATIALLY ORIENTED DATABASE FOR DIGITAL BRAIN IMAGES	09-01-96/06-30-97	JOHNS HOPKINS UNIVERSITY	239,976
1 R01AG13745-01	DUBOCOVICH, MARGARITA L MELATONIN RECEPTORS IN AGING	04-01-96/	NORTHWESTERN UNIVERSITY	
1 R01AG13746-01	GORODESKI, GEORGE I EFFECTS OF AGING AND ESTROGEN ON CORONARY RESISTANCE	06-01-96/	CASE WESTERN RESERVE UNIVERSITY	
1 R15AG13747-01	HOOPES, LAURA L DNA REPAIR GENES IN AGING AND IMMORTALITY	06-01-96/	POMONA COLLEGE	
1 R01AG13748-01	VALENTINE, JOAN S YEAST MODELS FOR STUDY OF OXIDATIVE STRESS IN AGING	04-01-96/	UNIVERSITY OF CALIFORNIA LOS ANGELES	
1 R29AG13749-01	ELLIS, RONALD J CLINICAL MARKERS OF ALZHEIMER'S DISEASES WITH LEWY BODIE	04-01-96/	UNIVERSITY OF CALIFORNIA SAN DIEGO	
1 R15AG13750-01	MANYAM, BALA V VALIDATION OF HERBAL COGNITIVE ENHANCERS IN DEMENTIA	04-01-96/	SOUTHERN ILLINOIS UNIVERSITY SCH OF	
1 R15AG13751-01	BOTTENBERG, DONNA J COMMUNICATIVE INTERVENTION FOR SPOUSES & PERSONS WITH AD	05-01-96/	UNIVERSITY OF NORTHERN COLORADO	
1 R15AG13752-01	HEYLIGER, CLAYTON E L-CARNITINE AND THE AGING HEART	06-01-96/	UNIVERSITY OF CINCINNATI	
1 R15AG13753-01	CRUISE, MARY J HISPANIC/LATINO OLDER ADULTS PRIMARY HEALTH PERCEPTIONS	07-01-96/	CALIFORNIA STATE UNIV-DOMINGUEZ HILL	
1 R15AG13754-01	MELISKA, CHARLES J LEARNING AND MEMORY IN TRANSGENIC MICE	04-01-96/	SOUTHERN ILLINOIS UNIVERSITY CARBOND	
1 R15AG13755-01	PORT, RICHARD L USE-INDUCED PLASTICITY IN AGED MAMMALS	05-15-96/	SLIPPERY ROCK UNIVERSITY OF PENNSYLV	
1 R15AG13756-01	TEDROW, LUCKY M HEALTH LIMITATIONS AND AGING IN PLACE	06-01-96/	WESTERN WASHINGTON UNIVERSITY	
1 R15AG13760-01	KNUTZEN, KATHLEEN M IMPACT OF HIGH RESISTANCE TRAINING ON THE MATURE ADULT	04-01-96/	WESTERN WASHINGTON UNIVERSITY	
1 R15AG13761-01	HIGGINS, JOSEPH R PHASE TRANSITIONS & INSTABILITIES IN ELDERLY LOCOMOTION	04-01-96/	SAN FRANCISCO STATE UNIVERSITY	

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 R15AG13764-01	STEFFEN, ANN M BEHAVIORAL CODING OF DEMENTIA PATIENTS AND CAREGIVERS	05-01-96/	UNIVERSITY OF MISSOURI-ST. LOUIS	
1 R15AG13766-01	WEHRENBERG, WILLIAM B LONGEVITY, AGING AND THE GROWTH HORMONE AXIS	04-01-96/	UNIVERSITY OF WISCONSIN MILWAUKEE	
1 R01AG13768-01	KIYAK, H ASUMAN EMPOWERNING ELDERS AS HEALTH PROMOTION ADVOCATES	06-01-96/	UNIVERSITY OF WASHINGTON	
1 R01AG13770-01	KELSO, J A S DYNAMICAL MECHANISMS OF SENSORIMOTOR ADAPTATION	04-01-96/	FLORIDA ATLANTIC UNIVERSITY	
1 R15AG13771-01	UEMURA, ETSURO THE EFFECTS OF BETA-AMYLOID ON MICROGLIAL MAC-1 INTEGRIN	04-01-95/	IOWA STATE UNIVERSITY OF SCIENCE & T	
5 R44AG13775-03	NUWAYSER, E S INJECTABLE MICROCAPSULE FOR ESTROGEN REPLACEMENT THERAPY	09-01-96/08-31-99	BIOTEK, INC.	238,899
1 R15AG13778-01	RHO, JAE-YOUNG ULTRASOUND AND FRACTAL ANALYSIS IN AGE-RELATED CHANGES	06-01-96/	UNIVERSITY OF MEMPHIS	
5 R01AG13779-02	ROTTENBERG, HAGAI MITOCHONDRIAL DYSFUNCTION IN IMMUNOSENESCENCE	08-01-96/07-31-97	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	179,781
1 R01AG13780-01	GANDY, SAMUEL E REGULATED CLEAVAGE OF AMYLOID PRECURSOR--MOLECULAR BASIS	09-15-96/03-31-97	CORNELL UNIVERSITY MEDICAL CENTER	248,507
5 R01AG13784-02	SASSOON, DAVID MOLECULAR BASIS OF UTERINE CELLULAR INTERACTIONS	08-15-96/07-31-97	MOUNT SINAI SCHOOL OF MEDICINE OF CU	243,798
1 R13AG13786-01	WILKING, SPENCER V SUMMER INSTITUTES IN GERIATRIC MEDICINE	07-01-96/06-30-97	BOSTON UNIVERSITY	40,874
1 R01AG13787-01	KENNEDY, ROBERT D HEALTH CARE BARRIERS FOR URBAN LATINO ELDERLY WITH ADRD	04-01-96/	BETH ABRAHAM HOSPITAL	
1 R01AG13789-01	KELSOE, GARNETT H SOMATIC GENETICS OF T CELL IMMUNITY	02-01-96/01-31-97	UNIVERSITY OF MARYLAND BALT PROF SCH	214,167
1 R01AG13791-01	WALLACE, ROBERT B ESTROGEN THERAPY, WEIGHT LOSS AND OA IN THE WHI	04-01-96/	UNIVERSITY OF IOWA	
1 R01AG13792-01	NEVITT, MICHAEL C ESTROGEN THERAPY, WEIGHT LOSS AND OA IN WHI	04-01-96/	UNIVERSITY OF CALIFORNIA SAN FRANCIS	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 R01AG13797-02	HERMAN, BRIAN A APOPTOSIS AND CERVICAL CANCER	08-15-96/07-31-97	UNIVERSITY OF NORTH CAROLINA CHAPEL	191,776
5 R01AG13798-07	YABLONKA-REUVENI, ZIPORA SATELLITE CELL DYNAMICS--A ROLE FOR THE MYOFIBER	09-01-96/08-31-97	UNIVERSITY OF WASHINGTON	246,468
5 R01AG13799-02	PASINETTI, GUILIO M COMPLEMENT AND NEUROPROTECTION--A MODEL FOR ALZHEIMERS	09-01-96/08-31-97	MOUNT SINAI SCHOOL OF MEDICINE OF CU	185,121
1 R43AG13800-01	PLISKE, REBECCA M AGE AND JOB PERFORMANCE: A COGNITIVE TASK ANALYSIS	03-01-96/	KLEIN ASSOCIATES, INC.	
1 R43AG13801-01	STROMBECK, RITA D HELPING OLDER GAY AND BISEXUAL MEN MANAGE HIV/AIDS	03-01-96/	HEALTHCARE EDUCATION ASSOCIATES	
1 R43AG13802-01	PATEL, ASHOK NOVEL DRUG DELIVERY SYSTEM FOR STEROID HORMONES	01-01-96/	SAIMOL INTERNATIONAL, INC.	
1 R43AG13804-01	KLOOS-FENN, ETHEL PIPIN: INTELLECTUAL HEALTH TRAINERS INFORMATION/RESOURC	03-01-96/	APPLIED RESEARCH CONSULTANTS	
1 R43AG13805-01	ABBOTT, SUSAN HEALTH EDUCATION: AIDS AND AGING	03-01-96/	NANCY LOW AND ASSOCIATES, INC.	
1 R43AG13806-01	BLACKSHEAR, PATSY B ELECTRONIC ACCESS SYSTEM FOR ELDERCARE CAREGIVERS	03-01-96/	ASSOCIATED ENTERPRISES, INC.	
5 R01AG13807-02	SONNENSCHEIN, CARLOS BREAST CANCER & AGING--A SOMATIC CELL GENETICS APPROACH	09-01-96/08-31-97	TUFTS UNIVERSITY BOSTON	258,497
1 R43AG13808-01	ARLINGHAUS, HEINRICH F SENSITIVE TRACE ELEMENT IMAGING IN ALZHEIMER'S DISEASE	04-01-96/	ATOM SCIENCES, INC.	
1 R43AG13809-01	BARNES, SCOTT Z QUANTITATIVE ASSESSMENT OF AMBULATION, POSTURE & BALANCE	03-01-96/	BERTEC CORPORATION	
1 R43AG13811-01	ATKIN, ANDREW PEPTIDE IMMUNOTHERAPEUTICS	03-01-96/	BIOCON, INC.	
1 R43AG13812-01	HYDE, JOAN J OPERATIONAL/MANAGEMENT MODEL IN RESIDENTIAL DEMETIA SCU'	03-15-96/	HEARTHSTONE ALZHEIMER CARE, LTD	
1 R43AG13814-01	MANHERZ, RONALD K FALLS SAFETY PROMOTION SYSTEM	04-01-96/	TORREY SCIENCE CORPORATION	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 R43AG13815-01	WOOTEN, KENNETH L GRAB BAR SUPPORT SYSTEM TO PROLONG ADULT INDEPENDENCE	03-01-96/	LIFESPEC CABINET SYSTEMS, INC.	
1 R43AG13817-01	HARTMAN-STEIN, PAULA E MULTIMEDIA SOFTWARE FOR ALZHEIMER'S CAREGIVERS	03-01-96/	CENTER FOR HEALTHY AGING	
1 R43AG13818-01	DACUS, FARRON L MONITOR/TRACKER FOR ALZHEIMERS WANDERERS	09-26-96/12-31-97	CLEVELAND MEDICAL DEVICES, INC.	98,533
1 R43AG13819-01	HEFELE, THOMAS J NEUROBIOBEHAVIORAL REHAB SYSTEMS FOR ELDER CARE	03-15-96/	COGNICARE, INC.	
1 R43AG13820-01	KLINE, KRISS AGING AND HEALTH FACTORS MONITORING: LHAMP TM SOFTWARE	03-01-96/	INTEGRAL HEALTH NETWORK, INC.	
1 R43AG13821-01	ARANEO, BARBARA A ADJUVANTED INFLUENZA VACCINATION FOR THE ELDERLY	03-01-96/	PARADIGM BIOSCIENCES, INC.	
1 R43AG13822-01	HARTRY, ANN L ANALYTIC TOOLS FOR PATTERN RECOGNITION IN EEG DATA	03-01-96/	ELECTRICAL GEODESICS, INC.	
1 R43AG13823-01	MC LAUGHLIN, THOMAS J COMMUNICATIONS AID FOR LATE-DEAFENED ELDERLY	04-01-96/	NXI COMMUNICATION, INC.	
1 R43AG13824-01	MANHERZ, RONALD K MOBILE INCONSPICUOUS INCONTINENCE MONITORING SYSTEM	04-01-96/	TORREY SCIENCE CORPORATION	
1 R43AG13825-01	BEEDLE, JOYCE L CONVERT CAREBOOK INTO CD-ROM OF CUSTOM ALZHEIMER'S CARE	05-01-96/	ALZHEIMER'S CONSULTING SERVICE	
1 R43AG13829-01	DUNN, WILLIAM L A FUNCTIONAL ASSESSMENT SYSTEM TO TEST ELDERLY DRIVERS	04-01-96/	QUANTUM RESEARCH SERVICES	
1 R43AG13830-01	AVENT, RICHARD PORTABLE MULTIMEDIA FOR FAMILY CAREGIVER TRAINING	06-01-96/02-28-97	AMERICAN RESEARCH CORP OF VIRGINIA	100,000
9 R44AG13831-02	LOUIE, MING H SCHEDULING AND PLANNING SYSTEM FOR HOME CARE SERVICES	03-27-96/12-31-96	ATLAS DATA SYSTEMS	290,706
1 R43AG13832-01	ANDERSON, ALBERT F SYSTEM FOR MANAGING LONGITUDINAL SURVEY DATA	05-01-96/04-30-97	PUBLIC DATA QUERIES, INC.	98,259
1 R43AG13833-01	PROFFITT, DEBORAH A SECURED INTERNET MEDICAL OUTCOMES STUDY DATA	04-01-96/	SEA CORPORATION	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 R43AG13835-01	PUGH, ROBERT W, JR FEMALE ANTI-INCONTINENCE DEVICE	04-01-96/	DACOMED CORPORATION	
1 R43AG13836-01	NOELL, EUNICE DIANE AGING WITH DIGNITY & SAFETY IN A SUPPORTIVE ENVIRONMENT	04-01-96/	SENIOR STYLE, LTD	
5 R01AG13837-02	GENTER, MARY B IMPACT OF ENVIROMENTAL TOXICANTS ON THE OLFACTORY SYSTEM	09-15-96/08-31-97	UNIVERSITY OF CINCINNATI	74,151
1 R43AG13838-01	HILLMAN, CHARLES E INTELLIGENT MONITORING SYSTEM FOR IN-HOME ELDER CARE	04-01-96/	HILLMAN CONSULTING SERVICES, INC.	
5 R01AG13839-02	VITEK, MICHAEL P ADVANCED GLYCOSYLATION ENDPRODUCTS AND AD AMYLOIDOSIS	09-01-96/08-31-97	DUKE UNIVERSITY	241,514
1 R43AG13840-01	DROZDOWSKI, ROBERT J AFFORDABLE, INTERACTIVE, NONINVASIVE DIAGNOSTIC PLATFORM	04-01-96/	AURUM DIAGNOSTICS	
1 R43AG13841-01	KARNITSCHNIG, JENNIFER HEALTH COMMUNICATIONS AND WELLNESS RESEARCH INVENTORY	03-18-96/	MICROMASS COMMUNICATIONS, INC.	
5 R01AG13843-02	OOI, WEE L IMPACT OF NURSING HOME ENVIRONMENT ON MORBID OUTCOMES	09-30-96/08-31-97	HEBREW REHABILITATION CENTER FOR AGE	245,517
1 R01AG13844-01	HIRSHFIELD, ANNE N PRIMORDIAL FOLLICLE ENDOWMENT AND REPRODUCTIVE AGING	02-01-96/01-31-97	UNIVERSITY OF MARYLAND BALT PROF SCH	176,524
5 R01AG13845-02	SNODGRASS, JOAN G AGE EFFECTS IN ATTENTION & MEMORY--PROCESS DISSOCIATION	08-26-96/07-31-97	NEW YORK UNIVERSITY	236,258
1 P30AG13846-01	KOWALL, NEIL W BOSTON UNIVERSITY ALZHEIMERS DISEASE CORE CENTER	07-01-96/06-30-97	BOSTON UNIVERSITY	727,560
3 R01AG13847-07S1	RILEY, RICHARD L B CELL REPERTOIRE OF NORMAL AND AUTOIMMUNE MICE	06-01-96/08-31-96	UNIVERSITY OF MIAMI	44,420
3 R01AG13847-07S2	RILEY, RICHARD L B CELL REPERTOIRE OF NORMAL AND AUTOIMMUNE MICE	06-15-96/08-31-96	UNIVERSITY OF MIAMI	74,400
5 R01AG13847-08	RILEY, RICHARD L B CELL REPERTOIRE OF NORMAL AND AUTOIMMUNE MICE	09-01-96/08-31-97	UNIVERSITY OF MIAMI	273,725
1 P30AG13848-01	DICKSON, DENNIS ALZHEIMER'S DISEASE CORE CENTER	07-01-96/	YESHIVA UNIVERSITY	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 P30AG13849-01	EISDORFER, CARL FLORIDA ALZHEIMER'S COLLABORATIVE TEAM	07-01-96/	UNIVERSITY OF MIAMI	
1 P30AG13850-01	KNOPMAN, DAVID S TWIN CITIES ALZHEIMER'S DISEASE CORE CENTER	07-01-96/	UNIVERSITY OF MINNESOTA TWIN CITIES	
1 P30AG13852-01	ANTUONO, PIERO G ALZHEIMERS'S DISEASE CENTER CORE GRANT	07-01-96/	MEDICAL COLLEGE OF WISCONSIN	
1 R01AG13853-01	SCHWINN, DEBRA A TRANSCRIPTIONAL REGULATION OF HUMAN 1A-ADRENOCEPTORS	03-01-96/02-28-97	DUKE UNIVERSITY	197,594
1 P30AG13854-01	MESULAM, MAREK-MARSEL ALZHEIMERS DISEASE CORE CENTER	07-01-96/06-30-97	NORTHWESTERN UNIVERSITY	767,393
1 R13AG13855-01	BARTKE, ANDRZEJ SYMPOSIA: NEUROBIOLOGY/NEUROENDOCRINOLOGY OF AGING	07-21-96/	SOUTHERN ILLINOIS UNIVERSITY CARBOND	
1 R01AG13856-01	HERING, THOMAS M REGULATION OF CARTILAGE REPAIR-SPECIFIC GENE EXPRESSION	03-05-96/02-28-97	CASE WESTERN RESERVE UNIVERSITY	141,240
1 R01AG13857-01	POOLE, A ROBIN TYPE II COLLAGEN DENATURATION IN AGING & OSTEOARTHRITIS	06-01-96/05-31-97	MC GILL UNIVERSITY	123,060
1 R01AG13859-01	SCHACHTER, HINDY WOMEN AND WORK AFTER CONVENTIONAL RETIREMENT AGE	01-16-96/	NEW JERSEY INSTITUTE OF TECHNOLOGY	
1 R01AG13860-01	HODIS, HOWARD N VITAMIN E ATHEROSCLEROSIS PREVENTION STUDY	04-01-96/03-31-97	UNIVERSITY OF SOUTHERN CALIFORNIA	481,508
1 R01AG13862-01	RUBENSTEIN, RICHARD CELLULAR EVENTS ASSOCIATED WITH NEURODEGENERATION	07-01-96/	INSTITUTE FOR BASIC RES IN DEV DISAB	
1 R01AG13863-01	SLOANE, PHILIP D ALTERNATIVES TO NURSING HOMES FOR ALZHEIMERS DISEASE	09-30-96/08-31-97	UNIVERSITY OF NORTH CAROLINA CHAPEL	449,326
1 R13AG13865-01	COE, RODNEY M BASIC SCIENCE CONTRIBUTIONS TO CLINICAL GERIATRIC CARE	07-01-96/06-30-98	ST. LOUIS UNIVERSITY	20,270
1 R01AG13867-01	RUBIN, HARRY IN VITRO SIMULATION OF IN VIVO CELLULAR AGING	07-01-96/	UNIVERSITY OF CALIFORNIA BERKELEY	
1 R29AG13869-01	HOPTMAN, MATTHEW J EFFECTS OF AGING ON INTERHEMISPHERIC INTERACTION	09-01-96/	NEW YORK UNIVERSITY MEDICAL CENTER	

NATIONAL INSTITUTE ON AGING - ACTIVE GRANT FOR FY 1995-1996

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 R01AG13871-01	ZIMMERMAN, SHERYL I MEDICAL AND FUNCTIONAL OUTCOMES OF RESIDENTIAL CARE	09-25-96/08-31-97	UNIVERSITY OF MARYLAND BALT PROF SCH	461,220
1 R01AG13875-01	KUCZMARSKI, MARIE F PREDICTORS OF MALNUTRITION IN OLDER ADULTS	07-01-96/	UNIVERSITY OF DELAWARE	
1 R01AG13877-01	WALKER, RICHARD F ANALYSIS OF GH INSUFFICIENCY IN THE ELDERLY	07-01-96/	UNIVERSITY OF SOUTH FLORIDA	
1 R13AG13878-01	HERSH, LOUIS B SUMMER NEUROPEPTIDE CONFERENCE	06-12-96/05-31-97	UNIVERSITY OF KENTUCKY	9,970
1 R01AG13879-01	CARRY, MICHAEL R AGING OF OVERUSED NERVE AND MUSCLE	07-01-96/	UNIVERSITY OF COLORADO HLTH SCIENCES	
1 R01AG13881-01	MEYER, KEITH C CHRONIC INFLAMMATION IN THE SEEMINGLY NORMAL AGING LUNG	07-01-96/	UNIVERSITY OF WISCONSIN MADISON	
1 R01AG13882-01	MUDUMBI, RAMAGOPAL V AGING AND VASCULAR PHARMACOLOGY OF ADENOSINE	07-01-96/	ST. LUKE'S REGIONAL MED CTR (BOISE,	
1 R01AG13883-01	HAGNILD, GAIL M HEALTHY AGING AMONG RURAL ELDERS	07-01-96/	MONTANA STATE UNIVERSITY (BOZEMAN)	
1 R01AG13887-01	PRYSTOWSKY, JANET H RETINOIDS AND VITAMIN D IN HUMAN WOUND HEALING	07-01-96/	COLUMBIA UNIVERSITY NEW YORK	
1 R13AG13888-01	SCHOENI, ROBERT F SUMMER INSTITUTE OF AGING STUDIES	07-16-96/06-30-97	RAND CORPORATION	42,634
1 R01AG13889-01	BERTERA, ELIZABETH M CULTURE-SENSITIVE NUTRITION EDUCATION FOR LATINO ELDERLY	07-01-96/	UNIVERSITY OF DELAWARE	
1 R01AG13890-01	SHENAUT, GREGORY K SEMANTIC MEMORY IN ALZHEIMER'S DISEASE: LIMITS ON LOSS	07-01-96/	UNIVERSITY OF CALIFORNIA DAVIS	
1 R01AG13891-01	SIHAG, RAM K ROLE OF SPECTRIN IN PATHOGENESIS OF ALZHEIMER'S DISEASE	07-01-96/	MC LEAN HOSPITAL (BELMONT, MA)	
1 R01AG13892-01	BARBER, B J EXTRACELLULAR MATRIX AGING EFFECT ON PRESSURE SORE	07-01-96/	UNIVERSITY OF KENTUCKY	
1 R01AG13895-01	TULLY, CHRISTINE L ZINC AND COGNITIVE DECLINE IN THE ELDERLY	07-01-96/	UNIVERSITY OF KENTUCKY	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 R01AG13896-01	ALLEN, ROBERT G REDOX EFFECTS IN MORTAL HUMAN CELLS	06-01-96/	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	
1 R13AG13899-01	WYKLE, MAY L SERVING MINORITY ELDERS IN THE 21ST CENTURY	07-10-96/06-30-97	CASE WESTERN RESERVE UNIVERSITY	35,000
1 R01AG13901-01	SCHMADER, KENNETH E HERPES ZOSTER: IMPACT ON QUALITY OF LIFE IN THE ELDERLY	07-01-96/	DUKE UNIVERSITY	
1 R01AG13903-01	UDUPA, KODETTHOOR B STUDIES ON ERYTHROID STIMULATING FACTOR DURING AGING	07-01-96/	UNIVERSITY OF ARKANSAS MED SCIS LTL	
1 R13AG13904-01	FOSTER, NORMAN L CONFERENCE ON CHROMOSOME 17--LINKED DEMENTIAS	09-01-96/08-31-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	37,500
1 R01AG13905-01	POLAK, JOSEPH CORRELATES OF COMMON CAROTID ARTERY STIFFNESS IN AN AGIN	07-01-96/	BOSTON UNIVERSITY	
1 R01AG13907-01	ALLEN, KATHERINE R THE WELL-BEING OF OLDER PARENTS WITH GAY ADULT CHILDREN	07-01-96/	VIRGINIA POLYTECHNIC INST AND ST UNI	
1 R29AG13908-01	WACKER, ROBBYN R GRANDPARENT VISITATION: JUDICIAL AND SOCIAL OUTCOMES	07-01-96/	UNIVERSITY OF NORTHERN COLORADO	
1 R29AG13911-01	HAMEED, ARIF APOPTOSIS BY GRANZYME 2 AND BIOLOGY OF AGING	07-01-96/	OHIO STATE UNIVERSITY	
1 R29AG13912-01	WOODARD, JOHN L FUNCTIONAL NEUROANATOMY OF MEMORY IN ALZHEIMERS DISEASE	07-01-96/06-30-97	EMORY UNIVERSITY	91,673
1 R01AG13914-01	STEWART, ABIGAIL J WOMEN IN THEIR 50: PROMOTING WELL-BEING	06-01-96/	UNIVERSITY OF MICHIGAN AT ANN ARBOR	
1 R01AG13915-01	ENGELHARDT, GARY V HOUSING AND THE SAVING OF THE ELDERLY	07-01-96/	DARTMOUTH COLLEGE	
1 R01AG13916-01	KEENAN, PAMELA A AGE RELATED MEMORY IMPAIRMENT WITH GLUCOCORTICOID USE	07-01-96/	WAYNE STATE UNIVERSITY	
1 P01AG13918-01	MANOLAGAS, STAVROS C MOLECULAR AND CELLULAR MECHANISMS OF OSTEOPOROSIS	08-27-96/05-31-97	UNIVERSITY OF ARKANSAS MED SCIS LTL	929,824
7 R01AG13919-02	HALL, GARTH F IN SITU NEURONAL MODEL OF PHF/TAU ACCUMULATION IN AD	09-15-97/11-30-97	UNIVERSITY OF MASSACHUSETTS LOWELL	173,133

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 R01AG13921-01	RORIE, DUANE K AGING, NEUROTRANSMITTERS AND BLOOD SUBSTITUTES	07-01-96/	MAYO FOUNDATION	
1 R01AG13922-01	MACH, ROBERT H PET IMAGING STUDIES OF A RHESUS MONKEY MODEL OF AGING	09-01-96/08-31-97	WAKE FOREST UNIVERSITY	303,455
1 R01AG13924-01	BLACKBURN, GEORGE L NUTRITION ASSESSMENT IN THE OLDEST OLD	07-01-96/	BETH ISRAEL DEACONESS MEDICAL CENTER	
1 R01AG13926-01	AZAD, NASRIN AGING/LYMPHOCYTE LUTEINIZING HORMONE RELEASING HORMONE	07-01-96/	CHICAGO ASSN FOR RESEARCH & EDUC IN	
1 R01AG13927-01	LAWRENCE, DAVID A AGING, IMMUNITY AND VACCINES	06-01-96/	WADSWORTH CENTER	
1 R01AG13932-01	REFOLO, LAWRENCE EFFECT OF THE FAD-LINKED PRESENILIN MUTATIONS ON AB	07-01-96/	MAYO CLINIC JACKSONVILLE	
1 R13AG13933-01	SCHNEIDER, EDWARD L UNESCO INTERNATIONAL CONFERENCE ON HUMAN AGING	04-01-96/	UNIVERSITY OF SOUTHERN CALIFORNIA	
1 R01AG13935-01	STINE-MORROW, ELIZABETH A AGE DIFFERENCES IN RESOURCE ALLOCATION DURING READING	09-01-96/06-30-97	UNIVERSITY OF NEW HAMPSHIRE	132,863
1 R01AG13936-01	MORROW, DANIEL G EXPERTISE AND AGE DIFFERENCES IN PILOT COMMUNICATION	09-01-96/06-30-97	UNIVERSITY OF NEW HAMPSHIRE	138,190
1 R01AG13939-01	VAN ELDIK, LINDA J SUPRAMOLECULAR A/BETA--GLIAL INTERACTIONS & CELL RESPONS	09-19-96/06-30-97	NORTHWESTERN UNIVERSITY	176,563
1 R01AG13940-01	LASCH, KATHRYN E HEALTH COSTS OF EARLY EXCLUSION FROM THE LABOR FORCE	07-01-96/	NEW ENGLAND MEDICAL CENTER	
1 R01AG13942-01	PERRY, HORACE M, III RACE, STRENGTH AND BONE METABOLISM IN AGED WOMEN	07-01-96/	ST. LOUIS UNIVERSITY	
1 R01AG13943-01	DYER, CARMEL B INTERDISCIPLINARY GERIATRIC TEAM APPROACH TO ELDER ABUSE	07-01-96/	BAYLOR COLLEGE OF MEDICINE	
1 R01AG13944-01	MINTZER, JACOBO E CAREGIVER INTERVENTIONS: DEMENTIA CARE OF THE AGED	07-01-96/	MEDICAL UNIVERSITY OF SOUTH CAROLINA	
1 R01AG13946-01	HENDRICKSON, ERIC A NOVEL APOPTOTIC MUTANTS AND TARGETS	07-01-96/	BROWN UNIVERSITY	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 R29AG13947-01	COOPER, LESLIE T ROLE OF ENDOTHELIAL CELL SENESCENCE IN VASCULAR STIFFNES	07-01-96/	UNIVERSITY OF CALIFORNIA SAN DIEGO	
1 P01AG13948-01	FINCH, CALEB E ALZHEIMER DISEASE, AGING, ESTROGENS, AND STRESS	07-01-96/	UNIVERSITY OF SOUTHERN CALIFORNIA	
1 R13AG13949-01	GILCHREST, BARBARA A FASEB RESEARCH CONF--CLONAL SENESCENCE/DIFFERENTIATION	08-01-96/07-31-97	FEDERATION OF AMER SOC FOR EXPER BIO	36,070
1 R01AG13950-01	MILLER, BARNEY E CONTROL OF ALZHEIMER'S PROTEINS IN TISSUE CULTURE	07-01-96/	EAST TENNESSEE STATE UNIVERSITY	
1 R01AG13956-01	HOLTZMAN, DAVID M APOE EFFECT ON CNS NEURONS--ROLE OF LRP	09-01-96/08-31-97	WASHINGTON UNIVERSITY	213,041
1 R01AG13957-01	SIEGEL, GEORGE J NEURAL REGULATION OF NA,K-ATPASE MRNA IN AGING BRAIN	07-01-96/	CHICAGO ASSN FOR RESEARCH & EDUC IN	
1 R01AG13960-01	MULLER, DANIEL MECH OF CTL DYSFUNCTION WITH AGE AND REVERSAL USING DR	07-01-96/	UNIVERSITY OF WISCONSIN MADISON	
1 R29AG13961-01	DORSEY, CYNTHIA M INSOMNIA IN ELDERLY--PASSIVE BODY HEATING VS ZOLPIDEM	09-01-96/08-31-97	MC LEAN HOSPITAL (BELMONT, MA)	99,844
1 R01AG13962-01	BRYSON, JAMES S EFFECTS OF RECIPIENT AGE ON THE DEVELOPMENT OF GVHD	07-01-96/	UNIVERSITY OF KENTUCKY	
1 R01AG13967-01	DICK, MALCOLM B STRENGTHS & DEFICITS IN THE MOTOR SYSTEM OF AD PATIENTS	07-29-96/05-31-97	UNIVERSITY OF CALIFORNIA IRVINE	171,565
1 R55AG13968-01	UCHINO, BERT N SOCIAL RELATIONS, AGING, AND CARDIOVASCULAR CHANGES	09-19-96/08-31-98	UNIVERSITY OF UTAH	100,000
1 R01AG13969-01	CHARNESS, NEIL H LIFE-SPAN EXPERTISE	09-13-96/04-30-97	FLORIDA STATE UNIVERSITY	184,460
1 R01AG13972-01	TARIOT, PIERRE N VALPROATE FOR AGITATION AND DEMENTIA IN THE NURSING HOME	07-01-96/	UNIVERSITY OF ROCHESTER	
9 R01AG13973-06	MC EVOY, CATHY L PRIOR KNOWLEDGE EFFECTS IN COGNITIVE AGING	05-21-96/04-30-97	UNIVERSITY OF SOUTH FLORIDA	85,568
1 R43AG13979-01	GRUENBERG, LEONARD W A CASE MIX SPECIFICATION SYSTEM FOR MEDICARE HMOS	03-15-96/	DATACHRON HEALTH SYSTEMS, INC.	

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
9 R01AG13983-12	CAMBIER, JOHN C SIGNAL TRANSDUCTION IN B CELL ACTIVATION	06-01-96/05-31-97	NATIONAL JEWISH MEDICINE & RES CTR	216,481
1 R01AG13985-01	HOFFER, BARRY J TROPHIC FACTOR INTERACTIONS WITH DOPAMINE PATHWAYS	07-01-96/	UNIVERSITY OF COLORADO HLTH SCIENCES	
1 R55AG13986-01	STALLARD, P J FORECASTING MODELS FOR ACUTE AND LONG TERM CARE	09-23-96/08-31-98	DUKE UNIVERSITY	100,000
1 R01AG13987-01	FENNELL, MARY L RURAL HOSPITAL LINKAGES TO LONG TERM CARE PROVIDERS	08-15-96/06-30-97	BROWN UNIVERSITY	263,032
1 R13AG13988-01	FOGEL, ROBERT W CONFERENCE--USING EARLY INDICATORS DATA	06-04-96/05-31-97	NATIONAL OPINION RESEARCH CENTER	39,190
1 R29AG13989-01	MARCANTONIO, EDWARD R REDUCING DELIRIUM AFTER HIP FRACTURE: A PROACTIVE MODEL	07-01-96/	BRIGHAM AND WOMEN'S HOSPITAL	
1 R13AG13990-01	DE LA TORRE, JACK C CEREBROVASCULAR PATHOLOGY IN ALZHEIMERS DISEASE	08-10-96/07-31-97	NEW YORK ACADEMY OF SCIENCES	12,000
1 R01AG13991-01	GILMAN, SID BASAL GANGLIA IN NORMAL AGING AND ALZHEIMER'S DISEASE	07-01-96/	UNIVERSITY OF MICHIGAN AT ANN ARBOR	
1 R13AG13992-01	SCHAIE, K WARNER EMOTION IN AGING AND ADULT DEVELOPMENT	06-21-96/03-31-97	PENNSYLVANIA STATE UNIVERSITY-UNIV P	41,022
1 R37AG13993-01	RUBINSTEIN, ROBERT L BEREAVEMENT IN LONG TERM CARE	09-01-96/08-31-97	PHILADELPHIA GERIATRIC CTR-FRIEDMAN	256,063
1 R41AG13994-01	GOLD, ROBERT S REDUCING ADVERSE DRUG EFFECTS VIA PALMTOP COMPUTING	08-01-96/	SYNERGY HEALTHCARE, INC.	
1 R41AG13995-01	SREENATH, SREE N GEROINFORMATICS: WIRELESS HAND-HELD COMPUTER DEVICE	07-01-96/	PARK HEALTH SYSTEMS, INC.	
1 R41AG13996-01	ISACSON, OLE PORCINE CHOLINERGIC NEURONAL CNS TRANSPLANTS	07-01-96/	DIACRIN, INC.	
1 R43AG13997-01	LEVIN, KENNETH H NEAR-INFRARED DIAGNOSTIC TEST FOR ALZHEIMER'S DISEASE	07-01-96/	INFRARED FIBER SYSTEMS, INC.	
1 R43AG13998-01	HARRIS, DIANA K NURSING HOME THEFT	06-01-96/	LADICO, INC.	

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FY: 96				
1 R43AG13999-01	OSTROM, LEE T ALZHEIMER'S PATIENT CHAIR NEEDS	03-01-96/	SNAKE RIVER ERGONOMICS, INC. (SRE, I	
1 R43AG14001-01	JONES, JUDITH K PATIENT-DOCTOR INTERACTION ANALYSIS FOR GERIATRICS	09-01-96/	DEGGE GROUP, LTD.	
1 R43AG14003-01	WALDRON, RICHARD J LUMBAR SPINE MOTION AND STRENGTH TRAINING DEVICE	08-01-96/	BUFFALO SPORTS PRODUCTS, INC.	
1 R03AG14005-01	TALLEY, CHERYL P GLUCOSE, LIVER FUNCTION, AND COGNITION IN AGED RATS	07-01-96/09-01-97	UNIVERSITY OF VIRGINIA CHARLOTTESVIL	26,601
1 R43AG14009-01	MERRITT, KIMBERLY N THE DEVELOPMENT OF A NATIONAL DATABASE AND QUALITY ASSUR	08-01-96/	QUEST CONSULTING	
1 R43AG14010-01	DUNN, WILLIAM L FUNCTIONAL ASSESSMENT TOOLS TO EVALUATE FRAIL SUBJECTS	08-01-96/	QUANTUM RESEARCH SERVICES	
1 R43AG14011-01	PARSLOW, DAVID L MULTILINGUAL CUSTOMIZABLE HOME HEALTH CARE INSTRUCTIONS	04-15-96/	KNOWLEDGE TRANSFER SYSTEMS, INC.	
1 R41AG14012-01	POLLACK, JAY G A VR TRAVEL TRAINING PROGRAM FOR PERSONS WITH DISABILITY	06-01-96/	DEATON ASHCRAFT GROUP, INC.	
1 R43AG14013-01	JUZANG, IVAN J TITLE OMITTED	07-01-96/	MEE PRODUCTIONS, INC.	
1 R43AG14015-01	COTTERMAN, ROBERT F DEVELOPING PUBLIC USE MEDICARE CLAIMS DATA FOR AHEAD	09-30-96/09-30-97	UNICON RESEARCH CORPORATION	100,000
1 R43AG14016-01	RANZENBERGER, JOYCE L FAMILY EXPRESSION - SHARE N' CARE	07-01-96/	ADMINISTRATIVE BUSINESS COUNSELING	
1 R01AG14018-01	SCINTO, LEONARD F PHYSIOLOGIC MECHANISMS FOR CHOLINERGIC SENSITIVITY IN AD	07-01-96/	BRIGHAM AND WOMEN'S HOSPITAL	
1 R43AG14020-01	ELGART, MEREDITH TRACKING OF PARAPROFESSIONAL HOME CARE SERVICES	07-01-96/	QM TWO-THOUSAND	
1 R43AG14022-01	MARGON, CAROLYN J THE WOMEN'S MULTIMEDIA GUIDE TO MENOPAUSE	07-15-96/	NEW LANGUAGE SOFTWARE	
1 R43AG14029-01	COMBIE, JOAN D POTENT ANTIOXIDANTS FROM THERMAL MICROBIAL MATS	07-01-96/	J.K. RESEARCH	

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FY: 96				
1 R43AG14030-01	KENNEDY, ROBERT S MELATONIN: BRAIN FUNCTION, NON-INVASIVE BIOMARKERS	07-01-96/	ESSEX CORPORATION	
1 R43AG14031-01	WANG, YUQIANG NOVEL HUPERZINE DERIVATIVE FOR DIMENTIA	09-01-96/	PANORAMA RESEARCH, INC.	
1 R43AG14032-01	MILIUS, RICHARD A COMPOUNDS WITH AFFINITY FOR AGGREGATED BETA-AMYLOID	06-01-96/	SIGMA-ALDRICH RESEARCH BIOCHEMICAL	
1 R43AG14033-01	WHITE, HELEN L SCREENING SMALL MOLECULES FOR NEUROTROPHIC PROPERTIES	07-01-96/	KRENITSKY PHARMACEUTICAL, INC.	
1 R13AG14054-01	MEYDANI, MOHSEN NUTRITION AND FUNCTIONAL AGING	09-30-96/08-31-97	AMERICAN AGING ASSOCIATION	15,000
1 R41AG14056-01	NIXON, RALPH A DEVELOPMENT OF A CSF DIAGNOSTIC TEST FOR ALZHEIMER'S	09-30-96/03-31-98	BIOLINK PARTNERS	98,440
1 R43AG14059-01	SABOORI, ALI M CHARACTERIZATION OF A NEW HUMAN PROSTATE CELL LINE	07-01-96/	GRL, INC.	
1 R43AG14061-01	DOLLBAUM, CHARLES M, JR COMMERCIALIZATION OF LABORATORY TESTS FOR SEX STEROIDS	07-01-96/	AERON BIOTECHNOLOGY, INC.	
1 R43AG14062-01	WANG, GUANGHUA POSTTRANSCRIPTIONAL CONTROL OF GLUT1: EFFECT OF AGING	09-01-96/	BEARSDEN BIO, INC.	
1 R29AG14066-01	NICKLAS, BARBARA J OBESITY, EXERCISE, & FAT CELL METABOLISM IN OLDER WOMEN	09-30-96/07-31-97	UNIVERSITY OF MARYLAND BALT PROF SCH	83,611
1 R13AG14070-01	WEINDRUCH, RICHARD H 1996 GSA MEETING--BIOLOGY OF AGING--POSSIBLE CAUSES	09-30-96/08-31-97	GERONTOLOGICAL SOCIETY OF AMERICA	34,185
1 R13AG14084-01	THARDY, EDWARD S ENERGY BALANCE AND BODY COMPOSITION CONFERENCE	09-30-96/08-31-97	UNIVERSITY OF VERMONT & ST AGRIC COL	16,000
7 R01AG14121-02	VATNER, STEPHEN F AGING EFFECTS ON CARDIOVASCULAR FUNCTION IN PRIMATES	08-01-97/07-31-98	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	317,359
1 R01AG14158-01	SCHMADER, KENNETH E IMPACT OF GERIATRIC CARE ON DRUG RELATED PROBLEMS	09-30-96/07-31-97	DUKE UNIVERSITY	257,855
1 R03AG14159-01	KENNEY, WILLIAM L, JR MUSCLE MASS AND HYPOTHERMIA IN THE ELDERLY	09-30-96/09-30-98	PENNSYLVANIA STATE UNIVERSITY-UNIV P	59,086

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FY: 96				
1 R03AG14160-01	ALLEN, RONALD E SKELETAL MUSCLE SATELLITE CELL ACIVATION DURING AGING	09-30-96/09-29-98	UNIVERSITY OF ARIZONA	75,105
1 R01AG14161-01	RUVKUN, GARY B INOSITOL SIGNALING IN C ELEGANS SENESCENCE AND DIAPAUSE	05-01-96/04-30-97	MASSACHUSETTS GENERAL HOSPITAL	261,557
1 R03AG14162-01	KASCSAK, RICHARD J MITES AS A RESERVOIR AND/OR VECTOR FOR PRION DISEASES	09-01-96/08-31-98	INSTITUTE FOR BASIC RES IN DEV DISAB	72,654
1 R03AG14163-01	KURET, JEFFREY A TAU POLYMERIZATION--AN IN VITRO MODEL OF TANGLE GENESIS	09-30-96/09-29-97	NORTHWESTERN UNIVERSITY	74,000
1 R03AG14165-01	FRACKOWIAK, JANUSZ MONOKINES AND ALZEHIMERS VASCULAR B AMYLOIDOSIS	09-30-96/09-29-98	INSTITUTE FOR BASIC RES IN DEV DISAB	75,899
1 R03AG14166-01	PRCHAL, JAROSLAV F RESTRICTION OF HEMATOPOIETIC STEM CELL POOL IN AGING	09-01-96/	UNIVERSITY OF ALABAMA AT BIRMINGHAM	
1 R03AG14167-01	SRIVATSAN, MALATHI EFFECT OF AGE ON APLYSIA NEUROREGENERATION 'A NEW MODEL'	09-01-96/	UNIVERSITY OF KENTUCKY	
1 R03AG14168-01	GOLDSTEIN, JOSHUA R MODELING US TIME TRENDS IN MARRIAGE AND DIVORCE	09-30-96/09-29-98	PRINCETON UNIVERSITY	30,935
1 R03AG14169-01	GAO, JIA-HONG NOVEL MRI STUDY--NEURONAL LOSS IN TRANSGENIC MICE	09-30-96/09-29-98	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	72,459
1 R03AG14170-01	MILLER, DAVID L SECRETASES OF YEAST AND HIGHER EUKARYOTES	09-01-96/	INSTITUTE FOR BASIC RES IN DEV DISAB	
1 R03AG14172-01	BLOCH, ROBERT J MEMBRANE SKELETON OF AGING SKELETAL MUSCLE	09-30-96/09-29-97	UNIVERSITY OF MARYLAND BALT PROF SCH	72,500
1 R03AG14173-01	LUMSDAINE, ROBIN L CAREGIVING RESPONSIBILITIES AND THE RETIREMENT DECISION	09-01-96/08-31-98	NATIONAL BUREAU OF ECONOMIC RESEARCH	77,874
1 R03AG14174-01	LEE, SAM W H CADHERIN AND CONNEXIN INVOLVEMENT DURING CARDIAC AGING	09-30-96/09-29-97	BETH ISRAEL DEACONESS MEDICAL CENTER	83,500
1 R03AG14175-01	DENTON, NANCY A SPATIAL ISOLATION OF IMMIGRANT AND POOR ELDERLY BY RACE	09-30-96/09-30-98	STATE UNIVERSITY OF NEW YORK AT ALBA	70,273
1 R03AG14176-01	STRAUSS, WILLIAM M CARDIAC FIBROBLAST GENE EXPRESSION	09-30-96/09-29-97	BETH ISRAEL DEACONESS MEDICAL CENTER	77,125

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 R03AG14177-01	VIJG, JAN MUTATIONAL SCANNING OF THE MITOCHONDRIAL GENOME	12-01-96/	BETH ISRAEL DEACONESS MEDICAL CENTER	
1 R03AG14178-01	MOSLEY, RODNEY L SKEWED T CELL REPERTOIRES IN AGED MICE	09-30-96/09-29-97	UNIVERSITY OF MICHIGAN AT ANN ARBOR	75,279
1 R03AG14179-01	HSU, VICTOR L NMR STUDIES OF AGING--RELATED PROTEIN DEAMIDATION	09-30-96/09-29-98	OREGON STATE UNIVERSITY	70,720
1 R03AG14180-01	BUTTERFIELD, D ALLAN BRAIN PROTEIN OXIDATION IN HYPEROXIA AND AGING	09-01-96/	UNIVERSITY OF KENTUCKY	
1 R03AG14181-01	BLAU, HELEN M CELL MEDIATED GENE THERAPY FOR ATHEROSCLEROSIS	09-30-96/09-29-97	STANFORD UNIVERSITY	83,095
1 R03AG14184-01	MACKEBEN, MANFRED ENHANCING SPATIAL VISION IN AGE RELATED MACULOPATHY	09-01-96/	SMITH-KETTLEWELL EYE RESEARCH FOUNDA	
1 R03AG14185-01	MIHELIC, ADRIENNE H COGNITIVE IMPAIRMENT AND EVERYDAY FUNCTIONING	09-30-96/09-29-98	JOHNS HOPKINS UNIVERSITY	75,285
1 R03AG14186-01	DUNCAN, MARILYN J AGING OF THE CIRCADIAN TIMING SYSTEM: ROLE OF SEROTONIN	09-01-96/	UNIVERSITY OF KENTUCKY	
1 R03AG14187-01	SCHMIDT, ANN M AMYLOID BETA PEPTIDE INTERACTION WITH CELLULAR RAGE	09-30-96/09-29-97	COLUMBIA UNIVERSITY NEW YORK	85,250
1 R03AG14188-01	ROBERTS, JEFFREY A ATTENTION AND CHOLINERGIC FUNCTION IN NONHUMAN PRIMATES	09-01-96/	UNIVERSITY OF CALIFORNIA DAVIS	
1 R03AG14191-01	MANTON, KENNETH G US FEMALE BREAST CANCER INCIDENCE/MORTALITY & SCREENING	09-30-96/09-29-97	DUKE UNIVERSITY	77,000
1 R03AG14193-01	BARTKE, ANDRZEJ NEW ANIMAL MODEL OF DELAYED AGING	09-30-96/09-29-98	SOUTHERN ILLINOIS UNIVERSITY CARBOND	71,000
1 R03AG14194-01	NEWMAN, MARK F COGNITION AND QUALITY OF LIFE AFTER CARDIAC SURGERY	09-30-96/09-29-98	DUKE UNIVERSITY	56,713
1 R03AG14195-01	FITE, KATHERINE V ANTIOXIDANTS AND AGING: AN AVIAN MODEL	07-01-96/	UNIVERSITY OF MASSACHUSETTS AMHERST	
1 R03AG14196-01	KWATRA, MADAN M AGING/G PROTEIN COUPLED RECEPTOR SIGNALING IN HUMAN HEAR	09-30-96/06-30-98	DUKE UNIVERSITY	77,000

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FY: 96				
1 R03AG14197-01	MURPHY, PATRICIA J SEX HORMONES AND POSTMENOPAUSAL SLEEP CHANGES	09-30-96/09-29-98	CORNELL UNIVERSITY MEDICAL CENTER	71,075
1 R03AG14198-01	HUSTED, CYNTHIA MAGIC ANGLE NMR STUDIES OF CNS MYELIN FLUIDITY IN AGING	09-30-96/09-29-97	UNIVERSITY OF CALIFORNIA SANTA BARBA	68,200
1 R03AG14199-01	CHAUHAN, VED P INTERACTION OF CATIONS & LIPIDS WITH AMYLOID BETA PROTEI	09-30-96/09-29-98	INSTITUTE FOR BASIC RES IN DEV DISAB	80,724
1 R03AG14200-01	RUBENSTEIN, RICHARD TRANSGENIC SAM MICE--AGING AND NEURONAL BAPP EXPRESSION	09-30-96/09-29-98	INSTITUTE FOR BASIC RES IN DEV DISAB	76,779
1 R03AG14201-01	JEWETT, DON L AUDITORY-INDUCED G-WAVE SLEEP-MEASURES IN THE ELDERLY	09-01-96/	ABRATECH CORPORATION	
1 R03AG14202-01	PATTERSON, DAVID INVESTIGATION INTO FAMILIAL INCLUSION BODY MYOSITIS	09-30-96/09-29-97	ELEANOR ROOSEVELT INST FOR CANCER RE	76,350
1 R03AG14203-01	LE DOUX, SUSAN P MAPPING PERSISTANT MTDNA DAMAGE IN AGING LYMPHOCYTES	09-01-96/	UNIVERSITY OF SOUTH ALABAMA	
1 R03AG14204-01	ROACH, DEBORAH A OLDEST OLD MORTALITY IN NATURE--BIODEMOGRAPHIC ANALYSES	09-01-96/08-31-98	DUKE UNIVERSITY	72,127
1 R03AG14205-01	NELSESTUEN, GARY L SERUM AMYLOID P INTERACTIONS WITH LIPOPROTEINS & AMYLOID	09-01-96/	UNIVERSITY OF MINNESOTA TWIN CITIES	
1 R03AG14206-01	GAUDETTE, DOUGLAS C AGED T LYMPHOCYTES: PKC ISOZYME-DEPENDENT SIGNALING	09-01-96/	UNIVERSITY OF NORTH TEXAS HLTH SCI C	
1 R03AG14207-01	HEES, PAUL S MRI MICROSCOPY STUDY OF DIASTOLIC FUNCTION IN AGING RATS	09-30-96/09-29-97	JOHNS HOPKINS UNIVERSITY	84,000
1 R03AG14208-01	GULATI, ANIL CENTRAL ENDOTHELIN: ITS ROLE IN AGING	09-01-96/	UNIVERSITY OF ILLINOIS AT CHICAGO	
1 R03AG14209-01	ZELINSKI, ELIZABETH M DISEASE AGING AND COGNITION	09-30-96/09-29-98	UNIVERSITY OF SOUTHERN CALIFORNIA	69,506
1 R03AG14210-01	WEBSTER, KEITH A REDOX STRESS COMPONENTS OF DEGENERATIVE HEART DISEASE	09-30-96/03-31-98	UNIVERSITY OF MIAMI	76,500
1 R03AG14212-01	BENDER, BRADLEY S CELLULAR MECHANISMS OF IMMUNOSENESCENCE	09-01-96/	UNIVERSITY OF FLORIDA	

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 R03AG14213-01	ZAKERI, ZAHRA PROGRAMMED CELL DEATH IN CANARIES: A MODEL FOR AGING	09-01-96/	QUEENS COLLEGE	
1 R03AG14214-01	BRODY, JACOB A UNDER AGE 65 MORTALITY RATE	09-01-96/	UNIVERSITY OF ILLINOIS AT CHICAGO	
1 R03AG14215-01	LAVROVSKY, YAN TRANSGENIC MOUSE MODEL FOR HUMAN PROSTATE HYPERPLASIA	09-30-96/09-29-98	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	72,500
1 R03AG14216-01	RUBINSTEIN, DANIEL B AGING, B-1 CELLS, AND AUTOANTIBODIES	09-01-96/	BOSTON UNIVERSITY MEDICAL CENTER HOS	
1 R03AG14217-01	BEAN, FRANK D PATTERNS OF SSI RECEIPT AMONG ELDERLY IMMIGRANTS	09-30-96/09-29-98	UNIVERSITY OF TEXAS AUSTIN	74,058
1 R03AG14218-01	WITTE, PAMELA L STAGE SPECIFIC ALTERATIONS IN B CELL FORMATION WITH AGE	09-30-96/09-29-97	LOYOLA UNIVERSITY MEDICAL CENTER	77,500
1 R03AG14220-01	DWYER, DEBRA S HOW POOR HEALTH INFLUENCES WORK AND RETIREMENT	09-01-96/08-31-97	CENTER FOR POLICY RESEARCH	506
1 R03AG14221-01	JENNY, NANCY S BONE RELATED PROTEINS IN ATHEROSCLEROSIS	09-01-96/	UNIVERSITY OF VERMONT & ST AGRIC COL	
1 R03AG14222-01	WIRA, CHARLES R MENOPAUSE AND MUCOSAL IMMUNITY IN REPRODUCTIVE TRACT	09-01-96/	DARTMOUTH COLLEGE	
7 R03AG14223-02	PAYNE, RONALD M AGE AND DISEASE ASSOCIATED CHANGES IN CREATINE KINASE	04-11-97/09-29-98	WAKE FOREST UNIVERSITY	67,961
1 R03AG14224-01	ZHENG, BIAO Q AGING EFFECTS ON T CELL SELECTION	09-30-96/09-29-97	UNIVERSITY OF MARYLAND BALT PROF SCH	71,982
1 R03AG14226-01	TAYLOR, J ANDREW BLUNTED BARDREFLEX WITH AGE--ROLE OF CAROTID STIFFNESS	09-30-96/08-31-98	HEBREW REHABILITATION CENTER FOR AGE	62,525
1 R03AG14227-01	ZOHOORI, NAMVAR DISABILITIES AND NUTRITIONAL STATUS IN THE ELDERLY	09-01-96/	UNIVERSITY OF NORTH CAROLINA CHAPEL	
1 R03AG14228-01	CAREY, JAMES R ELDERLY AND NATURE	09-01-96/08-31-97	UNIVERSITY OF CALIFORNIA DAVIS	50,000
1 R03AG14229-01	QUIST, EUGENE E ESTRADIOL AND CARDIOMYOCYTE AGING	09-30-96/09-29-98	UNIVERSITY OF NORTH TEXAS HLTH SCI C	64,326

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 R03AG14231-01	BORST, STEPHEN E IGF-I IN SCENESCENCE:ROLE IN MAINTAINING SKELETAL MUSCLE	09-01-96/	UNIVERSITY OF FLORIDA	
1 R03AG14232-01	SIERRA, FELIPE IMMUNE FUNCTION AND THE AGE RELATED RISE IN THIOSTATIN	09-30-96/09-29-98	ALLEGHENY UNIVERSITY OF HEALTH SCIEN	74,229
1 R03AG14234-01	KIMURA, HIDEO HYDROGEN SULFIDE FUNCTION IN ALZHEIMER'S DISEASE	09-03-96/	SALK INSTITUTE FOR BIOLOGICAL STUDIE	
1 R03AG14236-01	KOHWI, YOSHINORI EFFECTS OF AGING ON TRIP EXPRESSION IN BRAIN	09-01-96/	BURNHAM INSTITUTE	
1 R03AG14238-01	SCHWINN, DEBRA A CHARACTERIZATION OF ADRENOCEPTORS IN AGING PROSTATE	01-01-97/	DUKE UNIVERSITY	
1 R03AG14239-01	PASINETTI, GUILIO M INFLAMMATION IN AGING AND ALZHEIMERS DISEASE	09-30-96/09-29-98	MOUNT SINAI SCHOOL OF MEDICINE OF CU	84,125
1 R03AG14240-01	PONNAPPAN, USHA AGING AND IMMUNE FUNCTION: ROLE OF NFKB	09-01-96/	UNIVERSITY OF ARKANSAS MED SCIS LTL	
7 R03AG14242-02	HEYDARI, AHMAD R DNA REPAIR DEFICIENT TRANSGENIC ANIMAL MODEL	11-01-97/09-29-98	WAYNE STATE UNIVERSITY	74,250
1 R03AG14244-01	MC KENZIE, DEBBIE I FACTORS AFFECTING RENATURATION OF PRP AND INFECTIVITY	09-15-96/08-31-98	UNIVERSITY OF WISCONSIN MADISON	71,500
1 R03AG14246-01	LEWIS, WILLIAM MITOCHODRIAL DNA POLYMERASE AND AGING MUSCLE	09-01-96/	UNIVERSITY OF CINCINNATI	
1 U01AG14247-01	FOWLER, SARAH E TRIAL OF A COGNITIVE INTERVENTION FOR OLDER ADULTS	09-01-96/	CASE WESTERN RESERVE UNIV-HENRY FORD	
1 U01AG14252-01	CAMP, CAMERON J SELF-INITIATED INTERVENTIONS FOR AT-RISK OLDER ADULTS	10-01-96/	MENORAH PARK CENTER FOR THE AGING	
1 U01AG14253-01	WOLF-KLEIN, GISELE INFERENCE TRAINING: A COGNITIVE INTERVENTION FOR ELDERLY	10-01-96/	PARKER JEWISH GERIATRIC INSTITUTE	
1 U01AG14254-01	POOLE, W KENNETH TRIAL OF A COGNITIVE INTERVENTION FOR OLDER ADULTS	10-01-96/	RESEARCH TRIANGLE INSTITUTE	
1 R03AG14255-01	STURMAN, JOHN A BETA-ALANINE IN NEURODEGENERATION IN ANIMALS AND ALZHEIM	10-01-96/	INSTITUTE FOR BASIC RES IN DEV DISAB	

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FY: 96					
1 R03AG14256-01	BARZILAI, NIR AGE-RELATED DYSREGULATION OF HEPATIC GLUCOSE METABOLISM	09-01-96/		YESHIVA UNIVERSITY	
1 U01AG14258-01	GLYNN, ROBERT J TRIAL OF A COGNITIVE INTERVENTION FOR OLDER ADULTS	12-01-96/		BRIGHAM AND WOMEN'S HOSPITAL	
1 U01AG14259-01	SCOGIN, FORREST COGNITIVE AND DEPRESSIVE TREATMENT FOR AT-RISK ELDERS	08-16-96/		UNIVERSITY OF ALABAMA IN TUSCALOOSA	
1 U01AG14260-01	REBOK, GEORGE W TRIAL OF A COGNITIVE INTERVENTION FOR OLDER ADULTS	09-30-96/	08-31-97	JOHNS HOPKINS UNIVERSITY	425,898
1 U01AG14262-01	AMATO, DAVID A TITLE OMMITED	10-01-96/		ABT ASSOCIATES, INC.	
1 U01AG14263-01	WILLIS, SHERRY L FLUID ABILITY TRAINING AMONG ELDERLY	09-30-96/	08-31-97	PENNSYLVANIA STATE UNIVERSITY-UNIV P	411,746
1 U01AG14264-01	POON, LEONARD W COORDINATING CENTER FOR COGNITIVE INTERVENTION TRIAL	09-30-96/		UNIVERSITY OF GEORGIA	
1 R03AG14265-01	HACKSHAW, KEVIN V GAMMA INTERFERON SIGNALLING IN YOUNG AND OLD MOUSE MACRO	09-01-96/		OHIO STATE UNIVERSITY	
1 U01AG14266-01	ROGERS, JOAN C EXECUTIVE FUNCTIONS INTERVENTION FOR OLDER ADULTS	09-01-96/		UNIVERSITY OF PITTSBURGH AT PITTSBUR	
1 U01AG14267-01	LUDGIN, QUENTIN TRIAL OF A COGNITIVE INTERVENTION FOR OLDER ADULTS	09-30-96/		NATIONAL ELDERCARE SERVICES COMPANY	
1 U01AG14268-01	HAYSLIP, BERT THE IMPACT OF STRESS INOCULATION ON EVERYDAY FUNCTIONING	09-01-96/		UNIVERSITY OF NORTH TEXAS	
1 U01AG14269-01	NAKAGAWA-KOGAN, HELEN SELF MANAGEMENT COGNITIVE TRAINING FOR OLDER ADULTS	09-30-96/		UNIVERSITY OF WASHINGTON	
1 U01AG14270-01	HUNT, LINDA A COGNITIVE TRAINING & EVERYDAY COMPETANCE IN THE ELDERLY	09-01-96/		WASHINGTON UNIVERSITY	
1 U01AG14271-01	WEST, ROBIN L MEMORY TRAINING & ITS IMPACT ON HEALTH & HEALTH CARE USE	09-30-96/		UNIVERSITY OF FLORIDA	
1 U01AG14272-01	TERI, LINDA COGNITIVE TRAINING FOR INDEPENDENCE IN OLDER ADULTS	10-01-96/		UNIVERSITY OF WASHINGTON	

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 U01AG14273-01	RIZZO, MATTHEW COGNITIVE TRAINING AND EVERYDAY COMPETENCE IN ELDERLY	09-01-96/	UNIVERSITY OF IOWA	
1 U01AG14274-01	BURTON, BRADLEY PROJECT ECLIPS	10-01-96/	UNIVERSITY OF MISSISSIPPI MEDICAL CE	
1 U01AG14275-01	CZAJA, SARA J COGNITIVE TRAINING AND EVERDAY COMPETENCE FOR THE ELDERL	10-01-96/	UNIVERSITY OF MIAMI CORAL GABLES	
1 U01AG14276-01	MARSISKE, MICHAEL FLUID REASONING TRAINING FOR URBAN ELDERS	09-30-96/08-31-97	WAYNE STATE UNIVERSITY	418,015
1 U01AG14277-01	SMITH, GLENN E TRIAL OF A CONGNITIVE INTERVENTION FOR OLDER ADULTS	12-01-96/	MAYO FOUNDATION	
1 U01AG14278-01	LACHMAN, MARGIE COGNITIVE-BEHAVIORAL STRATEGIES FOR INDEPENDENT AGING	09-30-96/	BRANDEIS UNIVERSITY	
1 U01AG14279-01	THOMPSON, BRUCE W TRIAL OF A COGNITIVE INTERVENTION FOR OLDER ADULTS	10-01-96/	MARYLAND MEDICAL RESEARCH INSTITUTE	
1 U01AG14281-01	WYKLE, MAY L MEMORY SELF-EFFICACY & FUNCTIONAL ABILITY IN ELDERS	09-30-96/	CASE WESTERN RESERVE UNIVERSITY	
1 U01AG14282-01	MITCHELL, HERMAN E TRIAL OF A COGNITIVE INTERVENTION FOR OLDER ADULTS--CC	09-30-96/08-31-97	NEW ENGLAND RESEARCH INSTITUTES, INC	418,091
1 U01AG14283-01	LECOURS, ANDRE TRIAL OF A COGNITIVE INTERVENTION FOR OLDER ADULTS	10-01-96/	INSTITUT DE READAPTATION DE MONTREAL	
1 U01AG14285-01	ZANDI, TAHER PROMOTING INDEPENDENCE THROUGH ENHANCING MEMORY	10-01-96/	COLLEGE AT PLATTSBURGH	
1 U01AG14286-01	YESAVAGE, JEROME A TRIAL OF A CONGITIVE INTERVENTION FOR OLDER ADULTS	09-01-96/	STANFORD UNIVERSITY	
1 U01AG14287-01	BRANCH, LAURENCE G DUKE MEDICAL CENTER CONGINTIVE INTERVENTION TRIAL	09-30-96/	DUKE UNIVERSITY	
1 U01AG14288-01	MILLER, J PHILIP TRIAL OF COGNITIVE INTERVENTION FOR OLDER ADULTS: CC	09-30-96/	WASHINGTON UNIVERSITY	
1 U01AG14289-01	BALL, KARLENE K COGNITIVE TRAINING & EVERYDAY COMPETENCE IN THE ELDERLY	09-30-96/08-31-97	UNIVERSITY OF ALABAMA AT BIRMINGHAM	376,250

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 R01AG14290-01	PETTEGREW, JAY W IN VIVO MR STUDIES OF METABOLISM IN ALZHEIMERS DISEASE	05-01-96/03-31-97	UNIVERSITY OF PITTSBURGH AT PITTSBUR	325,221
1 R01AG14291-01	CALIGIURI, MICHAEL P EPS AND PREDICTORS OF PSYCHOSIS IN ALZHEIMERS DISEASE	09-30-96/08-31-97	UNIVERSITY OF CALIFORNIA SAN DIEGO	155,000
1 R01AG14304-01	LAWRENCE, VALERIE A MAXIMIZING POSTOPERATIVE FUNCTIONAL OUTCOMES IN ELDERS	08-15-96/07-31-97	UNIVERSITY OF TEXAS HLTH SCI CTR SAN	355,047
1 R03AG14305-01	FUCHS, ELAINE V REGULATION OF PROLIFERATIVE POTENTIAL IN NORMAL EPIDEMIS	09-30-96/09-29-98	UNIVERSITY OF CHICAGO	74,216
1 U01AG14331-01	MARKS, RONALD G DATA COORD. CTR., FOR A COGNITIVE INTERVENTION TRIAL	10-01-96/	UNIVERSITY OF FLORIDA	
1 R01AG14337-01	COTMAN, CARL W AUTOMATED IMAGE ANALYSIS OF HUMAN BRAIN CELLS	07-01-96/	UNIVERSITY OF CALIFORNIA IRVINE	
1 R01AG14339-01	ZABORSZKY, LASZLO 3-D RECONSTRUCTION OF BASAL FOREBRAIN NEURONS	07-01-96/	RUTGERS THE STATE UNIV NEWARK	
1 R01AG14342-01	MC DEVITT, CAHIR A DEGENERATION AND REPAIR OF THE MENISCUS	08-15-96/06-30-97	CLEVELAND CLINIC FOUNDATION	195,617
1 R01AG14379-01	KIMURA, JAMES H STRUCTURE AND FUNCTION OF CARTILAGE MACROMOLECULES	08-07-96/07-31-97	CASE WESTERN RESERVE UNIV-HENRY FORD	203,716
1 R29AG14405-01	MORGANELLI, PETER M IGG FC RECEPTORS AND METABOLISM OF LDL IMMUNE COMPLEXES	08-15-96/07-31-97	DARTMOUTH COLLEGE	113,400
1 R01AG14456-01	TSENG, HUNG BIOLOGICAL FUNCTION OF BASONUCLIN	08-15-96/07-31-97	UNIVERSITY OF PENNSYLVANIA	182,951
1 R01AG14472-01	GURWITZ, JERRY H PREVENTION OF ADVERSE DRUG EVENTS IN THE NURSING HOME	09-01-96/08-31-97	UNIVERSITY OF MASSACHUSETTS MEDICAL	523,373
1 R29AG14473-01	REBECK, G WILLIAM APOE AND ITS RECEPTORS IN NORMAL AND ALZHEIMERS BRAIN	08-05-96/07-31-97	MASSACHUSETTS GENERAL HOSPITAL	117,794
9 R01AG14554-05	MATTSON, MARK P B AMYLOID AND NEURONAL CALCIUM MISREGULATION	09-19-96/06-30-97	UNIVERSITY OF KENTUCKY	142,747
1 R01AG14563-01	HUANG, XIN-YUN TYROSINE KINASES AND G PROTEIN SIGNALING	09-26-96/06-30-97	CORNELL UNIVERSITY MEDICAL CENTER	143,966

GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
9 R01AG14579-12	SOULES, MICHAEL R REPRODUCTIVE AGING IN NORMAL PREMENOPAUSAL WOMEN	09-01-96/08-31-97	UNIVERSITY OF WASHINGTON	234,154
1 R01AG14580-01	GALE, KAREN GLUTAMATE TRANSMISSION IN RHINAL CORTEX AND MEMORY	09-30-96/06-30-97	GEORGETOWN UNIVERSITY	253,000
1 R01AG14582-01	RANDALL, WILLIAM R MOLECULAR BASIS FOR ACHR STABILITY	09-30-96/08-31-97	UNIVERSITY OF MARYLAND BALT PROF SCH	163,185
1 R01AG14584-01	CERNY, JAN REGULATION OF B CELL MEMORY	09-01-96/08-31-97	UNIVERSITY OF MARYLAND BALT PROF SCH	229,068
9 R01AG14585-06	SANZ, IGNACIO GENETIC AND FUNCTIONAL STUDY OF HUMAN CDR3 REGIONS	09-30-96/08-31-97	UNIVERSITY OF ROCHESTER	211,000
1 R01AG14587-01	FRENKEL, KRYSTYNA AUTOANTIBODIES AS BIOMARKERS OF BREAST CANCER	09-30-96/08-31-97	NEW YORK UNIVERSITY MEDICAL CENTER	266,764
9 R01AG14600-04	GIBSON, GARY E AGE/NUTRITION/GENES IN MODELS OF PSYCHIATIRC DISORDERS	09-23-96/08-31-97	WINIFRED MASTERSON BURKE REHAB HOSPI	238,990
1 R01AG14616-01	HARDY, JOHN A GENETIC STUDY INTO LRP RECEPTOR IN ALZHEIMERS DISEASE	09-15-96/08-31-97	MAYO FOUNDATION	173,501
1 R03AG14630-01	MANEV, HARI SIMILAR EFFECTS OF AGING AND PINEALECTOMY ON RAT BRAIN	09-25-96/08-31-98	UNIVERSITY OF ILLINOIS AT CHICAGO	64,500
1 P01AG14633-01	HARDY, JOHN A PRESENILINS AND ALZHEIMERS DISEASE	09-30-96/08-31-97	MAYO CLINIC JACKSONVILLE	1,047,578
9 R01AG14634-10	MITTELMAN, MARY S AD CAREGIVER WELL BEING--COUNSELING/INSTITUTIONALIZATION	09-30-96/08-31-97	NEW YORK UNIVERSITY MEDICAL CENTER	200,000
7 N01AG22102-005	ALLEN, ANTON M HEALTH MONITORING OF AGED HYBRID RAT COLONY	04-01-96/03-30-97	MICROBIOLOGICAL ASSOCIATES, INC.	24,610
7 N03AG30007-004	MAINTENANCE ON ELEVATORS	10-13-95/10-12-96	SSC LARGE BUSINESS-MARYLAND	952
3 N03AG30007-005	MAINTENANCE ON ELEVATORS	11-22-95/10-12-96	SSC LARGE BUSINESS-MARYLAND	
7 N03AG30030-005	MULTI LAYER PAN LINERS	04-29-96/04-15-97	SSC SMALL BUSINESS NEW YORK	56,881

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
3 N03AG30048-003	 MINORITY RECRUITMENT	10-01-95/10-31-95	SSC SMALL BUSINESS CALIFORNIA	
3 N03AG30048-004	 MINORITY RECRUITMENT	10-27-95/04-26-96	SSC SMALL BUSINESS CALIFORNIA	
3 N03AG30048-005	 MINORITY RECRUITMENT	04-26-96/04-26-96	SSC SMALL BUSINESS CALIFORNIA	
5 N01AG32124-002	BRYAN, R NICK EARLY MARKERS OF ALZHEIMERS DISEASE	09-24-96/09-29-98	JOHNS HOPKINS UNIVERSITY	1,406,735
5 N01AG32129-003	RALL, WILLIAM F DEVELOP AND MAINTAIN A CRYOPRESERVED EMBRYO BANK	02-07-96/04-30-96	SMITHSONIAN INSTITUTION	
5 N01AG32129-004	RALL, WILLIAM F DEVELOP AND MAINTAIN A CRYOPRESERVED EMBRYO BANK	09-30-96/04-30-98	SMITHSONIAN INSTITUTION	60,976
7 N03AG40004-004	 OPERATION ALZHEIMERS DISEASE EDUCATION/REFERRAL CENTER	12-28-95/12-31-96	HERNER AND COMPANY	800,000
3 N03AG40014-003	 VETERINARY SERVICES	10-01-95/06-06-96	UNIVERSITY OF MARYLAND BALT PROF SCH	
7 N03AG40014-004	 VETERINARY SERVICES	06-07-96/06-06-97	UNIVERSITY OF MARYLAND BALT PROF SCH	48,873
7 N03AG40016-005	 MECHANICAL MAINTENANCE OF GRC	07-16-96/07-31-97	SSC SMALL BUSINESS MARYLAND	594,402
3 N03AG40016-006	 MECHANICAL MAINTENANCE OF GRC	08-21-96/07-31-97	SSC SMALL BUSINESS MARYLAND	
3 N03AG40040-001	 ASSAYS FOR APOLIPOPROTEIN E-4 GENOTYPE	06-12-95/09-28-95	BIOTECHNOLOGY RESEARCH INSTITUTE	
3 N03AG40040-005	 ASSAYS FOR APOLIPOPROTEIN E-4 GENOTYPE	03-30-96/09-30-96	BIOTECHNOLOGY RESEARCH INSTITUTE	
7 N01AG42100-004	HANSEN, BARBARA C OBESITY, DIABETES, & AGING ANIMAL RESOURCES	06-20-96/06-20-97	UNIVERSITY OF MARYLAND BALT PROF SCH	377,173
3 N01AG42142-003	BREITNER, JOHN HEAD INJURY & ALZHEIMER'S DISEASE	06-18-96/08-31-97	DUKE UNIVERSITY	684,134

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
5 N01AG42142-004	BREITNER, JOHN HEAD INJURY & ALZHEIMER'S DISEASE	09-19-96/05-31-98	DUKE UNIVERSITY	233,651
5 N01AG42148-003	HURLEY, BEN AGE AND STRENGTH TRAINING EFFECTS ON MUSCLE STRENGTH	09-06-96/09-29-97	UNIVERSITY OF MARYLAND COLLEGE PK CA	324,205
5 N01AG42149-002	FOLEY, DANIEL HONOLULU ASIA AGING STUDY	09-25-96/09-29-97	KUAKINI MEDICAL CENTER	1,451,671
3 N01AG42150-002	SCHAEFER, GERALD INVESTIGATIONAL NEW DRUG TOXICOLOGY TREAT ALZHEIMER'S	08-07-96/09-29-96	MPI RESEARCH, LLC	
5 N01AG42150-003	SCHAEFER, GERALD INVESTIGATIONAL NEW DRUG TOXICOLOGY TREAT ALZHEIMER'S	09-25-96/09-29-97	MPI RESEARCH, LLC	465,819
7 N03AG50024-001	TRASH HAULING	08-15-96/08-14-97	SSC SMALL BUSINESS MARYLAND	27,250
3 N03AG50036-001	CODE DATA FOR RISK REDUCTION PROGRAM	09-26-96/04-02-98	JEFFERSON COMPREHENSIVE CARE SYSTEM	24,772
7 N01AG52104-002	ALLEN, ANTON PATH MONITORING MULTIGENOTYPIC MOUSE/RAT COLONIES	04-01-96/04-13-97	MICROBIOLOGICAL ASSOCIATES, INC.	56,491
5 N01AG52113-001	ZERHOUNI, ELIAS LONGITUDINAL EVALUATION OF PROSTATE GROWTH (MRI STUDIES)	09-25-96/09-29-97	JOHNS HOPKINS UNIVERSITY	152,280
9 N03AG60007-000	GUARD SERVICES	03-01-96/02-28-97	SSC SMALL BUSINESS VIRGINIA	93,323
3 N03AG60007-001	GUARD SERVICES	04-29-96/09-30-96	SSC SMALL BUSINESS VIRGINIA	
1 N03AG60008-000	GRC UTILITIES & SUPPORT JO	06-25-96/06-30-97	JOHNS HOPKINS BAYVIEW MEDICAL CENTER	3,287,676
9 N03AG60012-000	PROFESSIONAL, MEDICAL & ANCILLIARY SERVICES	06-01-96/05-31-97	SSC SMALL BUSINESS MARYLAND	
3 N03AG60012-001	PROFESSIONAL, MEDICAL & ANCILLIARY SERVICES	05-24-96/05-31-97	SSC SMALL BUSINESS MARYLAND	41,457
1 N03AG60019-000	FURNISH INSTALL GAMMACELL SMALL ANIMAL IRRADIATOR	09-25-96/03-01-97	SSC SMALL BUSINESS CANADA	225,501

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 N03AG60020-000	CONFOCAL MICROSCOPE SYSTEM	09-13-96/05-29-97	SSC SMALL BUSINESS NEW YORK	180,521
1 N03AG60022-000	JANITORIAL SERVICES FOR GERONTOLOGY RESEARCH CENTER	09-28-96/09-27-97	SSC SMALL BUSINESS MARYLAND	368,019
9 N03AG60028-000	ASSAYS	09-30-96/09-29-97	SSC SMALL BUSINESS MARYLAND	110,625
1 N03AG60122-000	MESSENGER SERVICE TO ON CAMPUT & OFF CAMPUS SITES	09-29-96/09-28-97	MELA ASSOCIATES, INC.	75,006
1 N03AG60130-000	PARKING SPACES FOR GATEWAY BLDG	09-30-96/09-29-97	SSC SMALL BUSINESS DISTRICT OF COLUM	180,720
1 N03AG60131-000	LASER SCANNING FLUORESCENCE SYSTEM	09-17-96/10-17-96	SSC SMALL BUSINESS NEW YORK	183,778
1 N03AG60346-000	ADP HARDWARE SOFTWARE AND SUPPORT SERVICES	09-30-96/09-29-97	SSC SMALL BUSINESS MARYLAND	231,298
1 N03AG60733-000	PROVIDE GROUNDS MAINTENANCE	08-22-96/09-30-96	SSC SMALL BUSINESS MARYLAND	33,000
1 N03AG60741-000	PROVIDE COLLECTION OF DATA ON PERSONNEL	05-07-96/12-07-96	HUNAN MEDICAL UNIVERSITY	39,432
1 N03AG60761-000	CLEARINGHOUSE SERVICES	09-06-96/09-30-96	SSC SMALL BUSINESS MARYLAND	47,171
1 N03AG60812-000	MODIFIED M4/RTP IMAGE ANALYSIS--TURNKEY SYSTEM	08-20-96/09-30-96	SSC SMALL BUSINESS CANADA	34,315
1 N03AG60828-000	RECONDITIONED BECTON DICKINSON FACSCAN FLOW CYTOMETER	04-23-96/05-23-96	SSC SMALL BUSINESS GEORGIA	38,000
1 N03AG60870-000	INFORMATION CLEARINGHOUSE	08-09-96/09-10-96	SSC SMALL BUSINESS MARYLAND	50,000
1 N01AG62101-000	NEWMAN, ANN B DYNAMICS OF HEALTH, AGING, AND BODY COMPOSITION	05-01-96/03-28-97	UNIVERSITY OF PITTSBURGH AT PITTSBUR	608,557
5 N01AG62101-001	NEWMAN, ANN B DYNAMICS OF HEALTH, AGING, AND BODY COMPOSITION	09-19-96/07-15-97	UNIVERSITY OF PITTSBURGH AT PITTSBUR	500,000

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GRANT NUMBER	PRINCIPAL INVESTIGATOR TITLE	BUDGET DATES START END	INSTITUTION	TOTAL
FY: 96				
1 N01AG62103-000	KRITCHEVSKY, STEPHEN DYNAMICS OF HEALTH, AGING, AND BODY COMPOSITION	05-01-96/03-28-97	UNIVERSITY OF TENNESSEE AT MEMPHIS	592,344
1 N01AG62106-000	CUMMINGS, STEVEN R HEALTH ABC--COORDINATING UNIT	03-29-96/03-28-97	UNIVERSITY OF CALIFORNIA SAN FRANCIS	741,144
1 N43AG62116-000	BANAS, DEBORAH EFFECTS OF 2-DG INGESTION ON AGING CHANGES IN RAT	09-30-96/03-31-97	EXPERIMENTAL PATHOLOGY LABORATORIES	99,983
1 N43AG62118-000	COOK, MARY A ASSESSMENT OF DOCTOR ELDERLY PATIENT ENCOUNTERS	09-30-96/03-31-97	JVC RADIOLOGY AND MEDICAL ANALYSIS	92,100
5 N01AG92114-013	CAIL, STEPHEN P LONG TERM COLONY OF MULTIGENOTYPIC AGED MOUSE STRAINS	09-18-96/12-31-97	CHARLES RIVER LABORATORIES, INC.	647,031
5 N01AG92116-008	WEISFELDT, MYRON NONINVASIVE ASSESSMENT OF CARDIAC STRUCTURE AND FUNCTION	09-06-96/09-29-97	JOHNS HOPKINS UNIVERSITY	443,752
				385,776,329
				2,016
				750,286,957
				4,056

ITEM 7—DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

U.S. HOUSING FOR THE ELDERLY—CALENDAR YEAR 1995 AND 1996

The Department of Housing and Urban Development is committed to providing America's elderly with decent affordable housing appropriate to their needs. The Department's goal is to provide a variety of approaches so that older Americans may be able to maintain their independence, remain as part of the community, have access to supportive services, and live their lives with dignity and grace.

I. HOUSING

A. SECTION 202—CAPITAL ADVANCES FOR SUPPORTIVE HOUSING FOR THE ELDERLY AND SECTION 811 SUPPORTIVE HOUSING FOR PERSONS WITH DISABILITIES

The National Affordable Housing Act of 1990 authorized a restructured Section 202 program while separating out and creating the new Section 811 program for Housing for Persons with Disabilities. Funding for both programs is provided by a combination of interest-free capital advances and project rental assistance. Project rental assistance replaces Section 8 rent subsidies. The annual project rental assistance contract amount is based on the cost of operating the project. The 30 percent maximum tenant contribution remains unchanged.

Since the passage of the National Affordable Housing Act of 1990, there have been 43,357 units approved under the Section 202 program and 13,041 units approved under the Section 811 program. Of those amounts 8,669 Section 202 units and 1,971 Section 811 were approved in Fiscal Year 1996.

B. SECTION 231—MORTGAGE INSURANCE FOR HOUSING FOR THE ELDERLY

Section 231 of the National Housing Act authorized HUD to insure lenders against losses on mortgages used for construction or rehabilitation of market rate rental accommodations for persons age 62 years or older, married or single. Nonprofit as well as profit-motivated sponsors are eligible under this program. The program is largely inactive since most sponsors and lenders prefer to use the Section 221(d)(3) and 221(d)(4) programs instead.

C. SECTION 221(d) (3) AND (4)—MORTGAGE INSURANCE PROGRAM FOR MULTIFAMILY HOUSING

Sections 221(d)(3) and (4) authorized the Department to provide insurance to finance the construction or rehabilitation of market rate rental or cooperative projects. The programs are available to non-profit and profit-motivated mortgagors as alternatives to the Section 231 program. While most projects under the programs have been developed for families, projects insured under Section 221 may be designed for occupancy wholly or partially for the elderly, and the mobility impaired of any age.

D. SECTION 232—MORTGAGE INSURANCE FOR NURSING HOMES, INTERMEDIATE CARE FACILITIES, AND BOARD AND CARE HOMES, AND ASSISTED LIVING FACILITIES

The Section 232 program assists and promotes the construction and rehabilitation (or purchase or refinance of existing projects) of nursing homes, intermediate care facilities, board and care homes, and assisted living facilities by providing mortgage insurance to finance these facilities. The vast majority of the residents of such facilities are the frail elderly. In FY 1996, HUD insured 156 projects containing 20,608 units and worth $1 billion.

E. SECTION 8—NEW CONSTRUCTION

The Section 8 program sponsored the new construction of housing for families and for the elderly by attaching subsidy to the units being developed. That way the landlord was guaranteed a stream of income that would facilitate finding financing and that would guarantee the ability to make payments and operate the developments. The new construction program was active from 1974 until the mid-1980s. There are 1.4 million private, project-based Section 8 units, about 47 percent of which serve elderly households. About 193,000 of these 658,000 units were built under the Section 202 program before the restructuring of that program in 1990. That means that about 465,000 units developed with Section 8 project-based assistance serve elderly households. The Section 8 new construction program is no longer in operation.

F. SERVICE COORDINATORS

The National Affordable Housing Act authorized funding for service coordinators under the Section 202 program in 1990. Eligibility was expanded to cover Sections 8, 221(d)(3), and 236 projects in 1992. A service coordinator is a social service staff person who is part of the project's management team. That individual is responsible for ensuring that the residents of the project are linked with the supportive services they need from agencies in the community to assure that they can remain independently in their homes and avoid premature and unnecessary institutionalization as long as possible.

In FY 1995, HUD awarded $19.5 million to 179 projects, almost all of which were Section 202 projects; another $5 million was awarded to 34 Section 202 projects in 1996.

G. THE CONGREGATE HOUSING SERVICES PROGRAM

The Congregate Housing Services Program (CHSP), initially authorized in 1978 and revised in 1990, provides direct grants to States, Indian tribes, units of general local government and local non-profit housing sponsors to provide case management, meals, personal assistance, housekeeping, and other appropriate supportive services to frail elderly and non-elderly disabled residents of HUD public and assisted housing, and for the residents of Section 515/8 projects under the Department of Agriculture's Rural Housing and Community Department Service.

In 1995 HUD made one grant for $252,595 to serve an estimated 20 additional non-elderly disabled residents of eligible housing. The program covers 111 grantees, which serve about 5,000 people.

H. FLEXIBLE SUBSIDY AND LOAN MANAGEMENT SET ASIDE (LMSA) FUNDING

The Flexible Subsidy Program provides funding to correct the financial and physical health of HUD subsidized properties, including those which house the elderly. Flexible Subsidy provides funds for projects insured under Section 221(d)(3), Section 236, and funding under the 202 program (once they have reached 15 years old).

The Loan Management Set Aside (LMSA) Program provides Project-based Section 8 funding to HUD-insured and HUD-held projects and projects funded under the 202 Program, which need additional financial assistance to preserve the long term fiscal health of the project.

I. MANUFACTURED HOME PARKS

The Housing and Urban-Rural Recovery Act (HURRA) of 1983 amended Section 207 of the National Housing Act to permit mortgage insurance for manufactured home parks exclusively for the elderly. The program has been operational since the March 1984 publication of a final rule implementing the legislation, although HUD insures very few manufactured home parks.

J. TITLE I PROPERTY IMPROVEMENT LOAN INSURANCE

Title I of the National Housing Act authorizes HUD to insure lenders against loss on property improvement loans made from their own funds to creditworthy borrowers. The loan proceeds are to be used to make alterations and repairs that substantially protect or improved the basic livability or utility of the property. There are no age or income requirements to qualify for a Title I loan.

K. TITLE I MANUFACTURED HOME LOAN INSURANCE

Title I of the National Housing Act authorizes HUD to insure lenders against loss on manufactured home loans made from their own funds to creditworthy borrowers. The loan proceeds may be used to purchase or refinance a manufactured home, a developed lot on which to place a manufactured home, or a manufactured home and lot in combination. The home must be used as the principal residence of the borrower. There are no age or income requirements to qualify for a Title I loan.

L. HOME EQUITY CONVERSION MORTGAGE INSURANCE PROGRAM

The Department has implemented a program to insure Home Equity Conversion Mortgages (HECM), commonly known as "reverse mortgages." The program is designed to enable persons aged 62 years or older to convert the equity in their homes to monthly streams of income and/or lines of credit.

As of September 30, 1996, the cumulative number of active insured loans reached 20,321. Two hundred and thirty-two lenders in 49 states participate in the program. The volume of loans increased significantly during the 1990's, from 151 in 1990 to 4,083 in 1995 as more lenders and the general population become more aware of the HECM program. For that reason, the Department is planning program changes that will offer consumer protection against excessive fees.

II. PUBLIC AND INDIAN HOUSING

A. SECTION 8 RENTAL CERTIFICATES AND RENTAL VOUCHERS

Section 8 of the U.S. Housing Act of 1937 authorizes housing assistance payments to aid low-income families in renting decent, safe, and sanitary housing that is available in the existing housing market.

About 16 percent of Section 8 certificate and voucher recipients are elderly. This represents 224,000 units.

B. ELDERLY/DISABLED SERVICE COORDINATORS

Section 673 of the Housing and Community Development Act of 1992 authorized the Department to fund services coordinators in public housing developments to assure the elderly and non-elderly disabled residents have access to the services they need to live independently. The Department awarded $60 million in FY 1994 and 1995 funds for public housing authorities to hire services coordinators for their elderly and non-elderly disabled residents to provide case management and link these needy residents to other supportive services.

C. TENANT OPPORTUNITY PROGRAM

Section 20 of the U.S. Housing Act of 1937 authorized the Tenant Opportunity Program. This program provides training and technical assistance to resident entities to organize their communities and to establish various resident managed initiatives. The program began in 1988 and to date has funded about 900 resident groups. Public and Indian housing developments with elderly residents are eligible to participate and we would estimate a small portion, perhaps 5 percent are in fact primarily elderly grantees.

D. PUBLIC HOUSING DEVELOPMENT PROGRAM

The Public Housing Development Program was authorized by Sections 5 and 23 of the United States Housing Act of 1937 to provide adequate shelter in a decent environment for families that cannot afford such housing in the private market.

In 1995, 208 additional units of public housing for the elderly were reserved, 469 were under construction, and 514 became available for occupancy. In 1996 another 43 were reserved, 272 were under construction, and 233 became available for occupancy. The following statistics are provided for the elderly low income population of public and Indian housing:

Public housing residents	360,000
Indian housing	11,400
Total Public and Indian Housing	371,400

E. SET-ASIDES

The Department is currently conducting a demonstration program called HOPE for Elderly Independence which was created in 1992. The purpose of the demonstration is to test the effectiveness of providing rental voucher and supportive services to frail elderly people who are living in the general community and require this combined assistance to continue living independently and to avoid premature or unnecessary institutionalization.

Hope for Elderly Independence grants worth $7.7 million made in FY 94. Hope for Elderly Independence vouchers worth $32.1 million (11,186 units) were assigned in FY 94 and another $990,805 (150 units) were assigned in FY 1995.

III. COMMUNITY PLANNING AND DEVELOPMENT

A. COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG) ENTITLEMENT COMMUNITIES PROGRAM

The CDBG Entitlement Communities Program is HUD's major source of funding to large cities and urban counties for a wide range of community development activities. These activities primarily help low- and moderate-income persons and households, however, they can also be used to help eliminate slums and blight or meet other urgent community development needs.

The Department normally does not ask grantees to report program beneficiaries by age. Despite this, grantees did report on their 1994 Grantee Performance Report (the most recent performance report for which the Department has reliable information) that they spent about 1.1 percent of their program funds (over $34 million) that year for public services that were specifically targeted to senior citizens and about 0.7 percent of their funds (over $22 million) for public facilities for senior citizens. In addition, HUD staff are aware that senior citizens frequently benefit from local housing rehabilitation programs that are funded by CDBG. What is not known is how many of those benefiting from rehabilitation projects are elderly. It has been the experience of the Department that the percentage of CDBG funds spent on these activities by grantees has not varied much from year to year.

No further information is available at this time.

B. CDBG STATE-ADMINISTERED AND HUD-ADMINISTERED SMALL CITIES PROGRAMS

The CDBG State-administered program and the HUD-administered Small Cities program for the States of New York and Hawaii

are HUD's principal vehicles for assisting communities with under 50,000 population that are not central cities of metropolitan areas. States and small cities/counties use the CDBG funds to undertake a broad range of activities and structure their programs to give priority to eligible activities that they wish to emphasize. As is also true with the Entitlement Communities program, these activities must primarily help low- and moderate-income persons and households, however they can also be used to help eliminate slums and blight or meet other urgent community development needs.

The Department has no specific information on the extent of benefit from these programs for the elderly, however HUD staff are aware that elderly persons and households who live in these small cities and counties are benefiting from CDBG-funded activities.

No further information is available at this time.

C. HOME INVESTMENT PARTNERSHIP

The HOME Program provides funds by formula to States and local governments for acquisition, rehabilitation, and construction of affordable housing for rent or homeownership. As of September 1996, the program, which was first funded in 1992, had assisted 21,500 elderly households. Over 80 percent of these households had incomes at or below 50 percent of the area median income. Most assistance was provided to existing homeowners (15,200) to rehabilitate their homes. HOME provided rental units for 3,200 elderly households, tenant based rental assistance to 2,300 elderly households, and assistance to purchase homes to 750 elderly households. The publication, *Home Repair/Modification Programs for Elderly Homeowners,* is designed to assist jurisdictions in designing programs using HOME funds specifically to meet the needs of the elderly.

D. EMERGENCY SHELTER GRANTS PROGRAM

The Emergency Shelter Grants Program provides funds to States, metropolitan cities, urban counties, Indian tribes, and territories to improve the quality of emergency shelters, make available additional shelters, meet the cost of operating shelters, provide essential social services to homeless individuals, and help prevent homelessness.

No further information is available at this time.

E. SUPPORTIVE HOUSING DEMONSTRATION PROGRAM

The Supportive Housing Demonstration Program (SHDP) has two components, Transitional Housing and Permanent Housing for the Handicapped Homeless. The Transitional Housing Program is designed to provide short-term housing and support services that facilitate the transition of homeless persons to independent living. The Permanent Housing for the Handicapped Homeless Program assists States in developing community-based, long-term housing and supportive services for handicapped persons who are homeless.

No other information is available at this time.

IV. FAIR HOUSING AND EQUAL OPPORTUNITY (FHEO)

A. THE FAIR HOUSING ACT

The Fair Housing Act prohibits discrimination in housing based on race, color, religion, sex, national origin, handicap, or familial status. The Act exempts from its provisions against discrimination based on familial status "housing for older persons." which is defined as housing intended and operated for occupancy by elderly persons. The statutory exemption of "housing for older persons" comprises three categories of housing: (1) housing provided under any State or Federal Program that the Secretary of HUD determines is specifically designated and operated to assist elderly persons; (2) housing intended for and solely occupied by residents 62 years of age and older; and (3) housing intended for and solely occupied by, at least one person 55 years of age or older per unit, provided various other criteria are met.

B. THE HOUSING FOR ELDERLY PERSONS ACT OF 1995

The Housing for Older Persons Act (HOPA) of 1995 named the "55 and older" senior housing exemption to the Fair Housing Act's prohibition against discrimination based on familial status. HOPA eliminates the requirement that "housing for older persons" have significant services and facilities for its elderly residents and establishes a good faith reliance defense from monetary damages based on a legitimate belief that the housing was entitled to an exemption. In order to qualify for the "55 and over housing" exemption a housing community or facility must: (1) have at least 80 percent of its occupied units occupied by at least one person 55 years of age or older; (2) adhere to policies and procedures which demonstrate an intent by the owner or manager to provide housing for persons 55 and older; and (3) verify the age of its residents through reliable surveys and affidavits.

C. AGE DISCRIMINATION ACT

During Fiscal Year 1995, the Department received five complaints alleging age discrimination in federally-assisted programs. It appears that three of these complaints were filed by persons over 62 years of age. (Age discrimination complaints may be filed by persons of any age.) In Fiscal Year 1996, there were 10 such complaints, 6 of which were filed by elderly persons.

D. DESIGNATED HOUSING

The 1992 Housing and Community Development Act authorized HUD to approve Public Housing Authority plans to designate mixed population housing units (serving elderly and persons with disabilities) for elderly families only, if the plans met certain statutory requirements. The Housing Opportunities Program Extension Act of 1996 simplified and streamlined those requirements, but continued to require HUD to review and approve or disapprove designate housing plans.

As of December 1996, 38 housing authorities had received approval to designate four units for elderly families only.

V. OFFICE OF POLICY DEVELOPMENT AND RESEARCH

A. AMERICAN HOUSING SURVEY

The American Housing Survey for the United States, Current Housing Reports H. 150 for the year 1995 contains special tabulations on the housing situations of elderly households in the United States. (Data for 1997 will be available in Fall 1998.) Chapter 7 of the regular report provides detailed demographic and economic characteristics of elderly households, detailed physical and quality characteristics of their housing units and neighborhoods and the previous housing of recent movers, and their opinions about their house and neighborhood. The data are displayed for the four census regions, and for central cities, suburbs, and non metropolitan areas, and by urban and rural classification. The non-elderly chapters (total occupied, owner, renter, Black, Hispanic, central cities, suburbs, and outside MSAs) as well as the publications for the 44 largest metropolitan areas individually surveyed over a 4-year cycle, Current Housing Reports H. 170, also contain data on the elderly.

An elderly household is defined as one where the householder, who may live alone or head a larger household, is aged 65 years or more. Special information in these publications is provided on households in physically inadequate housing or with excessive cost burden, and on households in poverty.

B. EVALUATION OF THE HOPE FOR ELDERLY INDEPENDENCE DEMONSTRATION PROGRAM

The program was conceived as an alternative to the Congregate Housing Services Program (CHSP). The major difference between the two programs is that HOPE IV is a tenant-based program implemented by the PHAs. Beyond specifying minimum age, level of frailty and income requirements, HUD has allowed considerable flexibility in local implementation of the HOPE IV coordinator, obtain matching funds for its share of the cost of services, and serve as a contractor for service delivery.

The second interim report was published in August 1996.

This report describes the baseline characteristics of the program participants and those of a comparison group composed of frail elderly recipients of Section 8 rental assistance who are not receiving HOPE IV supportive services. It also presents the HOPE IV participants' initial view of the program and it's services.

The PHAs have had to work very hard to get the HOPE IV program fully operational.—Most HOPE IV grantees have had to modify their normal Section 8 operating procedures and initiate an array of new linkages with other agencies in the community to recruit participants, help them relocate, and meet the special challenges of serving the very frail elderly. Two years into the program, the PHAs continue to have difficulties finding candidates not in assisted housing who are sufficiently frail. After two-years, only one-third of the projected slots have been filled. The grantees have had to help the participants find new housing (almost 25 percent of the eligible candidates) to be eligible for the program and physically move. This was unexpected, but many homes did not meet Section 8 housing quality standards and the landlords were unwilling to

upgrade them; in other cases the sponsoring PHA chose a program design option that permitted targeting services to a specific neighborhood so applicants had to move to participate. Some of the eligible participants could not make the transition into new housing and they were lost to the program. The comparison group survey shows that there are frail elderly receiving Section 8 assistance who need the program's services, but these elderly people are not eligible for HOPE IV services because HUD opted to selected participants from the waiting list, not from current recipients.

Even though the HOPE IV participants are considered very frail, over 20 percent of the participants do not meet the required level of frailty by HOPE IV program standards.—There are explanations for this disparity. First, the grantees had considerable difficulty interpreting the eligibility criteria regarding ADL deficiency as defined by the program. The professional assessment instruments available for measuring frailty are not perfectly suited for assessing frailty required by HOPE IV. Second, prior research in measuring ADL difficulty shows self-reports (which these are) tend to be inaccurate because the person has either compensated for the failure by changing how they approach an activity they have trouble performing or because they are unaware that they are functionally declining.

Even though not all HOPE IV participants meet the minimum ADL criteria for eligibility, the HOPE IV program appears to appropriately targeted to those at risk of being institutionalized.—The HOPE IV participants are much frailer than non-institutionalized elderly persons in the general population. However, they are less frail than persons in community based programs for nursing home eligible persons or than persons in nursing homes.

Even though most HOPE IV participants are considered very frail, with many adverse health conditions, they actively participate in activities outside the home and enjoy social contact.—Over half of the participants report they are satisfied with their lives, like their neighborhoods and living arrangements, have good appetites, have control over their activities, and have few worries. Almost all say that the HOPE IV program is integral to keeping them independent.

C. EVALUATION OF THE CONGREGATE HOUSING SERVICES PROGRAM (CHSP)

The New Congregate Housing services program was authorized under the National Affordable Housing Act of 1990 and amended by the Housing and Community Development Act of 1992.

The (CHSP) combines project-based rental assistance with community-based supportive services to help low-income frail elderly and non-elderly persons with disabilities maintain independence and avoid institutionalization. In addition to rental assistance, HUD pays 40 percent of the supportive services cost, the grantees pay 50 percent of the cost, and the participants pay 10 percent, if they are able. To be eligible for the program, residents must need assistance with at least three activities of daily living (ADL) as defined by HUD or, if they are non-elderly, they must have temporary or permanent disabilities.

The second interim report of the CHSP evaluation project was published October 1996.

The third interim report describes the characteristics of the program participants, their functional status, the services received, the cost of the program and the impact of the program.

The CHSP appears to be targeted to those at risk of being institutionalized and who are likely to be appropriately served by community-based options.—CHSP participants are older and much frailer (in terms of ADL criteria) than elderly persons in the general population, but they are somewhat similar to residents of more restrictive environments such as board and care homes, and in some cases, nursing homes.

Although overall the program participants include a substantial proportion of very old people (75 years or older) most of whom have six or more ADL impairments, about 22 percent of the program participants report having fewer than three ADLs.—This is for the same reasons as in the HOPE for Elderly Independence program: difficulty interpreting the eligibility criteria regarding ADL deficiency; problems with the professional assessment instruments available for measuring frailty; and inaccuracy of self reports.

About half of the original baseline participants have left the program.—Because the CHSP participants are so frail and old, a high number are not able to continue to live independently, even with CHSP services. An overwhelming majority (71 percent) of those who left the program moved to a more restrictive environment or died. Of those remaining in the program, 45 percent of the participants report more ADL limitations than at baseline, 31 percent fewer, and 24 percent report the same number.

Comparison of HOPE IV and CHSP

Both programs appear to be targeted to those at risk of being institutionalized and who are likely to be appropriately served by community-based options.—The two populations are very similar in most reports, except that the HOPE IV participants are frailer at a younger age. In general, elderly participants in both programs are much frailer (in terms of ADL criteria) than elderly persons in the same age range in the general population, even though about 20 percent of the participants currently in each of the programs do not meet the strict level of frailty required by the program standards.

In many cases, coordinated service delivery is new to the persons in these programs, particularly the HOPE IV elderly. This coordination has resulted in individual participants receiving greater total amounts of assistance than before participation. However, the level of assistance necessary to maintain independence with these populations corresponds to the level of frailty and impairment of the participants.—Most participants receiving services say they are satisfied with the program, especially HOPE IV participants, 86 percent of which say they are very satisfied. However, around one-fourth of the elderly in these programs say that they need more services to remain independent.

D. SERVICE COORDINATOR PROGRAM EVALUATION

The Office of Policy Development and Research completed an evaluation of the Service Coordinator Program (SCP) in early 1996. The major goal of study was to assess the effectiveness of the SCP, which pays the cost of a service coordinator who arranges to bring the needed supportive services to the elderly and persons with disabilities so that they may continue to live independently; the program does not pay for the cost of the services. The evaluation objectives were to describe early implementation experiences of SCPs; ongoing program operations; and resident satisfaction with the program.

There are several policy relevant findings:

The study provides evidence that the program worked effectively. Across the 18 study sites, residents were very satisfied with the program and the service coordinator. Even residents who believed that they did not currently need any help from the service coordinator indicated that they liked knowing that assistance was available should they need it.

Property managers and service coordinators believed that the SCP had prevented early institutionalization of some residents. Their estimates of the number of residents able to continue living independently as a result of the SCP ranged from 3 to 30 per project, or about 12 percent of residents on average across projects.

The flexibility of the program allowed service coordinators to address the myriad of supportive service needs of their residents, which ranged from coordinating transportation to medical-related services.

ITEM 8—DEPARTMENT OF THE INTERIOR

DEPARTMENTAL OFFICE FOR EQUAL OPPORTUNITY

In 1995 and 1996, the Departmental Office for Equal Opportunity (OEO) civil rights mission was to ensure compliance with the various Federal laws and regulations that prohibit discrimination on the bases of race, color, national origin, age, and disability in programs and activities that received Federal financial assistance. The Office also served as the focal point for all equal opportunity functions in the Department of the Interior. During the period, the Departmental OEO provided technical assistance on age discrimination matters to bureaus and offices of the Department and to entities of State and local governments. The Office developed policies and programs relating to age discrimination compliance and enforcement matters. Work force data based on age and other factors were collected and analyzed for the purpose of identifying illegal equal employment trends. Age discrimination complaints were adjudicated. In instances where age discrimination complaints were filed against the Department, the Departmental OEO routinely issued final agency decisions in response to such cases. In 1996, the Department's civil rights and Federal equal employment programs were the focus of "reinvention" laboratories which were associated with the Administration's National Performance Review Initiative. These laboratories served to improve customer service with respect to identifying instances of age discrimination; investigating and resolving civil rights complaints including ones that allege age discrimination; and, reengineering complaint processing practices that proved costly and inefficient. On March 4, 1996, the Interior Management Council formed a "Diversity Task Force" to review the affirmative employment issues regarding under-representation in the Department of the Interior. The Task Force looked at, among other concerns, age discrimination issues affecting the Department in such areas as recruitment, retention and employee development, and performance management standards. Age factors were considered by the Task Force in studying these issues. During the period, an electronic home page was developed on the "Internet." The home page described the Department's nondiscrimination policies and the procedures for filing complaints including those based upon age. Also, civil rights training was conducted for all bureaus and offices of the Department on the requirements of the Age Discrimination Act of 1975. In addition, the Departmental OEO oversaw the conduct of complaint investigations and compliance reviews and the resolution of accessibility problems in areas where federally assisted and federally conducted

program areas. These activities also included people with disabilities who were predominantly senior citizens.

OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

The Office of Surface Mining Reclamation and Enforcement (OSM) is committed to ensuring that persons are provided equal opportunity in all employment matters. During calendar years 1995 and 1996, a policy statement from the Director of OSM was in effect which stated that discrimination based on age (40 years of age and older) will not be tolerated. In addition, during calendar year 1995, a diversity policy statement was issued committing OSM to creating and maintaining a diverse work force that would be inclusive of elderly persons. Older workers are represented in most of OSM's occupational series. During Calendar year 1995, OSM's work force shrank from 874 to 640 employees due to a "Reduction-In-Force" and retirements. The bureau recognized that these types of situations could cause some older workers to experience work changes or stress. In order to help all its workers deal with these situations, OSM sponsored a number of seminars on "change." These seminars were designed to assist individuals in the transition from work to retirement or from one occupation to another. Older workers were also given the opportunity to attend various retirement seminars. Also, awards for 25, 30, and 35 years of service were given to many OSM employees in calendar years 1995 and 1996.

U.S. FISH AND WILDLIFE SERVICE

The U.S. Fish and Wildlife Service (Service) recognizes its responsibility for providing opportunities to all citizens throughout its system and strives to ensure that aging citizens are fully utilized and supported through special programs, volunteerism, employment opportunities and the modification of facilities to improve accessibility.

In 1995, the Service employed a total of 7,242 persons. Of that number, 4,764 employees were 40 years of age and older. This represented 66 percent of the total work force. Of the 4,764 employees, 269 were 60 years and older and worked various schedules in a wide variety of occupations with the majority employed in the biological sciences positions. The following occupational categories are reflective of that group:

2,179 (46%) were in Professional positions with 86 (4%) of them over the age of 60;

926 (19%) were in Administrative positions with 40 (4%) of them over the age of 60;

627 (13%) were in Technical positions with 48 (8%) of them over the age of 60;

466 (10%) were in Clerical positions with 37 (8%) of them over the age of 60;

14 (.3% were in Other positions with (7%) of them over the age of 60; and

552 (12%) were in Wage Grade positions with 57 (10%) of them over the age of 60.

Through its Office of Human Resources, the Service provided training and technical assistance to managers, supervisors and equal employment opportunity counselors on the regulations and guidelines governing age discrimination to sensitize them to the rights of employees who were 40 and older. In 1995, there were a total of 60 employment related discrimination complaints filed Service wide. Of these, 16 (26.7%) were filed alleging discrimination on the basis of age (40 and above). The Service investigated a total of 45 federally assisted program related complaints, of which 5 (11.1%) were filed alleging discrimination on the basis of age (40 and above). The Service increased its efforts in making programs, activities and facilities more accessible to persons with disabilities and to meet the needs of older employees and citizens. There were more than 23,000 volunteers Service-wide including 1,937 (8.4%) individuals over the age of 61. The Service sponsored recreational and environmental education programs in which senior citizens volunteered at National Wildlife Refuges, Fish Hatcheries, and Ecological Services Field Stations. The seniors conducted tours of Service facilities and answered questions about camping, fishing, hiking, and wildlife viewing. The Service entered into cooperative agreements; such as, Sullys Hill Visitor Center and the Devils Lake Retired Senior Volunteer Program (RSVP) and the "Serendipity" Club at the Salvation Army Senior Citizen Center, in Anchorage, Alaska.

In 1996, the Service employed a total of 6,997 persons. Of that number, 4,331 employees were 40 years of age and older. This represents 62 percent of the total work force. Of the 4,331 employees, 148 were 60 years and older and worked various schedules in a wide variety of occupations with the majority employed in the biological sciences positions.

The following occupational categories are reflective of that group:

1,972 (46%) were in Professional positions with 43 (2%) of them over the age of 60;

873 (20%) were in Administrative positions with 25 (3%) of them over the age of 60;

585 (14%) were in Technical positions with 27 (5%) of them over the age of 60;

387 (9%) were in Clerical positions with 19 (5%) of them over the age of 60;

13 (.3%) were in Other positions with 0 of them over the age of 60; and

501 (12%) were in Wage Grade positions with 34 (7%) of them over the age of 60.

There were more than 25,000 volunteers Service-wide including 3,542 (14.2% individuals over the age of 61. The Service sponsored recreational and environmental education programs in which senior citizens volunteered at National Wildlife Refuges, Fish Hatcheries, and Ecological Service Field Stations. The seniors conducted tours of Service facilities and answered questions about camping, fishing, hiking, and wildlife viewing. The Service received a significant portion of written and telephonic inquiries from retired individuals who were interested in natural resource oriented issues, especially concerning endangered species and non-game birds and animals. The Service's publication unit made available educational

materials and provided practical methods and techniques to enhance fish and wildlife habitats to the public. The Service continued its involvement in cooperative agreements with various Senior Centers and Organizations.

The Service's Office of Human Resources provided training and technical assistance to Service managers, supervisors and equal employment opportunity counselors on the regulations and guidelines governing age discrimination. This training enhanced their skills by enabling them to informally resolve complaints and sensitizing them to the rights of employees who were 40 and older. In 1996, there were a total of 45 employment related discrimination complaints filed Service wide. Of these, 16 (35.6%) were filed alleging discrimination on the basis of age (40 and above). Additionally, the Service investigated a total of 34 Federally Assisted Program related complaints, of which 3 (8.8%) were filed alleging discrimination on the basis of age (40 and above).

NATIONAL PARK SERVICE

The National Park Service (NPS) continues to ensure that a broad range of services and activities are provided to the visiting public including senior citizens. The NPS hosts the "Senior Community Service Employment Program (SCSEP)." This activity is carried out in cooperation with the U.S. Forest Service and Voyageurs National Park. Program participants must possess a valid State driver's license; be at least 55 years of age; pass a physical examination and live in or near Voyageurs National Park. Under SCSEP, Voyageurs National Park employed four senior citizens, i.e., three maintenance workers and one receptionist. The program seeks to provide supplemental income to seniors in general and to rural communities in particular. It provides invaluable work experience to older Americans. This employment program has worked very well at Voyageurs. The NPS also offers the "Volunteers-in-Parks Program" which operates at Voyageurs and other national parks. The program serves a variety of older couples who work at various park sites during the summer.

The George Washington National Monument serves as a worksite for older Americans who are employed by the Area Agency on Aging. The Agency on Aging pays the salary and the park provides work projects, supervision and training for program participants. Participants usually work part-time (20 hours per week).

The Golden Age Passport, for persons 62 and older, is a lifetime entrance pass to most national parks monuments, historic sites, recreation areas, and national wildlife refuges that charge an entrance fee. The passport admits the pass holder and any accompanying passengers in private automobiles. The Golden Age Passport also provides a 50% discount on fees charged for park services, facilities and services such as parking, boat launching, swimming, camping, and cave tours.

The NPS continues to ensure nondiscrimination on the basis of age in its workforce. For example, in 1996, out of 288 issues raised in complaints of alleged discrimination, in 40 instances, allegations of age discrimination were raised. The NPS processed a total of 26 complaints of alleged age discrimination out of a total of 99 complaints received during the period.

The NPS Accessibility Office is an office that is staffed by experienced park and recreation professionals who have provided park and recreation services to special populations including the elderly and people with disabilities. A primary goal of the office is to develop and implement a comprehensive and system wide approach for ensuring that the national park system is readily accessible to all people including the elderly and people with disabilities. Since its creation, the office has been providing training and technical assistance to all NPS regional offices in an effort to improve and make more accessible park and recreation services to senior citizens and other special populations.

U.S. GEOLOGICAL SURVEY

The U.S. Geological Survey (USGS) provides opportunities to all individuals throughout its system and ensures that older individuals were utilized through special programs, volunteerism, and employment opportunities.

In 1996, USGS employed a total of 8,949 individuals. There were, 5,700 (64%) USGS employees aged 40 and over. Of USGS employees aged 40 and over, there were 334 (6%) employees who were 60 years of age and older, and there was one employee over the age of 80.

The majority of USGS' mission related occupations, which include occupations such as hydrologists, geologists, and cartographers, are in the professional category. Of the 5,700 USGS employees age 40 and over, there were 2,777 (49%) in professional positions, 191 (3%) of whom were age 60 and over, and one employee over the age of 80. Other demographic information regarding USGS employees age 40 and over was as follows:

855 (15%) were in the "administrative" positions with 28 (3%) of them aged 60 and over;

1,645 (29%) were in "technical" positions with 77 (5%) of them aged 60 and over;

301 (5%) were in "clerical" positions with 33 (11%) of them aged 60 and over;

12 (0.2%) were in other positions with none of them aged 60 and over; and

110 (2%) were in the "wage grade" positions with 5 (5%) aged 60 and over.

In 1995, USGS employed a total of 9,220 people. There were 5,824 (63%) Survey employees aged 40 and over. Of USGS employees aged 40 and over, there were 400 (7%) employees who were 60 years of age and older, and four employees aged 80 and over.

In USGS' professional occupational series, 2,883 (49%) of the employees were aged 40 and over, 237 (8%) were aged 60 and over, and four employees aged 80 and over. Other demographic information regarding USGS employees age 40 and over was as follows:

807 (14%) were in the "administrative" positions with 31 (4%) of them aged 60 and over;

1,686 (29%) were in "technical" positions with 34 (11%) of them aged 60 and over;

316 (5%) were in "clerical" positions with 34 (11%) of them aged 60 and over;

8 (0.1%) were in other positions with none of them aged 60 and over; and

124 (2%) were in the "wage grade" positions with 8 (6%) aged 60 and over.

In addition to the full time employees, USGS also had many volunteers. These individuals provided outstanding services to USGS and the public nation-wide in a variety of capacities. The various types of volunteer opportunities, and the number of individuals involved, were:

Categories	1995	1996
USGS Retirees	50	50
Other Retirees	200	300
Docents	25	15
Scientists Emeritus	252	260
Totals	527	625

The USGS Scientist Emeriti are welcomed back to the USGS after retirement to continue important scientific research. The USGS benefits immeasurably from the accumulated knowledge, experience, and dedication of over 250 Scientist Emeritus. For example, Scientist Emeritus astrogeologist, Gene Shoemaker and his wife, contributed to the understanding of our solar system by significantly sharing in the discovery of Comet Shoemaker-Levy.

The following are examples of some of the other activities in which USGS' volunteers were involved:

A retired Federal government employee logged over 4,000 hours of volunteer service working in the Reston, Virginia, Earth Science Information Center filing maps and brochures and assisting customers. He epitomized the highest standards of customer service recognized at the USGS.

USGS retirees served as docents in the National Visitors Center, leading tours and providing information about the USGS to groups from pre-school age to senior citizens.

Scores of senior citizens volunteered nationwide for the Water Resources Division, collecting analyzing water quality data in their communities.

Two retirees from outside the Federal sector donated their time in Reston, Virginia, to provide critical assistance to the development and management of the USGS Earth Science Corps, a project that utilizes hundreds of citizens across the country to update USGS maps. It was estimated that within the Earth Science Corps contingent, 200 volunteers made valuable contributions to the USGS and the Nation by providing accurate, up-to-date geographic information about their communities.

Two retirees served as volunteers on a special project in Alaska to investigate the movement and impact of the Bering Glacier. Working under rugged conditions, the volunteers helped make it possible for USGS scientists to complete numerous studies and advance our understanding of this significant glacier.

Senior citizens and retirees with backgrounds in mathematics and computer science volunteered to instruct employees on software applications, enter data and evaluate software and hardware upgrades.

In the Water Resources Division, Volunteers aged 60 and over contributed their services to the USGS in the following ways:

1. Assisted in processing computer data for the Annual Data Report;
2. Worked on surface-water and quality-water record;
3. Assisted with field trips for the National Science Foundation and USGS Water Workshops;
4. Completed *Volume VI, Water Resources Division History, 1957–1966;*
5. Reviewed sediment laboratories for the Office of Surface Water, examining method consistencies of Water Resources Division sediment laboratories, and providing insight to the Sediment Action Laboratory Subcommittee;
6. Completed two models: Blaine Aquifer, Oklahoma, and the High Plains Aquifer, Twin Platte, Nebraska;
7. Provided support and guidance to the Central Region Hydrologist's office;
8. Provided technical support and consultation for flood hydrology and hydraulics program;
9. Reviewed Titan reports for McConnell Air Force Base, aquifer maps, reports, and other services as necessary;
10. Assisted in making discharge measurements and checking gages;
11. Assisted in the "Extreme Storm Study";
12. Prepared for and attended the International Records Annual meeting in Maple Creek, Saskatchewan, Canada;
13. Helped in selecting and monitoring wells for USGS observation well network;
14. Worked on the South Dakota History, Volume 7;
15. Assisted with Water Resources data collection and processing in the Data Unit;
16. Processed East Fork River bedload report and Wyoming dye tracing report;
17. Completed reports on river sediments, Powder River, Orinoco River, and Amazon River;
18. Revised the report entitled, *Transport, Behavior, and Fate of Volatile Organic Compounds in Streams and Rivers;*
19. Conducted laboratory work for the Nation Research Project in Boulder, Colorado; and,
20. Consulted on sediment transport, data collection, and interpretation of data.

BUREAU OF LAND MANAGEMENT

The Bureau of Land Management (BLM) administers a multi-faceted, multiple-use natural resource management program intended to serve all members of the public regardless of age, gender, national origin, race, color, religion or mental or physical disability. It fosters an environment of equality of opportunity through initiatives aimed at programmatic and work force diversification. The BLM's approach incorporates broad policies and practices which encourage participation and inclusion among all employees, applicants for employment, users of the public lands, and other members of the public who support the BLM's mission.

The BLM does not routinely gather and publish information on age groups within its nationwide work force. However, as of September 30, 1997, the BLM employed 8,949 permanent employees, of whom 705 individuals, or nearly 8 per cent of the work force, were eligible for voluntary retirement. This level of total employment is down from previous years, reflecting the effects of voluntary retirements and Government-wide early-out and other retirement incentive programs offered during 1995 and 1996 when the BLM, along with other Federal agencies, lost a considerable number of older employees.

During 1996, approximately 17,000 persons through the contiguous United States and Alaska contributed their skills and services to the BLM's natural resource management and protection activities as volunteers and hosted workers. Again, while no statistics on age were maintained, an appreciable number of individuals over the age of 65 traditionally have participated in the BLM's volunteer programs and have received public recognition for their contributions and dedication.

The BLM values the skills, perspectives and energy that older Americans can bring to its programs, both as employees and as volunteer workers. And recognizing its debt to the efforts of previous generations, the BLM carefully monitors its operations to ensure that older employees and volunteers can contribute meaningfully in accordance with their talents and interests. Finally, the BLM strives to ensure that all members of the public have full access to BLM installations, facilities, and programs—without discrimination or restricted access based upon age—in order to use, enjoy, and appreciate America's public lands.

BUREAU OF INDIAN AFFAIRS

During the reporting period of 1995 and 1996, the Bureau of Indian Affairs (BIA) administered initiatives and programs to benefit older (aging) American Indians and Alaskan Natives. More specifically, the BIA's Division of Social Services provided and financed adults with custodial and protective care services. These services were provided in homes, group homes, and nursing care facilities for elderly persons who lacked the financial, physical and mental capacity to care for themselves. Other aging citizens have received protective and counseling services without custodial care payments. They coordinated intensive skill nursing care service needs for aging residents through referrals to other Federal, State or local agencies. This office is currently establishing standards that will upgrade custodial care facilities making them eligible to receive Medicare and Medicaid payments and provide better subsequent custodial care to eligible aging Native Americans. The BIA's Social Services Division administers a Housing Improvement Program that makes existing housing repairs and renovations and some new home constructions on Indian reservations or communities. This program is a grant program designed to improve housing standards for citizens who are not qualified for such assistance under conventional housing assistance programs. Program participants are selected from weighted variables that favor low income individuals, people with disabilities, elderly applicants. Furthermore, Tribal

governments are "638 Contracts" as a means for meeting the special housing needs of elderly Native Americans.

BIA's Office of Indian Education Programs has developed and administers a Family and Child Education (FACE) Program. FACE is a family literacy program. The program serves all family members including the elderly who have guardian responsibility for minor children. The program provides for early childhood and adult education, instructions on parenting skills. These services are provided in homes, community centers, and schools. These services empower elderly Native Americans to become more proficient in caring for children that remain in their custody.

BIA's Office for Equal Employment Opportunity Programs continues to vigorously enforce the Age Discrimination in Employment Act which prohibits discrimination on the basis of age in its work force. These anti-discrimination enforcement efforts ensure that older employees may continue their careers uninhibited.

Minerals Management Service

The Minerals Management Service (MMS) continues to work to support programs for older Americans. MMS's work force statistics are as follows:

Seventy-eight percent of MMS' work force is comprised of employees aged 40 and over (1,362 or 1737);

Older employees are well represented in a variety of occupations within MMS including accountants, auditor, computer specialist, engineers, and physical scientists; and,

The MMS has implemented and continues to implement effective personnel management policies to ensure that equal opportunity is provided to all employees and applicants, including the aged.

The MMS continues to perform its mission-related functions with diligence and with appreciation of the importance of its actions. A major mission responsibility affecting large numbers of citizens is the approval of mineral royalty payments of various landholders, including numerous older Americans who often depend heavily on these payments to meet their basic human needs and rely on the ability of the MMS to effectively discharge their financial responsibilities.

The MMS offshore mission has the ultimate objective of increasing domestic mineral (oil and gas) production through offshore Resources, thereby decreasing its dependence on foreign imports. Such activities have a significant effect on the economic well-being of all Americans, especially older Americans. In summary, the MMS has a strong commitment to all of its employees including older workers. Older workers are a source of valuable knowledge and experience and a significant factor in the success of the MMS mission.

Bureau of Reclamation

The Bureau of Reclamation (Reclamation) conducts many activities throughout the year that affect and benefit aged individuals. Its Personnel Offices maintain contact with and provide services to many retirees who need advice or have questions concerning their

retirement and health benefits. In addition, retirees and their spouses attend annual health insurance fairs where representatives from insurance carriers are available to discuss the provisions of, or changes to, their respective medical plans. Several of Reclamation's regional offices continue to mail out a monthly newsletter to all retirees. The newsletters contain information on Reclamation, current employees, past employees, and is highly regarded by retirees as a way to keep in touch. Additionally, pre-retirement briefings and seminars are held for all interested employees who are within five years of retirement eligibility.

Work and Family Programs.—The Bureau of Reclamation established a Work and Family Team (WAFT) in September 1995 to implement the President's directive on Family-Friendly Federal Work Arrangements. The Team is comprised of representatives from all the Regions in Reclamation. Initiatives taken on behalf of older Americans and their families are principally addressed in this arena. The Bureau of Reclamation maintains family friendly workplace information in the Human Resources Offices, located in 7 geographically dispersed regions. A Human Resources Center is established within each office to provide information and assistance on various Human Resources. It is a "One Stop Shopping Center" including job information, References and Resources Library, Equal Employment Opportunity, Work and Family Resources Issues (to include elder care) and, etc. *The Office of Personnel Management's Handbook on Child and Elder Care* is available as well as information from the American Association of Retired Persons. The WAFT has developed a Web page to provide information on Resources, topics of interest and updates on information relating to family issues as well as a LAN address, "TALKTOWAFT," to enable employees to send questions about work and family policies or to ask for information. In addition, the WAFT has developed a handbook on a variety of family-related topics. One of the sections in the handbook addresses elder care and Resources.

Family and Medical Leave Initiatives.—Reclamation is in the process of testing an alternative work schedule program, which would allow employees greater flexibility in constructing their work hours to accommodate family needs. This is in addition to its telecommuting initiative already in place and vigorous support of the Family and Medical Leave Acts.

Employment Opportunities.—Reemployed annuitants are hired to perform special projects or provide assistance in specialized technical areas of work since they are able to offer invaluable experience and expertise to these assignments. Our Boise, Idaho, Office has signed a Memorandum of Agreement with the State of Idaho, Department of Health and Welfare, to provide work opportunities for individual interested in getting back into the work environment. The Region provides work opportunities while the State provides the salary. The period of time is usually 10–15 weeks. Traditionally, the individuals have been senior citizens.

ITEM 9—DEPARTMENT OF JUSTICE

INITIATIVES RELATED TO OLDER AMERICANS

INTRODUCTION

As the largest law firm in the Nation, the Department of Justice (DOJ) serves as counsel for its citizens. It represents them in enforcing the law in the public interest. Through its thousands of lawyers, investigators, and agents, the Department plays the key role in protecting against criminals and subversion, ensuring healthy competition of business in our free enterprise system, safeguarding the consumer, and enforcing drug, immigration, and naturalization laws. The Department also plays a significant role in protecting citizens through its efforts for effective law enforcement, crime prevention, crime detection, and prosecution and rehabilitation of offenders.

In addition, the Department conducts all suits in the Supreme Court in which the United States is concerned. It represents the Government in legal matters generally, rendering legal advice and opinions, upon request, to the President and to the heads of the executive departments. The Attorney General supervises and directs these activities, as well as those of the U.S. Attorneys and U.S. Marshals in the various judicial districts around the country.

Within the Department, two components—the Civil Rights Division and the Office of Justice Programs—conduct initiatives related to older Americans.

CIVIL RIGHTS DIVISION

The Civil Rights Division was established in 1957 to secure effective Federal enforcement of civil rights. The Division is the primary institution within the Federal Government responsible for enforcing Federal statutes prohibiting discrimination on the basis of race, sex, disability, religion, and national origin.

Americans with Disabilities Act (ADA) Enforcement

The Division's Disability Rights Section enforces the ADA's provisions prohibiting discrimination against people with disabilities in state and local government services and places of public accommodation. The Section has established a comprehensive technical assistance program to educate those with rights and responsibilities under the law. This program includes the establishment of an ADA Information File, containing over 70 documents, in 15,000 public libraries across the country, a toll-free ADA Information Line, which receives over 100,000 calls per year, and an ADA home page on the

World Wide Web, which receives over 50,000 hits per week. The Internet address is www.usdoj.gov/crt/adahom1.htm.

Through the ADA technical assistance grant program, the American Association of Retired Persons (AARP) has developed materials to help older persons understand their rights and to help businesses and agencies serving older persons understand their obligations under the law. The AARP provides training to service providers, advocates, and older persons throughout the country.

Since 1992, the Division has reached voluntary agreements with businesses and local governments in more than 600 cases involving state and local government services and the private sector. The resolution of these complaints has resulted in the removal of architectural and communication barriers in a wide variety of settings, including retail stores, restaurants, hotels, stadiums, and town halls. A 1996 agreement with the Cineplex Odeon Corporation, one of the Nation's largest operators of motion picture theaters, established a model for the industry on compliance with the ADA's requirements for assistive listening devices used by persons who are hard-of-hearing.

Civil Rights of Institutionalized Persons Act (CRIPA) Enforcement

The Division's Special Litigation Section has responsibility under CRIPA to investigate conditions in publicly operated nursing homes and to file suits where there is a pattern or practice of violations of the constitutional or Federal statutory rights of nursing home residents, including the right to adequate care and treatment. In 1996, the Section initiated investigations of several publicly operated nursing homes.

Further information about the activities of the Civil Rights Division is available online at www.usdoj.gov/crt or by calling the Department of Justice's Office of Public Affairs at 202/514-2007.

OFFICE OF JUSTICE PROGRAMS

Since 1984, the Office of Justice Programs (OJP) has provided Federal leadership in developing the nation's capacity to prevent and control crime and delinquency, improve the criminal and juvenile justice systems, increase knowledge about crime and related issues, and assist crime victims. OJP is comprised of five program bureaus, three Crime Act program offices, the Executive Office for Weed and Seed, the American Indian and Alaskan Native Desk (AI/AN), and the Violence Against Women Office (VAWO).

The Bureau of Justice Assistance (BJA) provides funding, training, and technical assistance to state and local governments to combat violent and drug-related crime and help improve the criminal justice system. It also administers the Edward Byrne Memorial State and Local Law Enforcement Assistance Program, the Local Law Enforcement Block Grants, the State Criminal Alien Assistance Program, the Public Safety Officers' Benefits Program, Regional Information Sharing Systems, and the Church Arson Prevention Grant Program.

The Bureau of Justice Statistics (BJS) is the principal criminal justice statistical agency in the nation. BJS collects and analyzes statistical data on crime, criminal offenders, crime victims, and the operation of justice systems at all levels of government. It also pro-

vides financial and technical support to state statistical agencies and administers special programs that aid state and local governments in improving their criminal history records and information systems, including grant programs that implement the Brady Handgun Violence Prevention Act and the National Child Protection Act.

The National Institute of Justice (NIJ) is the principal research and evaluation agency in the Department of Justice. NIJ supports research and development programs, conducts demonstrations of innovative approaches to improve criminal justice, develops new criminal justice technologies, and evaluates the effectiveness of justice programs. NIJ also provides primary support for the National Criminal Justice Reference Service, a clearinghouse of criminal justice-related publications, articles, videotapes, and online information.

The Office of Juvenile Justice and Delinquency Prevention (OJJDP) provides Federal leadership in preventing and controlling juvenile crime and improving the juvenile justice system at state and local levels. OJJDP also provides grants and contracts to states to help them improve their juvenile justice systems and sponsors innovative research, demonstration, evaluation, statistics, replication, technical assistance, and training programs to help improve the nation's understanding of and response to juvenile violence and delinquency. In addition, OJJDP administers the Missing and Exploited Children's program and four programs funded under the Victims of Child Abuse Act.

The Office for Victims of Crime (OVC) provides Federal leadership in assisting victims of crime and their families. OVC administers two grant programs created by the Victims of Crime Act of 1984 (VOCA). The Victims Assistance Program gives grants to states to support programs that provide direct assistance to crime victims. State victim assistance subgrantees reported expenditures of over $2 million for elder abuse victims in Fiscal Year 1996 (from October 1, 1995 through September 30, 1996). The Victims Compensation Program provides funding to state programs that compensate crime victims for medical and other unreimbursed expenses resulting from a violent crime. OVC also sponsors training for Federal, state, and local criminal justice officials and other professionals to help improve their response to crime victims and their families.

The three Crime Act Offices—the Violence Against Women Grants Office (VAWGO), the Corrections Program Office (CPO), and the Drug Courts Program Office (DCPO)—administer major programs authorized by the 1994 Crime Act.

VAWGO administers one formula and four discretionary grant programs. The grant programs are designed to help prevent, detect, and stop violence against women, including domestic violence, sexual assault and stalking.

CPO provides financial and technical assistance to state and local governments to implement the corrections-related programs created by the Crime Act. CPO administers two formula and two discretionary grant programs.

DCPO administers the discretionary drug court grant program authorized by Title V of the Crime Act. The purpose of the grant

program is to provide support for the development, implementation, and improvement of drug courts through grants to local or state governments, courts, and tribal governments, as well as through technical assistance and training. A survey of 93 drug courts by OJP's Drug Court Clearinghouse found that 1 percent of drug court participants were over age 60.

OJP's American Indian and Alaskan Native Desk (AI/AN) improves outreach to tribal communities. AI/AN works to enhance OJP's response to tribes by coordinating funding, training, and technical assistance and providing information about available OJP resources. An overview of OJP's response to preventing and controlling crime in Indian Country is provided in the February 1997 report, Office of Justice Programs Partnership Initiatives in Indian Country. The report is available at no cost from the National Criminal Justice Reference Service at 1–800/851–3420 or online through OJP's home page at www.ojp.usdoj.gov.

The Executive Office for Weed and Seed (EOWS) is dedicated to building stronger, safer communities through the Weed and Seed strategy, a community-based, multi-disciplinary approach to combating crime. EOWS works closely with United States Attorneys and OJP's bureaus to implement Operation Weed and Seed in communities throughout the country.

Also within OJP is the Violence Against Women Office (VAWO), which coordinates the Department of Justice's legislative and other initiatives relating to violence against women, including intradepartmental activity. To stop violence against older women, the VAWO Director works with organizations such as the Older Women's League (OWL), the American Association of Retired Persons (AARP), and the National Task Force on Violence Against Women.

The following describes OJP's major activities on behalf of older Americans:

Working Group on Victimization of Older Persons.—OJP leads a Department-wide Working Group on Victimization of Older Persons. Participants include OJP, BJA, NIJ, OVC, VAWGO, the Department's Criminal Division, and the Executive Office for U.S. Attorneys. The Working Group explores ways to elevate the Department's focus on victimization of senior citizens through new or ongoing efforts. It also coordinates related activities among its member agencies and provides planning and other assistance to DOJ agencies in conducting initiatives related to older persons.

Research.—In Fiscal Year 1996, NIJ awarded a 2-year research grant to Victim Services in New York City to conduct (in cooperation with the New York City Police Department) an evaluation of a program teaming community policing and social services to respond to elder abuse. The study is examining the effects of the project's public education efforts and home visitations to elderly residents. Preliminary findings were reported at the November 1996 annual meeting of the American Society of Criminology. The study found that home visits increased crime reporting, reduced the incidence of financial abuse, and increased the victim's confidence to call the police again; public education increased victims' satisfaction with police; and victims who received the home visits and/or public education information believed these interventions to

be helpful. The final report is expected by April 1998. For copies, contact NIJ's National Criminal Justice Reference Service at 1–800/851–3420 or online at www.ncjrs.org.

Safe Return Program.—At the direction of Congress, OJJDP administers this program to facilitate the identification and safe return of memory-impaired persons who are at risk of wandering from their homes. Directed by the Alzheimer's Disease and Related Disorders Association, the Safe Return Program operates a national photographic registry of memory-impaired persons, maintains a toll-free telephone service, provides a Fax Alert System, conducts "train-the-trainers" programs for law enforcement and emergency personnel, develops information and educational materials, conducts public awareness campaigns, and works to network with other "wandering persons" programs. For more information, contact the Safe Return Program at 1–800/572–1122.

Telemarketing Fraud.—In Fiscal Year 1996, with a $2 million appropriation for "programs to assist law enforcement in preventing and stopping marketing scams against senior citizens," BJA awarded a grant to the National Association of Attorneys General (NAAG) to develop a training curriculum for prosecutors and investigators to help address these crimes. NAAG is collaborating in this project with the National District Attorneys Association and the National White-Collar Crime Center. A small, regional pilot training course was held in San Diego in February 1998. A larger training program is planned in Boston, Massachusetts, in the spring of 1998. BJA and OVC also are funding the development of education and public awareness campaigns to address telemarketing fraud aimed at senior citizens.

Triad.—Through a grant to the National Sheriffs' Association, BJA and OVC support Triad. Triad programs involve a three-way effort among a sheriff, the county police chief(s), and members of the American Association of Retired Persons (AARP) or other older/retired leadership in the area. These groups agree to work together to reduce criminal victimization of older citizens and enhance the delivery of law enforcement services to this population. Triad provides the opportunity for an exchange of information between law enforcement and senior citizens. It focuses on reducing unwarranted fear of crime and improving the quality of life for seniors.

A Triad program is tailored to meet the needs of each community and is guided by a senior advisory council called SALT (Seniors and Lawmen Together). More than 415 counties participate in Triad nationwide, and efforts are under way to encourage Native American tribal governments to initiate Triad projects. For more information about Triad, or for help in starting a program, contact the National Sheriffs' Association at 1–800/424–7827.

Training and Technical Assistance.—Through its Trainers' Bureau, OVC provides training to Federal, state, and local law enforcement officials on issues relating to elder abuse and financial exploitation of the elderly. For example, in November 1996, OVC staff conducted a training program on elder abuse issues for tribal governments in Warm Springs, Oregon. The training conference was attended by 180 people, including representatives of 12 Native American tribes, as well as 6 tribal chiefs. Further information

about OVC's Trainers' Bureau is available from Donna Ray at 202/616–3572 or e-mail at rayd@ojp.usdoj.gov.

Victimization Statistics.—Through its National Crime Victimization Survey (NCVS), the OJP's Bureau of Justice Statistics annually collects data on crime victimization on individuals age 12 and older in a statistically representative sample of U.S. households. A BJS Special Report, *Age Patterns of Victims of Serious Violent Crime,* released in September 1997, uses data from 1992 through 1994 to examine serious violent crime across different age groups. Serious violent crimes include rape and sexual assault, robbery, and aggravated assault, as measured by NCVS, and homicide from data reported by law enforcement agencies to the FBI.

The report found that vulnerability to violent crime victimization varies across the age spectrum. The victimization rate increases through the teenage years, crests at around age 20, and steadily decreases through the remaining years. This pattern, with some exceptions, exists across all race, sex, and ethnic groups. According to the report, persons age 50 or older made up 30 percent of the population, 12 percent of murder victims, and 7 percent of serious violent crime victims. Copies of this report are available at no cost from the BJS Clearinghouse at 1–800/732–3277 or online at www.ojp.usdoj.gov/bjs/.

Indian Country Initiatives.—OJP's American Indian/Alaska Native Desk is working to expand existing OJP efforts concerning elder abuse to address problems in Indian Country. It also is collaborating with the Indian Health Service at the U.S. Department of Health and Human Services to explore partnership efforts regarding elder abuse in tribal communities.

Future Initiatives.—On March 30, 1998, BJA sponsored a focus group on elder victims of crime to discuss issues and plan strategies related to prevention, enforcement, and the response of the criminal justice system and other institutions, as well as to make recommendations to the Justice Department. Participants included staff from the OJP components, the Executive Office for U.S. Attorneys, the Department of Justice's (DOJ) Criminal Division and other representatives of the DOJ Working Group on Elder Victimization, representatives from agencies in states with the highest senior citizen populations, and national senior citizen organizations.

For More Information about OJP programs or activities on behalf of older Americans, contact OJP's Office of Congressional and Public Affairs at 202/307–0703 or access the OJP home page at www.ojp.usdoj.gov. Funding information is available from the Department of Justice Response Center at 1–800/421–6770. OJP and other criminal and juvenile justice-related publications are available from the National Criminal Justice Reference Service by calling toll-free, 1–800/851–3420, or online at www.ncjrs.org.

ITEM 10—DEPARTMENT OF LABOR

The welfare of our Nation's older citizens is a matter of substantial concern to the Department of Labor. The Department of Labor is pleased to provide this summary of the programs it administers which can provide helpful assistance to older citizens. These include—job training and related services, dislocated worker services, and other employment services, under programs administered by the Department of Labor's Employment and Training Administration; a public information and assistance program on matters relating to certain pension and welfare plans under programs administered by the Pension and Welfare Benefits Administration; the Bureau of Labor Statistics' statistical programs providing employment and unemployment data for older persons; protection for certain employees to take unpaid, job-protected leave to provide care for sick, elderly parents under a program administered by the Employment Standards Administration; and a Clearinghouse administered by the Women's Bureau which provides information and resources to workers and employers interested in developing or implementing family-friendly policies such as elder care and child care. These programs and services are addressed more fully in the following discussion.

EMPLOYMENT AND TRAINING ADMINISTRATION

INTRODUCTION

The Department of Labor's (DOL's) Employment and Training Administration (ETA) provided a variety of training, employment and related services for the Nation's older individuals during Program Years 1994 (July 1, 1994–June 30, 1995) and 1995 (July 1, 1995–June 30 1996) through the following programs and activities: the Senior Community Service Employment Program (SCSEP); programs authorized under the Job Training Partnership Act (JTPA); and the Federal-State Employment Service system.

SENIOR COMMUNITY SERVICE EMPLOYMENT PROGRAM

SCSEP, authorized by Title V of the Older Americans Act, employs low-income persons age 55 or older in a wide variety of part-time community service activities such as health care, nutrition, home repair and weatherization, child care, and in beautification, conservation, and restoration efforts. Program participants work an average of 20 hours per week in schools, hospitals, parks, community centers, and in other government and private, non-profit facilities. Participants also receive personal and job-related counseling, annual physical examinations, job training, and in many cases, referral to private sector jobs.

About 82 percent of the participants are age 60 or older, and about 58 percent are age 65 or older. Almost three-fourths are fe-

male; about 40 percent have not completed high school. All participants are economically disadvantaged.

Table 1 below shows SCSEP enrollment and participant characteristics for the program year July 1, 1994, to June 30, 1995, in Column 1 and July 1, 1995, to June 30, 1996, in Column 2.

TABLE 1.—SENIOR COMMUNITY SERVICE EMPLOYMENT PROGRAM (SCSEP): CURRENT ENROLLMENT AND PARTICIPANT CHARACTERISTICS—PROGRAM YEARS JULY 1, 1994, TO JUNE 30, 1995, (PY94) AND JULY 1, 1995, TO JUNE 30, 1996 (PY95).

	(PY94)	(PY95
Enrollment:		
Authorized positions established	67,645	64,600
Unsubsidized employment rate (Percent)	27.7	25.7
Characteristics (Percent):		
Sex:		
Male	27.9	27.6
Female	72.1	72.4
Educational status:		
8th grade and less	20.4	19.6
9th grade through 11th grade	19.4	19.0
High School graduate or equivalent	38.1	38.8
1-3 years of college	15.2	15.6
4 years of college or more	6.9	7.0
Veterans	13.0	13.4
Ethnic Groups: [1]		
White	59.4	59.4
Black	24.3	24.6
Hispanic	10.1	10.0
American Indian/Alaskan Native	1.7	1.8
Asian/Pacific Island	4.3	4.1
Economically disadvantaged	100.00	100.0
Poverty level or less	80.7	85.4
Age groups:*		
55-59	18.9	17.2
60-64	24.5	23.7
65-69	24.4	24.8
70-74	19.2	19.8
75 and over	13.0	14.5

[1] Figures may not add to 100% due to rounding.
Source: U.S. Department of Labor, Employment and Training Administration.

JOB TRAINING PARTNERSHIP ACT PROGRAMS

The Job Training Partnership Act (JTPA) provides job training and related assistance to economically disadvantaged individuals, dislocated workers, and others who face significant employment barriers. The ultimate goal of JTPA is to move program participants into permanent, self-sustaining employment. Under JTPA, Governors have the approval authority over locally developed plans and are responsible for monitoring local program compliance with the Act. JTPA functions through a public/private partnership which plans, designs and delivers training and other services. Private Industry Councils (PICs), in partnership with local governments in each Service Delivery Area (SDA), are responsible for providing guidance for and oversight of job training activities in the area.

Amendments to JTPA became effective July 1, 1993. These amendments target program services to those with serious skill deficiencies; and individualize and intensify the quality of services provided. Five percent of the funds appropriated for the adult program (Title II–A) must be used by States in partnership with SDAs

for older workers. The amendments also require Governors to ensure that services under the adult program are provided to older workers on an equitable basis.

BASIC JTPA GRANTS

Title II–A of JTPA authorizes a wide range of training activities to prepare economically disadvantaged youth and adults for employment. Training and training-related services available to eligible older individuals through the basic Title II–A grant program include vocational counseling, jobs skills training (either in a classroom or on-the-job), literacy and basic skill training, job search assistance, and job development and placement. Table 2 below shows the number of persons 55 years of age and over who terminated from the Title II–A program during the period July 1, 1994, through June 30, 1995, and during the period July 1, 1995, through June 30, 1996. (The data do not include the 5 percent set-aside for older individuals, which is discussed separately.)

TABLE 2—JTPA DATA JULY 1, 1994–JUNE 30, 1996

[Title II–A]

Item	Number Served		Percent
	PY94	PY95	
Total Adult Terminees	237,470	224,458	100
55 years and over	3,831	3,485	2

Source: U.S. Department of Labor, Employment and Training Administration (April 1998 Data).

SECTION 204 SET-ASIDE

The 1992 JTPA amendments require 5 percent of the Title II–A allotment of each State to be made available for the training and placement of older individuals in private sector jobs. Only economically disadvantaged individuals who are 55 years of age or older are eligible for services under this State set-aside.

Governors have wide discretion regarding use of the JTPA 5 percent set-aside. Two basic patterns have evolved. One is adding set-aside resources to Title II–A to ensure that a specific portion of older persons participates in the basic Title II–A program. The other is using the resources to establish specific projects targeted to older individuals which operate independently of the basic job training program for disadvantaged adults. Likewise, States are required to provide "equitable services to older individuals throughout the State, taking into consideration the incidence of such workers in the population." Some States distribute all or part of the 5 percent set-aside by formula to local SDAs; other States retain the resources for State administration or model programs.

Governors are expected to coordinate services as much as possible with those provided under Title V of the Older Americans Act—Senior Community Service Employment Program. There are two separate provisions for older individual programs as they relate to Title V of the Older Americans Act. First, under the Title II–A program, up to ten percent of the participants may be individuals who are not economically disadvantaged, but who have a serious barrier to employment. Second, when a JTPA grantee and Title V sponsor establish joint projects, individuals eligible under Title

V of the Older Americans Act "shall be deemed to satisfy the requirements" of JTPA. These joint (JTPA–SCSEP) projects may include co-enrollment of Title V participants in Title II–A activities. Joint programs must have a written agreement, which may be financial or nonfinancial in nature, and may include a broad range of activities. For Program Year 1994 (July 1, 1994, through June 30, 1995), 16,101 participants were enrolled in the State set-aside program for economically disadvantaged individuals 55 years of age and older. For Program Year 1995 (July 1, 1995, through June 30, 1996), 16,594 participants were enrolled in the State set-aside program for economically disadvantaged individuals 55 years of age and older.

PROGRAMS FOR DISLOCATED WORKERS

Title III of JTPA authorizes a State and locally-administered dislocated worker program that provides retraining and readjustment assistance to workers who have been, or have received notice that they are about to be, laid-off due to a permanent closing of a plant or facility; laid off workers who are unlikely to be able to return to their previous industry or occupation; and the long-term unemployed with little prospect for local employment or reemployment. Those older dislocated workers eligible for the program may receive such services as job search assistance, retraining, pre-layoff assistance and relocation assistance. During the period July 1, 1994, through June 30, 1995, approximately 28,257 individuals 55 years of age and over exited the program (9 percent of the program terminations). During the period July 1, 1995, through June 30, 1996, approximately 26,640 individuals 55 years of age and over left the program (10 percent of the program terminations).

THE FEDERAL-STATE EMPLOYMENT SERVICE SYSTEM

The State-operated public employment service (ES) offices offer employment assistance to all job seekers, including middle-aged and older persons. A full range of basic labor exchange services are provided, including counseling, testing, job development, job search assistance and job placement. In addition, labor market information and referral to relevant training and employment programs are also available.

Federal reporting requirements for State employment service agencies (SESAs) were revised effective July 1, 1992, to capture additional information on applicant characteristics, including data on the age of all ES applicants and those placed in employment. During the period July 1, 1994 through June 30, 1995 over 1,219,000 ES applicants were age 55 and over. Approximately 98,100 of the ES applicants age 55 and over were placed in jobs during this period. During the period July 1, 1995 through June 30, 1996 over 1,191,000 ES applicants were age 55 and over. Approximately 87,600 of the ES applicants age 55 and over were placed in jobs during this period.

PENSION AND WELFARE BENEFITS ADMINISTRATION

INTRODUCTION

The Pension and Welfare Benefits Administration (PWBA) is responsible for enforcing the Employee Retirement Income Security Act (ERISA). PWBA's primary responsibilities are for the reporting, disclosure and fiduciary provisions of the law.

Employee benefit plans maintained by employers and/or unions generally must meet certain standards, set forth in ERISA, designed to ensure that employees actually receive promised benefits. Employee benefit plans exempt from ERISA include church and Government plans.

The requirements of ERISA differ depending on whether the benefit plan is a pension or a welfare plan. Pension plans provide retirement benefits, and welfare plans provide a variety of benefits, such as employment-based health insurance and disability and death benefits. Both types of plans must comply with provisions governing reporting and disclosure to the Government and to participants (Title I, Part 1) and fiduciary responsibility (Title I, Part 4). Pension plans must comply with additional ERISA standards (contained in both Title I, Parts 2 and 3, and Title II), which govern membership in a plan (participation); nonforfeitability of a participant's right to a benefit (vesting); and financing of benefits offered under the plan (funding). Welfare plans providing medical care must comply with ERISA continuation of coverage requirements and medical child support orders (Title I, Part 6).

The Departments of Labor and Treasury have responsibility for administering the provisions of Title I and Title II, respectively, of ERISA. The Pension Benefit Guaranty Corporation (PBGC) is responsible for administering Title IV, which established an insurance program for certain benefits provided by specified ERISA pension plans. On a regular basis, PWBA meets and coordinates closely with the Internal Revenue Service (IRS) and PBGC on matters concerning pension issues.

In FY 1996, PWBA worked to advance the Health Insurance Portability and Accountability Act (P.L. 104–91), enacted August 21, 1996, which amended ERISA to provide increased access to health care benefits, to provide increased portability of health care benefits, and to provide increased security of health care benefits. The Newborns' and Mothers' Health Protection Act and the Mental Health Parity Act, enacted on September 26, 1996 (P.L. 104–204), added to ERISA mental health parity provisions and provisions regarding minimum mandatory hospital stays for newborns and mothers. Implementation of these laws requires PWBA's continuing attention.

PWBA also worked to advance the Administration's Retirement Savings and Security Act. Many of its provisions were incorporated in the Small Business Jobs Protection Act (P.L. 104–188) (SBJPA) enacted on August 20, 1996. The SBJPA created a new simplified retirement plan for small businesses, and simplified plan distribution and nondiscrimination rules.

Because of the risk of abuse or loss (e.g., from employer's bankruptcy), many employees have raised questions about the time period during which employers must transmit participant contribu-

tions to employee benefit plans. To address their concerns, PWBA issued a rule under Title I of ERISA which substantially shortens the time period during which covered private sector employers may hold employees' contributions to pension plans, including 401(k) plans, before depositing the funds in the plans. Under the new rule, for example, an employer that sponsors a 401(k) plan must deposit its employees' contributions in the plan as soon as the contributions can reasonably be segregated from the employers' general assets, but not later than 15 business days following the month in which the employer withholds the money from employees' paychecks, or receives employees' checks for the amount of the contributions.

With the growth of participant-directed individual account pension plans, more employees are directing the investment of their pension plan assets and, thereby, assuming more responsibility for ensuring the adequacy of their retirement income. In order to help employers address the need of participants for more investment information, PWBA issued an interpretive bulletin providing guidance to plan sponsors, fiduciaries, participants and beneficiaries concerning the circumstances under which the provision of investment related educational information, programs and materials to plan participants and beneficiaries will not give rise to liability under ERISA.

In fiscal year 1996, PWBA continued its program of research directed toward improving the understanding of the employment-based pension and health benefit systems. PWBA published comprehensive data and statistics on the private retirement income system and pension plan investments in its semiannual "Private Pension Plan Bulletin." Another key component of the research program was the project with the National Academy of Sciences to improve retirement income modeling. Under PWBA's small grants program, twelve new contracts were awarded and products were received from thirteen previously awarded projects. Studies completed included "Does 401(k) Introduction Affect Defined Benefit Plans?" and "Health Insurance Coverage of Children of Working Parents."

INQUIRIES

PWBA publishes literature and audio-visual materials which, in some depth, explain provisions of ERISA, procedures for plan to ensure compliance with the Act and the rights and protections afforded participants and beneficiaries under the law. In addition, PWBA maintains a public information and assistance program, which responds to many inquiries from older workers and retirees seeking assistance in collecting benefits and obtaining information about ERISA. Among the publications disseminated, the following are designed exclusively to assist the public in understanding the law and how their pension and health plans operate: Top Ten Ways to Beat the Clock and Prepare for Retirement; Women and Pensions—What Women Need to Know and Do; What You Should Know About Your Pension Rights; Protect Your Pension—A Quick Reference Guide; How to File a Claim for Your Benefits; How to Obtain ERISA Plan Documents from the Department of Labor; Handling Inquiries on Pension and Welfare Benefits; Guide to

Summary Plan Description Requirements; Reporting and Disclosure Guide for Employee Benefit Plans; Trouble Shooter's Guide to Filing the ERISA Annual Report; Exemption Procedures under Federal Pension Law; Health Benefits under COBRA; Multiple Employer Welfare Arrangements under ERISA (MEWAs); Customer Service Standards—Our Commitment to Quality; How Did We Measure Up.

BUREAU OF LABOR STATISTICS

The Department of Labor's Bureau of Labor Statistics (BLS) regularly issues a wide variety of statistics on employment and unemployment, prices and consumer expenditures, compensation including wages and benefits, productivity, economic growth, and occupational safety and health. Data on the labor force status of the population, by age, are prepared and issued on a monthly basis. Data on consumer expenditures, classified by age groupings, are published annually. In 1994 BLS published the first results of the redesigned survey of occupational injuries and illnesses; these data are now available by age, race, and gender, providing important new information on this aspect of the labor market experiences of older Americans. In addition to regularly recurring statistical series, BLS undertakes special studies as resources permit. In May 1994 BLS published a report on an experimental series that reweighted the official Consumer Price Index using expenditure data for older Americans. This report updated a portion of a study originally performed by BLS in response to the Older Americans Act Amendments of 1987. BLS continues to compute the reweighted index each month.

THE WOMEN'S BUREAU CLEARINGHOUSE

Established by the Women's Bureau of the U.S. Department of Labor in 1989, the Clearinghouse is a computerized database and resource center responsive to dependent care and women's workplace issues. Services help employers and employees make informed decisions about which programs and services help in balancing work and family. The Clearinghouse offers information in five broad option areas for child care and elder care services: direct services, information services, financial assistance, flexible leave policies, and public-private partnerships. The workforce quality component of the Clearinghouse offers information and guidance on the rights of women workers such as age, wage discrimination, the Family and Medical Leave Act (FMLA), pregnancy discrimination, and sexual harassment and the agencies that enforce them. Within each of these areas customers can be provided with model programs from other companies, implementation guides, national and State information sources and bibliographic references.

The Clearinghouse continues to receive requests for information on work-site elder care program options. Information provided included flexible work schedules, adult day care, case management, decision making, information and referral, respite care, and transportation services.

The Clearinghouse can be accessed through 1-800-827-5335.

EMPLOYMENT STANDARDS ADMINISTRATION

The Family and Medical Leave Act of 1993 became effective on August 5, 1993, for many employers. This statute provides potential benefit to the elderly in that it empowers eligible employees of covered employers to take up to 12 weeks of unpaid, job-protected leave in any 12-month period to provide care for a parent who has a serious health condition. In the past, the employee had to make a decision in many instances of whether or not to give up their job to provide care to a sick, elderly parent.

ITEM 11—DEPARTMENT OF STATE

The Department is pleased to report that we continue to expand services for aging Americans. Not only are employees working longer (the mandatory retirement age for Foreign Service is 65, and there is no mandatory retirement age for Civil Service), but employee responsibilities for caring for aging family members have grown significantly. In recognition of this, in 1995 the Office of Medical Services, Education and Wellness Programs, conducted a panel discussion on a variety of topics focused on older persons. That office hosted a health fair and offered several medical tests aimed at identifying diseases found primarily in older persons, such as prostate, cholesterol, and blood pressure screenings. The Office of Medical Services also hosted a panel of experts from the Washington metropolitan area to describe long-term care programs in local jurisdictions. Seminars were offered on Alzheimer's disease, living wills, osteoporosis and menopause. The Office of Employee Consultation Services, staffed by licensed clinical social workers, arranged support groups and special presentations on topics such as caring for elderly parents and dementia.

The Office of Work and Family Programs in the Bureau of Personnel was established in 1995 as a focal point for work and family programs. This office assists employees with questions on locating elder care services and recently hosted a monthly series of noontime sessions on family related topics, including elder care. The Work and Family Program Coordinator represented the Department on the Office of Personnel Management's Interagency Working Group on Adult Dependent Care.

In support of the Foreign Service's employees based overseas, the family Liaison Office continued to provide Foreign Service families with oral and written information on caring for elderly parents, medical insurance, and procedures for taking an elderly relative to overseas posts. In addition, they make referrals, upon request for information on payment options for long-term care and legal issues.

In 1996, the Department's Work and Family Programs office expanded its outreach efforts. They held seminars for grandparents who are primary caretakers for their grandchildren and repeated their most popular seminar topics, i.e. caring for aging parents and the diseases most common in the elderly. In addition, the Office of Employee Consultation Services hired an additional clinical social worker who had a specialty in geriatrics.

Thank you for your continuing interest in this issue. The Department continues to identify ways to adapt or expand our current elder care services to help employees balance their work and family responsibilities.

ITEM 12—DEPARTMENT OF TRANSPORTATION

SUMMARY OF ACTIVITIES TO IMPROVE TRANSPORTATION SERVICES FOR THE ELDERLY [1]

INTRODUCTION

The following is a summary of significant actions taken by the U.S. Department of Transportation during calendar years 1995 and 1996 to improve transportation for elderly persons.[2]

DIRECT ASSISTANCE

FEDERAL RAILROAD ADMINISTRATION (FRA)

The National Railroad Passenger Corporation (Amtrak) continued throughout calendar years 1995 and 1996 to provide discounted fares, accessible accommodations, and special services, including assistance in arranging travel for disabled and elderly passengers. These passengers continue to represent a substantial part of Amtrak's ridership—in recent years, 28 percent of long-distance passengers were 62 or older.

Discounted Fares.—Amtrak has a systemwide policy of offering to elderly persons and persons with disabilities a 15 percent discount on one-way ticket purchases. This 15 percent discount cannot be combined with any other discounts.

Accessible Accommodations.—Amtrak provides accommodations that are accessible to elderly persons and passengers with disabilities, including those using wheelchairs, on all of its trains. Long-distance trains include accessible sleeping rooms. Short-distance trains, including Northeast Corridor trains, have accessible seating and bathrooms. Many existing cars are being modified to provide more accessible accommodations and all new cars will provide enhanced accessibility for passengers with mobility and other types of disabilities.

Mechanical lifts operated by train or station staff provide passengers with access to single-level trains from stations with low platforms and short plate ramps provide access to bi-level equipment. An increasing number of Amtrak stations are fully accessible, particularly key intermodal stations that provide access to commuter trains and other forms of transportation.

Special On-Board Services.—Amtrak continues to provide special on-board services to elderly persons and passengers with disabilities, including aid in boarding and deboarding, special food service,

[1] "Prepared for the U.S. Senate Special Committee on Aging—February 1998.

[2] Many of the activities highlighted in this report are directed toward the needs of persons with disabilities. However, one-third of the elderly are persons with disabilities and thus will be major beneficiaries of these activities.

special equipment handling, and provisions for wheelchairs. Amtrak has also improved training of its employees to enable them to respond better to passengers with special needs. It is recommended that passengers advise Amtrak of any special needs they may have in advance of their date of departure.

Assistance in Making Travel Arrangements.—Persons may request special services by contacting the reservations office at 1–800–USA–Rail. This office is equipped with text telephone (TTY) service for customers who are deaf or hard of hearing. To ensure that passengers receive the assistance they need, Amtrak maintains a Special Services Desk which supports its reservations agents seven days a week. This desk has completed successful responses to nearly 100,000 requests for special services. Passengers may also inform their travel agent or the station ticket agent of their assistance requirements when making travel reservations.

FEDERAL TRANSIT ADMINISTRATION (FTA)

Under 49 USC 5310, the FTA provides assistance to private nonprofit organizations and certain public bodies for the provision of transportation services for the elderly and persons with disabilities. In FY 1995, $57.7 million was used to assist 1,371 local providers purchase 1,783 vehicles, and in FY 1996, $52 million was used to assist 1,260 local providers purchase 1,562 vehicles for the provision of transportation services for the elderly and individuals with disabilities. Most of the agencies funded under this program are either disability service organizations or elderly service organizations, and service provided under the program is nearly equally divided between the two. Those agencies serving the elderly are, however, more dependent on funding from the elderly and persons with disabilities program as 53 percent of their vehicles are purchased with Section 5310 funds compared to 42 percent of vehicles purchased by agencies serving the disabled. Vehicles purchased with these funds may also be used for meal delivery to the homebound as long as such use does not interfere with the primary purpose of the vehicles.

Under 49 USC 5311, the FTA obligated $169.4 million in FY 1995 and $137.6 million in FY 1996. These funds were used for capital, operating, and administrative expenditures by state and local agencies, nonprofit organizations, and operators of transportation systems to provide public transportation services in rural and small urban areas (under 50,000 population). The nonurbanized area program funds are also used for intercity bus service to link these areas to larger urban areas and other modes of transportation. An estimated 36 percent of the ridership in nonurbanized systems is elderly which represents nearly three times their proportion of the rural population.

Under 49 USC 5307, the FTA obligated $3.2 billion in FY 1995 and $2.4 billion in FY 1996. These funds were used for capital and operating expenditures by transit agencies to provide public transportation services in urbanized areas. while these services must be open to the general public, a significant number of passengers served are elderly.

Under the Transportation Cooperative Research Program, FTA provided funding in 1996 to assist the Southern Maine Area Agen-

cy on Aging to develop and implement an operational demonstration of the Independent Transportation Network (ITN) in Portland, Maine. The ITN is a nonprofit, membership based transportation service for seniors that uses cars along with both paid and volunteer drivers to pick up seniors in and around Portland and take them where they need to go. The goal of the ITN is to become a financially self-sufficient transportation program specifically designed to provide transportation services for the elderly who own their own vehicles but, because of diminished capacity, no longer want to drive themselves or can no longer safely drive their own automobiles. The ITN uses demand responsive automobiles to match the convenience of private cars. It offers payment options ranging from cash or transportation credits earned from trading in unused vehicles to payment into an individual ITN account from the elderly users or their children.

The National Easter Seal Society's Project ACTION (Accessible Community Transportation in Our Nation) is a $2 million a year research and demonstration grant program. National and local organizations representing public transit operators, the transit industry, and persons with disabilities are involved with the development and demonstration of workable approaches to promote access to public transportation services for persons with disabilities. A significant proportion of the population of persons with disabilities are elderly and, as a result, will benefit from this project. Project ACTION also assists in the implementation of the Americans with Disabilities Act by identifying and addressing training needs related to accessibility in transportation. Project ACTION has also targeted other model projects to be refined and replicated throughout the country.

RESEARCH

FEDERAL AVIATION ADMINISTRATION (FAA)

The Office of Aviation Medicine's Civil Aeromedical Institute has contributed to the following research related to the needs and concerns of the aging population in aviation transportation.

Cognitive Function Test.—An automated cognitive function test (CogScreen) was developed to permit the more sensitive and specific evaluation of pilots after brain injury and disease. Administration of CogScreen to groups of pilots led to the establishment of a data base that could be used to assess fitness to perform flying duties in relation to the age of the subject being evaluated. A report describing age-related changes in CogScreen performance is under review.

FEDERAL HIGHWAY ADMINISTRATION (FHWA)

Beginning in 1989, a High Priority Area for research was established to address the needs of older drivers with respect to the roadway environment. Research under this program started as problem identification, and quickly moved to focus on the specific areas which cause the greatest problems for older drivers and pedestrians. The studies described below were ongoing during the calendar years 1995 and 1996. It should be noted that all human factors research, including Intelligent Transportation Systems initia-

tives, conducted by FHWA includes an older driver component to ensure the system's utility for all potential users.

Pavement Markings and Delineation for Older Drivers used simulation and field techniques to investigate the use of improved pavement marking and delineation systems to enhance their value for older drivers. Findings showed that delineation treatments that included both an edge line and an off-road element (post-mounted delineators, chevron signs) have the best recognition distance for both younger and older drivers. Better recognition distances mean that the driver has more time to preview the road ahead and to plan steering maneuvers.

Human Factors Study of Traffic Control in Construction and Maintenance Zones is using laboratory and field studies to evaluate the entire traffic control system, including Traffic Control Devices (TCD) placement and layout, and operational aspects, in construction zones. Specific problems which older drivers encounter will be addressed, and countermeasures will be developed and tested.

Intersection Geometric Design for Older Drivers and Pedestrians investigated specific problems that older drivers and pedestrians have in negotiating intersections. For example, channelized right turns can add to the distance which pedestrians have to cross, and because older pedestrians have slower walking speeds, they may be put at greater risk. One critical finding of this research was with respect to left turn operations. The research suggests that if the right-of-way is available, left turn lanes should be offset to the left, such that drivers trying to turn may have unrestricted sight distance in viewing oncoming traffic.

Investigation of Older Driver Freeway Needs and Capabilities was a preliminary research study investigating the problems older drivers have with freeways. Prior to this study, it had often been assumed that older drivers avoided freeways; however, it was found that they generally do not avoid them. Problems identified for future older driver research included navigation and way-finding, freeway merging and transition areas, visual acuity and contrast sensitivity, and lane-changing behavior.

Delineation of Hazards for Older Drivers evaluated object markers for comprehension, conspicuity, and recognizability under day and night conditions, both in laboratory and field testing. It was found that all drivers tend to notice the object being marked (e.g., tree, bridge abutment) rather than the marker. None of the existing or experimental object markers from this study was consistently noticed by subjects. Future research will address this problem.

Computer-Aided Optimization and Evaluation of Candidate Manual on Uniform Traffic Control Devices (MUTCD) Signs was a laboratory study of recognition distance and comprehension of 13 novel or redesigned symbol signs, including lane reduction transition, tractor crossing, and number of railroad tracks. The results were used by the Office of Highway Safety in selecting the best new or redesigned signs to be included in the revised MUTCD.

Improved Traffic Control Device Design and Placement to Aid the Older Driver is a field study which investigated issues related to the design and placement of signs to aid older drivers in terms of detection, comprehension, recognition distances and response

times. This study is being conducted under the auspices of the National Cooperative Highway Research Program (NCHRP).

Uniform Traffic Signal Displays for Protected/Permissive Left Turn Control investigated problems with left turn control, particularly with the variety of signs currently in use. Problems looked at included the "yellow trap" and driver confusion. This study was the first phase of an NCHRP study. The second phase will include experimental treatments to address specific problems.

Effect of Advanced Traveler Information Systems (ATIS) Display Views and Age on Intersection Recognition investigated, in a laboratory setting, the performance of younger and older drivers in terms of speed and accuracy in using different types of in-vehicle displays. Older drivers were slower than younger drivers; however, the real differences in times were small. Researchers found that older drivers using Head Up Displays (HUDs), small windshield projected displays that present information closer to the driver's line of sight than instrument panel displays, performed better than those using displays mounted next to the steering wheel, indicating the potential benefit of HUDs for navigational assistance.

NATIONAL HIGHWAY TRAFFIC ADMINISTRATION (NHTSA)

Vehicle Design for Crash Avoidance.—NHTSA's crash avoidance research program addresses the relationship between vehicle design and driver performance and behavior. New vehicle technologies could help reduce older driver crashes and enhance their mobility. For example, in-vehicle navigation systems may allow drivers to concentrate on watching for dangerous traffic conflicts instead of being distracted while searching for road signs. Collision avoidance systems may alert drivers to potential crash situations. Additional research in this area could provide useful information regarding the acceptability of technology-based innovations designed to help older, functionally less able people continue to drive. The focus is to determine how the design and function of vehicle systems need to be adapted to the unique capabilities and needs of older drivers.

Research was initiated to develop human factors guidelines for consideration in developing a warning display for back up collision warning systems. These systems sense the presence and distance of objects behind vehicles and warn drivers through various types of visual displays and auditory signals. Older drivers often express difficulties when backing due in part to restricted head movements, as well as poor vehicle visibility to the rear. This ongoing research will help to assure that warning information will be presented to drivers in an understandable and timely format.

Occupant Protection.—One of the most significant reasons for elderly drivers over-involvement in fatal crashes is the inability of their bodies to absorb crash forces. What would be a survivable crash for a younger person is often a fatal crash for an older person. Current occupant-protection standards do not specifically address the frailty of older occupants. More information is needed to establish the feasibility of improving the protection of older people when they are in a crash.

At people age, their vulnerability to injuries and fatality increases dramatically. NHTSA is continuing two major activities

begun in 1993 that will better understand and increase the survivability of older vehicle occupants who are involved in a crash. Work is continuing under a grant awarded to the William Lehman Injury Research Center at the Ryder Trauma Center, Jackson Memorial Hospital in Miami, Florida. This will develop an Automobile Trauma Care and Research Facility, and establish an information system that will advance both the delivery of trauma care and the detailed data for research on automobile injuries, treatments, outcomes, and costs. The availability of an older population of automobile injury victims in the Miami area is providing information on the prevention of restrained occupant injuries that will be of increasing national importance as the population ages and the use of occupant restraints (air bags and automatic and manual belts) grows.

NHTSA is also continuing research with the Transportation Systems Center using computer simulation and experimental work to improve belt/air bag systems for vehicle occupants. Particular attention is being paid to possible approaches to improving alternate restraint designs or requirements for elderly vehicle occupants. It is expected that this work will be of particular value to older vehicle occupants and to women who, due to their more fragile bone structure, can benefit most from improved belt/air bag designs.

In addition, NHTSA's new side impact standard provides a higher level of protection to older occupants in vehicles meeting the standard. The new standard is based on a dynamic crash test which incorporated age effects for the first time and, thus, will provide better protection to older vehicle occupants. Manufacturers are required to apply the standard to 100 percent of care manufactured after September 1, 1996.

Pedestrian Safety Issues.—Older pedestrians, 65 and over, account for a smaller proportion (7.7 percent) of all pedestrian crashes than would be expected by their numbers in the population (12.8 percent). However, they account for almost one-quarter (22.4 percent) of all pedestrian fatalities. In response to this problem, NHTSA and FHWA are continuing work aimed at preventing crashes involving older pedestrians. A joint research initiative is ongoing in Phoenix and Chicago, and involves a demonstration program of behavioral safety information [public information and education materials] combined with traffic engineering applications [installing overhead and signal information signs, etc.] in selected zones of the cities that have been shown to have a high incidence of older pedestrian crashes. An impact evaluation is planned in Phoenix.

Safe Driving Assessment.—The majority of older drivers do not constitute a major safety problem. Research has indicated that most older drivers adjust their driving practices to compensate for declining capabilities. They reduce or stop driving after dark or in bad weather and avoid rush hours, and unfamiliar routes. Men appear to be somewhat more reluctant than women to stop driving and consequently are at a higher risk of crashing than women of comparable age. Conditions such as memory loss, glaucoma, and antidepressant use appear to be related to increased crash risk.

Some older persons are not aware of their changing conditions; most notably, those with cognitive disorders, such as Alzheimer's

disease, and certain visual problems. These drivers may not self regulate and, as a result, pose an increased risk of crash involvement. Such individuals may require outside intervention to remove them from traffic. Unfortunately, research suggests that most family members, social service agencies, and health care professionals are either not sufficiently aware or choose not to provide assistance in making driving related decisions to those who need it. For a variety of reasons, many appear hesitant to get involved with this issue.

Those elderly drivers who remain a problem are not easily detected with standard licensing procedures. Further, there is some doubt as to whether most licensing staff have the skills necessary to detect these problem drivers, even with training and state-of-the-art testing techniques. Diagnostic tests currently in use have not been shown to be effective in identifying those older drivers who are at increased crash risk, but some recently developed tests of "speed of attention" and "visual perception" may have such potential.

Several long-term efforts are not approaching conclusion. These developmental projects include: (1) procedures to help elderly drivers make better decisions about adapting their driving to accommodate their changing abilities are being developed in a joint project with the Federal Highway Administration and the Commonwealth of Pennsylvania; (2) procedures for family members, friends, social service agencies, physicians, and other health care providers to recognize when an older person needs to adjust his or her driving to adapt to functional limitations; (3) model screening and assessment procedures to aid driver licensing agencies deal with those who do not appropriately restrict their driving; and (4) model programs for medical and social service agencies to help older people to make appropriate decisions about driving while maintaining their mobility. Current efforts also include a survey to determine societal perceptions and willingness to assist older drivers to better regulate their driving.

Mobility Issues.—One factor that must be considered with regard to interventions is the fact that elderly people who give up driving often lose mobility. For many, the automobile is their primary mode of transportation and acceptable alternatives are simply not available. Decreased mobility is frequently followed by decreased quality of life as elderly people are cut off from the social events, family visits, medical attention, and opportunities for worship that are critical in maintaining their sense of well being. These issues are being studied in a joint project with the Department of Health and Human Services and in a separate project with the Federal Transit Administration.

RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION (RSPA)

RSPA played a key role in initiating an effort to develop a *Transportation Science and Technology Strategy* for the Federal Government. Staff activities in late 1996 identified *Accessibility for Aging and Transportation-Disadvantaged Populations* as one of twelve topics warranting *partnership initiatives* between Federal agencies and the transportation community. (The Strategy was subsequently

released in November 1997, and development of implementation plans is continuing.)

INFORMATION DISSEMINATION

OFFICE OF THE SECRETARY OF TRANSPORTATION (OST)

Improving Transportation for a Maturing Society discusses the impact of postponing retirement, longer productive lives and the growing segment of older operators will have on the Nation's impact the transportation system. It is also available through the Internet.

FEDERAL RAILROAD ADMINISTRATION (FRA)

Information about Amtrak accessibility is available to senior citizens and passengers with disabilities in a brochure entitled "Access Amtrak" which can be obtained by calling 1–800–USA–RAIL. Amtrak also works directly with a number of organizations each year on moving groups of passengers needing assistance and traveling together.

FEDERAL HIGHWAY ADMINISTRATION (FHWA)

Synthesis of Research Findings on Older Drivers gathered all available research and synthesized it into a report of the major replicable findings regarding older drivers. This research was then incorporated into an Older Driver Highway Design Handbook which became available in January 1998. The handbook will serve as an important resource for traffic engineers in assuring that highways meet the needs and capabilities of older drivers and pedestrians.

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION (NHTSA)

A Pedestrian and Bicyclist Safety and Accommodations course, funded by NHTSA and FHWA, was completed. This course was designed to address the pedestrian and bicyclist traffic safety needs of highway safety specialists, police, traffic engineers, and other professionals. A resource guide was prepared which provides information about traffic safety problems and ways to avoid them for all pedestrians, including older pedestrians. Also, as a countermeasure to the hazards that older Hispanic pedestrians face, materials are being prepared for Hispanic senior citizens. These materials include a report, slide show, a presenters guide, brochure, and a video "novela."

RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION (RSPA)

RSPA's Technology Sharing Program has continued the distribution of technical materials responding to needs and priorities identified by state and local officials. Key products published and distributed during 1995 and 1996 relating to the provision of transportation for special users include the following:

Access for Persons with Disabilities to Passenger Vessels and Shore Facilities: The Impact of the Americans with Disabilities Act of 1990 (July 1996, DOT–T–96–20) describes approaches to making marine passenger vessels and dockside facilities accessible to the

disabled, including the elderly. It was developed for the Office of the Assistant Secretary for Transportation Policy and distributed in cooperation with them.

The Effects of Age on the Driving Habits of the Elderly: Evidence from the 1990 National Personal Transportation Study (October 1994, DOT–T–95–12) focuses on safety-related changes in the behavior of elderly (post-65) drivers. Six aspects are considered: the amount of daily driving exposure, driving by time of day, driving speed, driving by type of roadway, vehicle size, and number of passengers carried.

Operational Strategies for Rural Transportation (March 1996, DOT–T–97–01) explores the potential of advanced electronics for improving transit services to rural patrons, particularly the elderly. It emphasizes trip request and billing processes for the bus service provided.

Operator Performance Measurement: Developing Commonality Across Transportation Modes—Proceedings of a September 1994 Workshop (November 1996, DOT–VNTSC–RSPA–95–2) describes techniques to determine and assure the performance of vehicle operators, including elderly persons, and to thereby assure system safety.

Planning Intermodal and Operations Facilities for Rural and Small Urban Transit Systems: Workshop Manual (October 1995, DOT–T–96–08) describes how to develop transportation intermodal terminals to suit the scale and conditions of rural and small urban areas.

ITEM 13—DEPARTMENT OF THE TREASURY

TREASURY ACTIVITIES IN 1995–96 AFFECTING OLDER AMERICANS

The Treasury Department recognizes the importance and the special concerns of older Americans.

SOCIAL SECURITY TRUST FUNDS

The Secretary of the Treasury is Managing Trustee of the Social Security trust funds. The short- and long-run financial status of these trust funds is presented in annual reports issued by the Trustees. The April 1997 report, covering calendar year 1996, estimated that combined Old Age and Survivors Insurance and Disability Insurance (OASDI) benefits can be paid on time for about the next 31 years. The OASDI cost-of-living increase was 2.6 percent in 1995 and 2.9 percent in 1996. The taxable base for OASDI was increased to $61,200 for 1995 and to $62,700 for 1996. The amount a 65- to 69-year-old beneficiary could earn before OASDI benefits were reduced was $11,280 in 1995; in 1996 it was $12,500.

MEDICARE TRUST FUNDS

The Secretary of the Treasury is also Managing Trustee of the Federal Hospital Insurance (HI) and Supplementary Medical Insurance (SMI) trust funds. In their April 1997 report, covering calendar year 1996, the Trustees estimated that the HI trust fund would be exhausted in 2001.

PERSONAL INCOME TAX

Each year, pursuant to statute, the width of the income tax brackets and personal exemption and standard deduction amounts are increased to reflect the effects of inflation during the preceding year.

The personal exemption allowed for each taxpayer and dependent increased from $2,450 in 1994 to $2,500 in 1995, and to $2,550 in 1996.

Taxpayers aged 65 or over (and taxpayers who are blind) are entitled to larger standard deductions than other taxpayers. Each single taxpayer who is at least 65 years old was entitled to an extra $950 standard deduction in 1994 and 1995, and $1,000 in 1996. Each married taxpayer aged 65 or over was entitled to an extra standard deduction of $750 in 1994 and 1995, and $800 in 1996. Thus, a married couple, both of whom were over age 65, was entitled to extra standard deduction amounts of $1,500 in 1994 and 1995, and $1,600 in 1996. Including the extra standard deduction amounts and the basic standard deduction amounts, taxpayers over

age 65 were entitled to the following standard deductions for tax years 1994 through 1996:

Filing status	1994	1995	1996
Single	$4,750	$4,850	$5,000
Unmarried head of household	6,550	6,700	6,900
Married filing jointly:			
One spouse age 65 or older	7,100	7,300	7,500
Both spouses age 65 or older	7,850	8,050	8,300

The tax credit for the elderly (and permanently disabled) was retained throughout the period.

The 15 percent excise tax on excess accumulations in, and distributions from, the aggregate amount of qualified retirement plans, tax-sheltered annuities, and IRAs was eliminated, effective in 1997. The separate limits on contributions and benefits applicable to each type of retirement saving vehicle remain.

Two provisions of the Health Insurance Portability and Accountability Act of 1996 (HIPA) are particularly relevant to the aged. Both provisions became effective for tax year 1997. Qualified long-term care insurance premiums and the unreimbursed expenses for the care of a chronically ill individual may be deductible, but only as part of the itemized deduction for medical expenses. Employer-paid long-term care premiums are excludable from the employee's income subject to taxation. Long-term care premiums paid by self-employed workers are partially deductible in the calculation of adjusted gross income to the same extent as other health insurance premiums. HIPA also provides that accelerated death benefits received under a life insurance contract or from a viatical settlement provider are generally excluded from income subject to tax.

Internal Revenue Service

The Internal Revenue Service (IRS) recognizes the importance and special concerns of older Americans, a group that will comprise an increasing proportion of the population in the years ahead. Major programs and initiatives of the Office of the Assistant Commission (Taxpayer Services) and the Office of Strategic Planning and Communications that are of interest to older Americans and to others are described below.

The following publications, revised on an annual basis, are directed to older Americans:

Publication 524, *Credit for the Elderly or the Disabled,* explains that individuals 65 and older may be able to take the Credit for the Elderly or Disabled, reducing taxes owed. In addition, individuals under 65 who retire with a permanent and total disability and receive taxable disability income from a public or private employer because of that disability may be eligible for the credit.

Publication 554, *Older Americans' Tax Guide,* explains the income conditions under which single taxpayers aged 65 or older, and married taxpayers filing jointly if at least one of the spouses is 65 or older, are generally not required to file a Federal income tax return. The publication also advises older taxpayers about possible eligibility for the earned income credit. The taxpayer may be eligible for a credit based on the number

of qualifying children in the home or a smaller credit if the taxpayer has no qualifying children.

Publication 721, *Tax Guide to U.S. Civil Service Retirement Benefits,* and Publication 575, *Pension and Annuity Income,* provide information on the tax treatment of retirement income.

Publication 907, *Tax Highlights for Persons with Disabilities* is a guide to issues of particular interest to persons with handicaps or disabilities and to taxpayers with disabled dependents.

Publication 915, *Social Security Benefits and Equivalent Railroad Retirement Benefits,* assists taxpayers in determining the taxability, if any, of benefits received from Social Security and Tier I Railroad Retirement.

All publications are available free of charge. They can be obtained by using the order forms found in the tax forms packages or by calling 1–800–TAX–FORM (1–800–829–3676.) Many libraries, banks, and post offices stock the most frequently requested forms, schedules, instructions and publications for taxpayers to pick up. Also, many libraries stock a reference set of IRS publications and a set of reproducible tax forms.

Most forms and some publications are on CD–ROM, available in some larger libraries, and are on sale to the general public through the Government Printing Office's Superintendent of Documents. Information about ordering can be obtained by calling (202) 512–1800. Over 100 forms and instructions and about 150 tax topics are available by fax by calling 703–363–9694.

Taxpayers may obtain most forms, instructions, publications and other products via the IRS's Internet Web Site at www.irs.ustreas.gov. They can also reach IRS using:

Telnet at iris.irs.ustreas.gov

File Transfer Protocol at ftp.irs.ustreas.gov

Direct Dial (by modem) at 703–321–2020, IRIS, the on-line information service

The 1990 tax year was the first year older Americans could use the expanded Form 1040A to report income from pensions and annuities, as well as other items applicable to older Americans, such as estimated tax payments and the credit for the elderly or the disabled. More than half of the potential filing population eligible to use this simpler, shorter form made the switch from the much longer Form 1040.

Responding to requests from the public for such a product, the Tax Forms and Publications Division developed large-print versions of the Form 1040 and Form 1040A packages earmarked for older Americans. These packages (designated as Publications 1614 and 1615, respectively) are newspaper-size and contain both the instructions and the forms (for use only as worksheets, with the amounts to be transferred to regular-size forms for filing).

IRS VOLUNTEER & OUTREACH PROGRAMS

The *Volunteer Income Tax Assistance (VITA) Program* offers FREE tax help to people who cannot afford paid professional assistance. Volunteers help prepare basic tax returns for taxpayers with special needs, including persons with disabilities, non-English speaking persons, those with low income, and elderly taxpayers.

Assistance is provided at community and neighborhood centers, libraries, schools, shopping malls and other convenient locations across the nation. Volunteers generally include college students, law students, members of professional, business and accounting organizations, and members of retirement, religious, military and community groups.

In 1995, over 46,000 volunteers assisted over 1.7 million taxpayers at nearly 8,100 sites across the nation through the VITA Program. In 1996, over 47,000 volunteers assisted over 1.8 million taxpayers at 8,300 sites across the nation through the VITA Program.

Banks, Post Offices, and Library (BPOL) Programs

During 1995 and 1996, the Banks, Post Offices and Library Program (BPOL) provided approximately 46,500 libraries, banks, post offices, and other sites with free tax preparation materials such as tax forms and publications that can assist older Americans in preparing Forms 1040, 1040A, 1040EZ, and related schedules. IRS provided volunteers in some libraries to answer tax questions and direct taxpayers to the correct tax forms.

Small Business Tax Education Program (STEP)

The Small Business Tax Education Program (STEP) provides information about business taxes and the responsibilities of operating a small business. During 1995 and 1996, small business owners and other self-employed persons had an opportunity to learn what they needed to know about business taxes through a partnership between IRS and approximately 2,000 community colleges, universities, and business associations. Assistance was offered at convenient community locations and times. Many elderly persons, such as those beginning second careers, availed themselves of this program.

Community Outreach Tax Education Program

The Community Outreach Tax Education Program provides individuals with group income tax return preparation assistance and tax education seminars. IRS employees and trained volunteers conduct these seminars which address a variety of topics. They are tailored for groups and individuals with common tax interest, such as groups of older Americans. These seminars are conducted at convenient community locations.

In 1995, over 1,400 volunteers assisted over 660,000 taxpayers in over 7,200 sessions across the nation through this program. In 1996, almost 500 volunteers assisted over 421,000 taxpayers in over 5,000 sessions. In addition, the IRS coordinated outreach activities with the Center for Budget and Policy Priorities that led to grassroots EITC and AEITC information campaigns by state and local social advocacy groups throughout the nation.

Tax Counseling for the Elderly (TCE) Program

The Tax Counseling Program was first authorized by Congress in 1978 as part of the Revenue Act of 1978. The Revenue Act authorizes an appropriation of special funds, in the form of grants, to provide free income tax assistance to individuals 60 years of age or older. TCE sponsors recruit volunteers that are trained by the

Service to provide income tax assistance to older individuals. TCE volunteer sites can be found in retirement homes, neighborhood sites, and shopping malls. Volunteers also travel to the private residences of the homebound. In 1996, 33,000 volunteers assisted 1.6 million taxpayers at nearly 11,000 sites.

FINANCIAL MANAGEMENT SERVICE

The Financial Management Service (FMS) makes 700 million Social Security, Supplemental Security Income, and Veterans benefit payments annually. Working under the mandate of the Debt Collection Improvement Act (DCIA) signed by President Clinton on April 26, 1996, Federal departments and agencies are on the fast track to convert all Federal payments to electronic funds transfer (EFT) by January 1999. EFT significantly improves the certainty of the payments reaching the intended recipients on a timely basis, and improves the ability of recipients to use those payments safely and conveniently. Payment inquiries and claims will be significantly reduced under EFT.

Payment by EFT has substantial benefits in terms of reliability, safety, and security that are especially important for the elderly. Recipients are twenty times more likely to have a problem with a paper check than with an EFT transaction; each year Treasury replaces over 800,000 checks that are lost, stolen, delayed, or damaged during delivery. Waiting days for a replacement check is an inconvenience and a burden on recipients, especially elderly persons living on low incomes. EFT payments are much more convenient and secure—misrouted EFT payments are never lost, and are typically rerouted to the correct bank account within 24 hours.

FMS is overseeing implementation of DCIA government-wide and is working with agencies to identify and resolve the major issues confronting stakeholders so that Treasury's formulation of regulations and policy on EFT conversion will reflect Federal agencies' and key stakeholders' participation in addressing and resolving issues. During 1996 Treasury began a major initiative to assure the successful implementation of the EFT mandate. Treasury will ensure that individuals required to receive payments electronically will, for that purpose, have access to an account at a financial institution at reasonable cost, and with the same consumer protections as other account holders at that financial institution. In addition, the Secretary of the Treasury is authorized to grant waivers based on recipient hardship, for classes of checks, or where otherwise necessary. The transition to EFT will be made with the interests of recipients being of paramount importance, and waiver guidelines will be liberal.

The law required EFT to be used for Federal payments to new recipients who become eligible to receive such payments after July 26, 1996. On that date, an Interim Rule was published in the *Federal Register,* providing initial guidance on implementation. A follow-up rulemaking will be published in 1997 to offer guidance for EFT conversion for all Federal payments after January 1, 1999.

During 1996, FMS contracted with Booz Allen & Hamilton and Shugoll Research for a four-phase research effort that will help determine the future marketing efforts aimed at individual recipients of Federal benefit checks. A comprehensive public education and

marketing campaign involving presentations nationwide and distribution of a variety of informational materials is being planned to communicate the requirements of the EFT legislation and the impact it will have on recipients, financial institutions, and Federal agencies.

FMS continues to support the implementation of Electronic Benefit Transfer (EBT). Geared toward those individuals without a bank account or who choose not to use Direct Deposit, EBT is an electronic benefit delivery mechanism that enables recipients to use plastic cards to access their benefits at automated teller machines or point-of-sale terminals. FMS developed guidelines for banks to use in designing low-cost "Direct Deposit Too" all-electronic accounts to provide basic banking services to the unbanked.

FMS continues to support the implementation of a nationwide program to make EBT a viable electronic payment mechanism. Forty states have some type of EBT program which provides benefit access to recipients: six of these are full-fledged, state-wide programs, and the others are either in the pilot phases or in the process of being awarded to providers. In 1996, FMS was instrumental in establishing the Southern Alliance of States (SAS), and five contracts have been awarded under the SAS Federal EBT contract. Nationwide EBT will be operational by 1999, and all 50 states expect to be operating statewide EBT systems by 2002.

U.S. MINT

The U.S. Mint continues to consider the needs and concerns of older persons.

The Exhibits and Public Services staff of the Philadelphia Mint and staff of the Denver Mint Visitors Center are available to help older persons and people with special needs who wish to take the Mint self-guided tour. A wheelchair is also available for those wishing to take the tour. In addition, benches are strategically placed along the tour route to provide resting areas for visitors.

In 1996–97, seven videodisc monitors were installed in the tour gallery of the Philadelphia Mint. The videos highlight the history of the Mint and coin production. The new system allows older visitors and visitors with sight impairments to view coin production up close. While visitors may still view the factory from forty feet above the plant floor, the monitors allow for a better understanding of coin production.

BUREAU OF ENGRAVING AND PRINTING

Series 1996 currency

The new Series 1996 $100 notes, the first in the series, were introduced in March 1996. During the next several years, lower denominations will be issued in order of decreasing value. An international public information campaign is being coordinated between BEP, the Federal Reserve System, and the Secret Service, to make the public aware of the new notes; the Department has conducted a special outreach to older individuals. The new currency is the same size, color, and has the same feel as the old notes, and depicts the same historical figures and national symbols. The new security features, benefitting those with reduced vision are: the portrait is

shifted slightly off-center, to provide room for a watermark, making it harder for counterfeiters to print; serial numbers on the new currency differ slightly from old currency; and the ink used for the numeral in the lower right-hand corner changes color from green to black when viewed from different angles.

Other assistance

BEP's on-site medical staff continued to provide life-style counseling for employees who are senior citizens. The emphasis is on wellness and prevention of disease, and includes advice on nutrition and weight control, testing of blood pressure and cholesterol levels, and examination of possible vision and hearing deficiencies.

An assessment of BEP facilities, including the tour areas, has been completed and found to be in accordance with the Americans with Disabilities Act (ADA).

The BEP continued its contract with the National Academy of Sciences to conduct a study, with the cooperation of the American Counsel for the Blind, to determine ways to assist the blind and partially sighted with handling currency.

OFFICE OF THRIFT SUPERVISION

The Office of Thrift Supervision (OTS) carried out a number of activities affecting older Americans.

OTS continues its Community Affairs program, established in 1993 and designed to provide outreach and support to the thrift industry's efforts to meet housing and other community credit and financial services needs. One of the primary objectives of the program is to serve as a liaison between the thrift industry and consumer and community groups on housing and community development issues. Most of the groups with which we interact represent low- and moderate-income individuals, including older persons.

During 1995 and 1996, the Community Affairs staff in the headquarters office and in each of our regional offices, along with senior management, initiated or participated in meetings with hundreds of thrift and community organizations across the country, including groups with particular emphasis on the elderly. During those meetings, information was shared on affordable housing, financial services and economic development needs; on thrifts' authorities and abilities to meet those needs; and on opportunities for collaborative partnerships.

OTS also periodically issues its Community Liaison newsletter to all thrifts and several hundred community and consumer organizations. One goal of this publication is to promote understanding and awareness of successful achievements in affordable housing and community development. By spotlighting these initiatives, many of which have benefited elderly Americans, it is our hope that other financial institutions, community and consumer groups, and government entities will be encouraged to replicate these approaches in their communities.

For many years, OTS has had an active program designed to address complaints that consumers may have against the thrifts that OTS regulates. OTS operates a free nationwide consumer hotline that offers the options of obtaining information about filing a complaint or speaking immediately with an analyst. A senior analyst

is assigned each day to help people evaluate whether their concerns are addressed by our regulations. Senior citizens are more likely to use this service, and appear to appreciate the direct contact.

During 1996, OTS expanded its services to seniors and others who have disabilities, by establishing a TDD line for complaints, and publicizing it in OTS' consumer literature. We also continued to provide appropriate accommodation to customers with disabilities, such as blindness or arthritis, that make it difficult to file a written complaint. In most cases, this involves writing out the complaint for the consumer and sending it to them for signature or some other form of verification.

OTS has also issued a Customer Service Plan for consumer complaints and urged the institutions it regulates to give high priority to consumer relations. Of approximately 5,000 complaints filed with OTS in 1996, 17 complaints alleged credit discrimination based on age. OTS investigated each of the complaints in accordance with its expanded procedures for discrimination complaints. The procedures provide that the complainant is interviewed, the entire loan file is obtained from the thrift, and OTS staff determines if a special on-site investigation is needed. None of the 1996 complaints led to a finding of discrimination.

BUREAU OF THE PUBLIC DEBT

The Bureau of the Public Debt continues to make improvements in its programs to better serve all investors. The following steps to streamline and simplify access to Treasury securities are of particular benefit to the elderly investor.

Savings securities

Public Debt's Savings Bond Webb Site provides much useful information about bonds and is a very popular site with bond owners, many of whom are elderly. In addition to savings bond facts, many forms can be downloaded from, or ordered through the site.

The Bureau continues to update and improve the Savings Bond Wizard, an easy-to-use bond pricing software application available via diskette and on Public Debt's Web Site. With Wizard, bond owners can keep an inventory of their bonds, and compute current redemption values and earned interest on their personal computers. Because the Bureau receives frequent positive feedback about Wizard, it remains one of the highest priorities.

By accessing a new, automated system via telephone, customers can easily request the forms needed for savings bond transactions and receive the forms much sooner than when requesting them by mail.

More inquiries from savings bond owners are now answered by telephone or Internet electronic mail. These types of contacts allow for better communication and clearer understanding of the information needed and provided, which is especially helpful to older customers.

The number of Series H/HH bondowners receiving semi-annual interest payments by electronic deposit continues to increase steadily. Over 70 percent participate in the Automated Clearing House (ACH) method, many of whom are older people who exchange matured Series E/EE bonds for Series H/HH. A major benefit of elec-

tronic deposits is the assurance that payments will be received on time, without having to make a special trip to deposit interest checks.

Savings Bond forms are printed in as large a print as possible.

Public Debt plans to make savings bonds available for purchase in 1998 by automatic, electronic debits to purchasers' financial accounts, on the dates and in the denominations and registrations specified by the purchasers. This process will provide a convenient way for persons who are retired (or do not have access to payroll savings plans through their employers) to invest in savings bonds.

Public Debt is finalizing plans for an inflation-indexed savings bond, which will offer investors protection from the effects of inflation. These bonds will offer investment security that older Americans desire.

Marketable securities

Treasury marketable securities provide a safe investment and interest income, features that are popular with older Americans. The latest survey of investors using the Treasury Direct service indicated that 62 percent were aged 65 or older. Therefore, recent improvements to Treasury Direct will benefit older Americans.

To help all of its customers, including the elderly, Public Debt implemented a new Statement of Account that was larger, easier to read, and provided more information. Also, a special brochure explaining the Statement of Account was provided to investors.

Public Debt continues to encourage owners of registered and bearer securities to convert these certificates to book entry form in Treasury Direct. Holding Treasury securities in book entry form provides a much safer and more convenient method than holding certificates.

UNITED STATES SECRET SERVICE

White House tours

The U.S. Secret Service processes approximately 1.5 to 2 million people through the White House Tours annually. In a reinvention effort to provide better customer service to the public, the Secret Service Uniformed Division makes available for the elderly and physically disabled escorted wheelchair tours of all the White House areas open to the public. Past procedures only provided for tours of the State Floor. Additionally, upon request, "special sign language tours" are made available for the hearing impaired and "special touch tours" are provided for the visually impaired.

SCEP

The Secret Service has been working to develop a senior citizen employment program (SCEP). SCEP is a work training program designed to provide older, economically disadvantaged seniors with an opportunity to upgrade outdated skills and develop new skills which may enhance future employment opportunities. At the same time, seniors hired under this program will provide administrative clerical support to Secret Service offices. The Personnel Division will work closely with designated organizations such as the American Association of Retired Persons and other community associa-

tions to identify eligible seniors. Implementation of the SCEP is projected for Fiscal Year 1998.

Advance fee fraud

Advance fee fraud schemes emanating from Nigeria are targeting American citizens and have resulted in reported financial losses exceeding a hundred million dollars. It is believed the true losses are much higher as many victims fail to report their losses due to fear or embarrassment. The Service's experience has shown that the elderly population is especially susceptible to advance fee frauds, as they are to other types of confidence schemes. The Secret Service has received scores of reports from members of the older community who report that they have lost their life savings and more in pursuit of an advance fee scheme.

From the onset of its involvement in the investigation of this crime, the Secret Service has realized that a large scale public awareness program must accompany aggressive investigation and prosecution. In conjunction with the Departments of State and Commerce, the Secret Service has reached out to organizations that are associated with the principal targets of this scam, namely small businesses and the elderly. Organizations such as the Better Business Bureau, the American Bankers Association, and the AARP have assisted the Secret Service in publishing articles designed to educate the public to these schemes and hopefully prevent them from failing prey to these frauds.

Government benefits

The Secret Service continues to protect the nation's elderly recipients from fraud perpetrated against their government benefits. The Secret Service is committed to investigating all fraud related to government benefits. During Fiscal Year 1995–1996, the Secret Service received and investigated 16,942 cases relating to U.S. Treasury check violations (which includes Social Security benefits, Railroad Retirement, Office of Personnel Management, et al) of which 16,167 were closed.

As a result of the Electronic Funds Transfer (EFT) Provision of the Debt Collection Improvement Act of 1996, the Secret Service has received 2,778 cases for investigation involving the illegal diversion of funds through the Direct Deposit/Electronic Funds Transfer process. In FY 1996, the Secret Service closed 1,136 EFT cases.

U.S. CUSTOMS

U.S. Customs Service's major activities affecting older Americans include the following:

The Customs Service offers special treatment for the aging, the handicapped, the ill, and those who are unable to wait in line when arriving from abroad. Such travelers can speak with a Customs supervisor upon arrival in the Customs processing area of the airport or other Customs port of entry. The supervisor is able to facilitate the traveler's Customs clearance.

Customs strives to treat all travelers entering and leaving the United States with professionalism and courtesy. In addition, Customs works to ensure that Federal inspection facilities, such as

restrooms, etc., facilitate the movement of the elderly or handicapped who must rely on a wheelchair or walker.

In addition, the Customs Service has a number of programs to support Customs employees. For example, the Employee Assistance Program encourages elderly employees to seek additional assistance if needed. The Customs Health Enhancement Program offers activities and classes to Customs employees, including the elderly, in areas such as the fitness center, CPR/first aid, stress management, conflict resolution, defense tactics, allergy and asthma, nutrition, and health screening. The Customs Service also offers retirement seminars several times each year to all employees who are eligible to retire within the succeeding 5 years. These seminars cover retirement benefits, legal matters and financial planning.

ALCOHOL, TOBACCO AND FIREARMS

The Bureau of Alcohol, Tobacco and Firearms (ATF) has several programs that benefit all employees, but specifically can be viewed as addressing an aging workforce:

ATF supports its Health Improvement Program and encourages employees of all ages, especially those over age 50 and who are medically cleared, to participate.

The Employees Services Branch conducts annual pre-retirement seminars for employees who are eligible to retire within the succeeding 5 years. These seminars address civil service retirement benefits, social security, tax implications and financial planning.

The Employee Assistance Program provides all employees and their family members with free confidential assistance for personal problems that may impact work life. This program provides counseling/support services regarding numerous issues such as: finances, family, health, legal, substance abuse, and emotional well being.

OFFICE OF COMPTROLLER OF THE CURRENCY

During 1995 and 1996, the Office of Comptroller of the Currency (OCC) continued to enforce fair lending laws relating to age discrimination and continued its active liaison and outreach program with national and regional consumer organizations, including the American Association of Retired Persons.

Comptroller Eugene Ludwig met monthly with representatives from national consumer organizations at informal meetings held at the OCC'S Washington, D.C., headquarters and met semi-monthly with representatives of regional consumer and community organizations from each of the OCC's six districts. The purpose of these outreach meetings was to share information about OCC policy and national bank examination practices with consumer organizations and to learn first-hand of concerns these organizations may have with the activities of national banks and the OCC's supervision of the national banking system.

During 1995, the OCC established its Community Reinvestment and Development Specialist program. As a result, the OCC now employs two full-time specialists in community development and consumer banking in each of the OCC's six districts. they are responsible for regular outreach and information dissemination to

community and consumer organizations, including local and regional organizations representing the interests of elderly consumers. These specialists focus on banking industry and consumer organizations awareness of innovative practices of national banks in meeting the credit and financial service needs of disadvantaged consumers, including those of elderly consumers.

The OCC also is responsible for resolving consumer complaints against national banks, including those complaints made by older Americans. During 1995 the OCC received 15,745 written complaints and 21,970 telephone complaints. During 1996, the OCC received 13,695 written complaints and 14,077 telephone inquiries. In 1995, to improve the process for handling consumer complaints, the OCC established the Consumer Assistance Unit, a centralized complaint processing center in Washington, D.C., and launched a toll-free national consumer complaint telephone number (800–613–6743).

ITEM 14—COMMISSION ON CIVIL RIGHTS

During calendar years 1995 and 1996 the Commission continued to process complaints received from individuals alleging denials of their civil rights. Specifically, in 1995, 17 complaints alleging discrimination on the basis of age were received by the Commission and referred to the appropriate agency for resolution. In 1996, the Commission referred 40 complaints alleging age discrimination.

ITEM 15—CONSUMER PRODUCT SAFETY COMMISSION

REPORT ON ACTIVITIES TO IMPROVE SAFETY FOR OLDER CONSUMERS

Each year, according to estimates by the U.S. Consumer Product Safety Commission (CPSC), nearly one million people over age 65 are treated in hospital emergency rooms for injuries associated with products they live with and use every day. The death rate for older people is almost six times that of the younger population for unintentional injuries involving consumer products. Consumer products used in and around the home are associated with over 35 deaths per 100,000 persons 65 and older, and over 6 deaths per 100,000 persons under 65.

Fires and burns in the home

Burns from fires in the home are an important source of injury to older Americans. CPSC recommends the installation and maintenance of smoke detectors on every floor of the home. Older consumers should look for nightwear that will resist flames, such as a heavy weight fabric or tightly woven fabrics such as polyester, modacrylics, or fabrics made from wool.

Cooking fires also cause injury and death to older consumers. As part of its work on range fires, CPSC is evaluating the feasibility of technologies that detect a pre-fire condition and shut the burner off before a fire occurs.

Older consumers are at greater risk of dying from fires involving both upholstered furniture and mattresses and bedding than the general population. CPSC is currently considering ways to address upholstered furniture and mattress and bedding flammability.

Burns from hot tap water are another cause of injury to many older Americans. CPSC recommends that consumers turn down the temperature of their water heater to 120 degrees Fahrenheit to help prevent scalds.

In 1995 and 1996, CPSC distributed approximately 130,000 copies of the "Home Safety Checklist for Older Consumers" (English and Spanish). The "Home Safety Checklist" is a room-by-room check of the home, identifying hazards and recommending ways to avoid injury. Consumers may order a free copy by sending a postcard to "Home Safety Checklist," CPSC, Washington, D.C. 20207.

CPSC also contributed to the publication "What Smart Shoppers Know About Nightwear Safety." This brochure was developed by a group of experts in apparel flammability and distributed by the American Association of Retired Persons (AARP). The brochure encourages older consumers to look for sleepwear that is flame resistant. Consumers may request a copy by sending a postcard to AARP, 601 E Street, N.W., Washington, D.C. 20049.

Electrical wiring in older homes

In 1994–95, CPSC conducted a study of electrical wiring fires in older homes. This is a subject of particular importance to senior citizens, since they frequently live in older homes, which are especially vulnerable to electrical wiring fires. Based on this study, CPSC produced a video entitled "Wired for Safety," emphasizing hazards with old electrical wiring and safety measures to prevent fire and electric shock. About 3,000 copies of the video were distributed to electrical safety inspectors, code officials, and others nationwide.

CPSC launched this campaign to help prevent the estimated 40,000 home electrical wiring fires each year. These fires claim 400 lives each year and cost society $2.2 billion annually. Working with fire departments, electrical safety experts, and building code officials, CPSC encourages electrical reinspections and upgrades to home electrical wiring. Consumers may obtain a free guide to eliminating home wiring hazards by sending a postcard to "Home Wiring Hazards," CPSC, Washington, D.C. 20207.

Adult-friendly poison prevention packaging

Older consumers are involved in the childhood poisoning issue because many young children are poisoned when they swallow grandparents' medicine. Child-resistant (CR) packaging has saved children's lives. CPSC has data estimating that the widespread use of child-resistant closures on aspirin and oral prescription medicines saved the lives of at least 800 children under age five since 1972. However, CR packaging can only work if people choose it and use it properly. Many older consumers find it difficult to open CR packaging and may not replace the caps or use the packaging at all.

To make it easier for all adults, especially older ones, to use child-resistant packaging, CPSC in 1995 adopted a change in its rules for testing packaging under the Poison Prevention Packaging Act. The new regulation requires that packaging be tested by panels of adults 50 to 70 years of age rather than 18 to 45 years old, as was previously the case. This change—effective for packaging marketed after January 1998—assures that child resistant packaging will become more "adult-friendly." The change is encouraging the industry to develop innovative closures that rely on older people's "cognitive skills" instead of their physical strength. CPSC expects the new packaging to help prevent more child poisonings. In addition, CPSC reminds all adults to keep medicines locked up and out of reach of children.

In 1994, Chairman Ann Brown awarded commendations to two companies for safety innovations in child-resistant packaging that were especially useful for older consumers. Procter and Gamble received an award for marketing a major product in adult-friendly child-resistant packaging and Sunbeam Plastics was recognized for developing an entire line of adult-friendly child-resistant packaging.

ITEM 16—CORPORATION FOR NATIONAL SERVICE

CORPORATION FOR NATIONAL SERVICE

On September 21, 1993, the President signed into law the National and Community Service Trust Act, which created the Corporation for National Service (Corporation). The Corporation's mission is to engage Americans of all ages and backgrounds in community-based service. This service addresses the Nation's unmet education, public safety, human and environmental needed to achieve direct and demonstrable results. This commitment to "get things done" is honored by the Corporation's three national service initiatives: The National Senior Service Corps (Senior Corps), AmeriCorps, and Learn and Serve America.

NATIONAL SENIOR SERVICE CORPS: A THIRTY YEAR HISTORY OF LEADERSHIP IN SENIOR VOLUNTEERISM AND SERVICE

Senior Corps is comprised of three seasoned programs previously supported by the Federal agency ACTION and its predecessors:

- The **Foster Grandparent Program** enables seniors to provide individual support to children and youth with special and exceptional needs.
- The **Retired and Senior Volunteer Program** (RSVP), volunteers perform a myriad of services, including organizing neighborhood block watches, identifying sources of groundwater contamination, teaching computer classes, and participating in natural disaster recovery.
- The **Senior Companion Program** supports older volunteers who provide assistance that allow frail individuals to continue living independently and with enhanced quality of life..

In 1996, nearly half a million Senior Corps volunteers contributed their time, skills, wisdom and experience to addressing unmet community needs, while emphasizing the impact on both the individuals and the communities served.

Table 1: National Snapshot of the Senior Corps Programs[1]

Program	Number of Local Projects	Number of Volunteers	Volunteer Hours of Service to Communities
FGP	277	23,600	22 million hours
RSVP	757	455,000	85 million hours
SCP	185	11,900	12 million hours
Totals	**1,209**	**490,500**	**119 million hours**

[1] Source for all Senior Corps program and volunteer related data: 1995 Annual Project Profile of Volunteer Activities (PPVA), Corporation for National Service, National Senior Service Corps.

Table 2: Senior Corps Programs in the Community

Program	Number of Local Projects	Number of Census Districts Served	Number of Local Public and Nonprofit Agencies With Senior Corps Volunteers
FGP	277	762	9,670
RSVP	757	1,447	65,300
SCP	185	567	2,970
Totals	**1,209**	**1,820**	**77, 920**

FUNDING THE NATIONAL SENIOR SERVICE CORPS A COST-EFFECTIVE FEDERAL INVESTMENT TO BENEFIT LOCAL COMMUNITIES

The total federal funding for National Senior Service Corps programs in fiscal year 1996 was **$ 128,401,000**, apportioned among each of the three programs as follows:

Table 3: National Senior Service Corps FY '96 Federal Funding[2]

Senior Corps Program	FY '96 Funding
Foster Grandparent Program	$ 61.9 million
Retired and Senior Volunteer Program (RSVP)	$ 38.9 million
Senior Companion Program	$ 31 million
Total	**$128.4 million**

Senior Corps projects are locally sponsored and administered. Within the broad framework of its legislation, service activities grow out of agreements among the participants, funded projects, and the communities served. As a result, these activities reflect a mix of needs unique to each community.

The community-driven focus is, in large part, a reason for the local non-federal support enjoyed by Senior Corps programs.

[2] Source for fiscal data: FY '96 federal appropriation, Corporation for National Service, National Senior Service Corps.

Table 4: Senior Corps Programs and Non-Federal Local Contributions

Senior Corps Program	Federal Investment	Non-Federal Local Contribution	Percentage of Match on Every Federal Dollar
Foster Grandparent Program	$ 61.9 million	$ 31.5 million	51 percent 51 cents per dollar
Retired and Senior Volunteer Program (RSVP)	$ 38.9 million	$ 38.9 million	113 percent $1.13 per dollar
Senior Companion Program	$ 31 million	$ 18.8 million	61 percent 61 cents per dollar
Total	**$ 128.4 million**	**$ 89.2 million**	

Senior Corps programs allow local agencies to provide greater levels of service within their relatively small operating budgets and demands placed on them as community service providers. The monetary value of the volunteer services provided by Senior Corps volunteers exceeds one billion dollars.[3]

Table 5: Senior Corps Programs and Return on the Federal Investment

Senior Corps Program	FY '96 Annual Volunteer Service Hours	Value of Service	Return on Federal Investment
Foster Grandparent Program	22 million hours	$ 286 million	4-fold return
Retired and Senior Volunteer Program (RSVP)	85 million hours	$ 1 billion	30-fold return
Senior Companion Program	12 million hours	$ 150 million	5-fold return
Total	**119 million hours**	**$ 1.4 billion**	

[3] Based on the 1996 Biannual Report, *Giving and Volunteering in the United States*, Independent Sector, which assigned a comparable value of $13.24 per hour to volunteer service.

OPPORTUNITIES FOR OLDER ADULTS: AMERICA'S MOST ABUNDANT NATURAL RESOURCE

Twice as many older adults live in the United States today as 30 years ago and the number of persons over age 55 will double again by 2025. Three factors make older persons the nation's best increasing natural resource:

- **Good Health -** More than 80 percent of Americans age 65 and over report no difficulties with activities of daily living. Less than 5 percent are institutionalized.
- **More Time -** Americans are now spending a third of their lives in retirement, freeing an average of more than 20 hours a week to engage in additional activities.
- **High Interest -** According to the Independent Sector, a Washington, D.C.-based organization that studies American volunteerism, when persons 55 and older are asked to volunteer, over 70 percent do.

Service by seniors is changing the definition of satisfaction and success in post-retirement, and is increasingly regarded as an essential ingredient in productive aging. For example, in a 2.5 year follow-up of the MacArthur Successful Aging study, participation in volunteer activities was predictive of improved functioning in older adults, with 32 percent lower risk of poor physical function in those so involved, independent of the effective of being physically active. There is preliminary evidence from the same study that the amount of time one is involved in formal volunteering activities is important in conferring health benefits, with greater time involvement predictive of the level of physical functioning two years later. Finally, there is evidence that organized and structured roles and behavior are among the best predictors of survival (Fried, Freedman, et. al, 1997). It follows, therefore, that public investment in volunteer service by seniors is not only prudent, but that it has multiple benefits.

NATIONAL SENIOR SERVICE CORPS SIGNIFICANT ACTIVITIES 1995-1996

Promoting Community Impact

As a new millennium approaches, the Senior Corps is at an unprecedented juncture. On one hand, a new generation of older Americans – more healthy, educated, and numerous than any before it – will provide tremendous energy and resources to the senior service movement. On the other hand, economic realities and funding cutbacks at all levels require increased innovation in the delivery of volunteer services.

In this new environment, it is anticipated that funding must go to those programs that can distinguish themselves among competitors by demonstrating value, cost-effectiveness, and significant results in solving critical community needs. Thus, the Senior Corps is aggressively moving beyond talking about "how much time and how many seniors we provide" to answering the question "what difference do we make?"

Senior Corps' evolution in vision requires programming focused on outcomes. *Programming for Impact* is the framework that was developed by the Senior Corps in 1996 to facilitate this evolution. It advocates an approach to service programming that integrates community need, accomplishment and impact into station and volunteer assignment development, planning and reporting. It also measures responsiveness to the community and thereby fosters recognition of seniors as a vital, invaluable resource.

Some key components of the *Programming for Impact* initiative in 1996 included the National Conference, state impact conferences involving key stakeholders in dialogue and consensus building, and development and dissemination of technical assistance guidebooks and project management tools.

The White House Conference on Aging

The 1995 White House Conference on Aging, the last such event of this century, was distinguished from previous years because for the first time in history, the 1995 delegates overwhelmingly supported a resolution acknowledging older adults as **resources** to their communities and nation. Delegates underscored the fact that older people want to be involved, and called for expanded avenues for older Americans to contribute to the well-being of their communities through volunteer service.

White House Conference on Aging Resolution 20.1, one of the ten Resolutions receiving the most votes cast by delegates to the conference, charged the Corporation for National Service, through its National Senior Service Corps, with leadership to promote volunteer service by older persons and to increase the numbers of older persons serving in the National Senior Service Corps by the end of the 20th century.

For the first time in our nation's history, Americans are now spending a significant portion of their lives in post-retirement; for many, a full one third of their lives. Amid concerns about the problems that accompany an aging society, greater attention must be paid to the enormous opportunity this demographic revolution presents. The nation cannot squander the time, talent, experience, and resources offered by its older population at a time when so many social, educational, environmental, and human needs remain urgent and unmet.

The First-Ever National Service Corps Training Conference: *Renewing America Through Senior Service*

In July 1996, Senior Corps brought together over 1,200 Senior Corps Project Directors and other participants key to a strong senior service movement to learn and share best practices information. The National Conference was an important training opportunity for projects. Joining the project directors were hundreds of representations from Corporation State Offices, State Commissions, and partners from national non-profits, foundations and the corporate sector.

Conference participants had a choice of more than 160 educational and instructional workshops and networking sessions designed to focus on excellence, innovation, and strategies for expanding funding and resources. A common theme throughout the Conference was *Programming for Impact*, reinforcing methods to improve Senior Corps programs' ability to plan, meet, and evaluate the differences senior volunteers make in meeting critical community needs.

The National Leadership Forum on Senior Service

Convened concurrently with the National Senior Service Corps Conference, the National Leadership Forum on Senior Service involved more than 50 leaders from national non-profit organizations, the business sector, corporations, foundations, the media, and university alumni associations. This inaugural Senior Corps event expanded the network to other sectors which will be increasing important to broadening support for the senior service movement in the new century.

Forum members committed themselves to a number of collaborative efforts such as renewed focus on targeting grant funds from the Robert Wood Johnson Foundation to Senior Corps programs, initiatives that model increased interaction between corporate volunteer councils and Senior Corps programs, and commitments to encourage greater media attention to senior volunteers' contributions to local communities.

The Experience Corps Demonstration Program

Senior Corps tests new models for mobilizing older persons in service through its demonstration authority, which builds on the effective practices and lessons learned through RSVP, the Foster Grandparents Program, and the Senior Companion Program and positions Senior Corps to tap the vast civic potential of the aging baby boom generation.

The first initiative of its kind in Senior Corps history, the **Experience Corps Demonstration** was launched in 1995 to test new models and incentives for involving older people in volunteer service while demonstrating the value of concentrated senior resources on the critical needs of children in urban, public elementary schools. Demonstration sites operate at existing FGP and RSVP projects.

Senior Corps worked with Public/Private Ventures on the design of the demonstration efforts and with the Johns Hopkins School of Medicine on its research component.

The Experience Corps program model calls upon seniors of all income and educational levels and offers a range of volunteer service opportunities and incentives for participation, including the traditional stipend, scholarships and service credits. Although older adults can become involved at various commitment levels, emphasis is on at least a half-time commitment.

The demonstration laid the groundwork for a 1997 *Seniors for Schools* initiative which will use lessons learned from the original sites to target improving literacy and academic skills of children attending kindergarten through third grade.

An Independent Evaluation of the Retired and Senior Volunteer Program (RSVP)

An independent evaluation conducted by Westat, Inc. in 1996 concluded that RSVP meets the goals set for it in its legislation and that the accomplishments of the RSVP volunteers positively affected their communities.

Examples of community impacts cited in the study included almost 300,000 families and 108,000 patients receiving health care support services, more than 23 million meals served to individuals such as the homeless or home-bound seniors or disaster victims, and almost 10 million hours of professional and technical support services such as tax preparation assistance provided to the elderly or the poor.

The Westat study found high levels of non-federal contributions to RSVP, further attesting to the value local communities place on RSVP. Non-federal sources contributed 40 percent of the cash costs of RSVP. Large non-federal contributions, including 98.5% in-kind contributions came from other private non-profit organizations, local public sources, businesses, and private individuals. Overall, non-federal contributors provided slightly more funds to RSVP projects in fiscal 1996 than federal sources.

The evaluation also identified ways for RSVP to strengthen its ability to meet the evolving needs of communities and the coming wave of baby-boomers into the ranks of the older population. In response to the evaluation, Senior Corps has launched a national effort and a series of roundtable discussions around the country with community stakeholder to address eight identified areas for recommended change.

FOSTER GRANDPARENT PROGRAM

In fiscal year 1996, nearly **24,000 Foster Grandparents** gave care and attention to **80,000 children and youth** with special and exceptional needs.

Program Overview

The Foster Grandparent Program began in August 1965 as a national demonstration effort. Since its inception, the Foster Grandparent Program has provided young and old the chance to grow together. Today, nearly 24,000 older Americans serve as Foster Grandparents. They give care and attention every day to 80,000 children and youth with special and exceptional needs. In improving the lives of children they serve, Foster Grandparents also profoundly enrich their own lives.

Foster Grandparents volunteer in schools, hospitals, drug treatment centers, correctional institutions, and Head Start and day care centers. They offer emotional support to children who have been abused and neglected, mentor troubled teenagers and young mothers, care for premature infants and children with physical disabilities or severe illnesses, including AIDS. This special care helps young people grow, gain confidence, and become more productive citizens. In the process, Foster Grandparents strengthen communities by providing personalized services to special needs children that community budgets cannot afford and by building strong bridges across generations.

Foster Grandparents must be at least 60 years of age and meet certain income eligibility requirements. They serve 20 hours per week and receive pre-service orientation, training throughout their service, and a modest stipend to offset the cost of volunteering. They receive reimbursement for transportation, some meals during service, an annual physical, and accident and liability insurance while on duty.

Non-Federal Support and Return on Federal Investment

Foster Grandparent projects are jointly funded by federal, state, and local governments, with significant support from the private sector. The federal budget to support these projects was $67.2 million in fiscal year 1995 and $61.9 million in fiscal year 1996. The non-federal local contribution averaged $31.5 million annually or 51 cents for every federal dollar invested – well above the 10 percent match required by law and attesting to the success of Foster Grandparents in the communities they serve.

In 1996, 21,400 Foster Grandparents served through 277 projects sponsored by local nonprofit agencies.

The 22 million hours of service provided annually by Foster Grandparents was worth over $286 million, according to a study by the Independent Sector. This represented more than a four-fold return on the federal dollars invested in these projects.

NATIONAL PROFILE OF FOSTER GRANDPARENT VOLUNTEERS

Characteristics	Percent (%)
Distribution by Gender:	
Female	90%
Male	10%
Distribution by Age:	
60 - 69 years	34%
70 - 79 years	50%
80 - 89 years	12%
85 and over	4%
Distribution by Ethnicity:	
White	47%
African American	37%
Hispanic/Latino	11%
Asian/Pacific Islander	3%
American Indian/Alaskan Native	3%
Population Served	
Urban	60%
Rural	40%

The federal cost of a Foster Grandparent serving 20 a week is $3,670 annually

FOSTER GRANDPARENT PROJECT EXAMPLES

Home-Based Support for Families of Raising Children with Developmental Disabilities
FGP of Corpus Chrisit, Texas

The "Little Hands-Big Hearts" project is a collaborative effort launched by the Corpus Christi Foster Grandparents and the Nueces County Mental Health/Mental Retardation Community Center to promote permanency planning as an alternative to institutionalization for children with developmental disabilities.

Eight Foster Grandparents helped ten families care for their developmentally disabled children at home while maintaining a well-functioning household. The Grandparents accompanied the children to day care centers, occupational and speech therapy classes, and school and family outings.

The families testified that without the services of the Foster Grandparents, institutional care would have been their only alternative -- particularly for single parents. As a result of the success experienced, each family asked for a continued commitment from their Foster Grandparent.

FOSTER GRANDPARENT PROJECT EXAMPLES (Continued)

Helping Homeless Youth
FGP of Fresno County - Fresno, California

At the Sanctuary Shelter for homeless and runaway youth, four to six Foster Grandparents assisted young people, ages 11-17, during each two week period they live at the shelter. Foster Grandparents also served youth in the Sanctuary's Community Center. During their 20 hours of service each week, the goal of the Foster Grandparents was to tear down barriers that prevented the youth from communicating with teachers, families and other authority figures. On average, the Sanctuary serves a total of 1,000 youth annually, and has come to rely on the Foster Grandparents as a source of extra attention, support and nurturance that makes a difference for so many of the young clients.

Helping Vulnerable Families Remain Together
FGP of San Antonio - San Antonio, Texas

Thirteen Foster Grandparents served through the Texas Department of Protective Services, assisting entire families with histories of severe child neglect. The Foster Grandparents provided their services in the family homes, and took on a range of activities designed to promote stability and safety for the children. The Foster Grandparents conducted parenting, safety and nutrition sessions. They also helped mothers learn necessary housekeeping skills, coping skills, as well as child development lessons. Five Foster Grandparents served children of battered women or children with mothers who are HIV/AIDS positive. The Grandparents served as positive role models to the children, and helped to provide the services that many of the mothers are unable to offer, due to health or safety concerns.

Academic Tutoring for Students in Need of Extra Assistance
Wind River Reservation, Wyoming

The Wind River Native American Reservation is the third largest in the country. Its school district has the highest school drop out rate of any district in the state. From 1985-1994, scores on the California Achievement Test (CAT) steadily declined among elementary school students. To reverse this trend, Foster Grandparents tutored more than 200 children through the Help One Student to Succeed Program (HOSTS). The program involved the Grandparents on a one-to-one basis with students who tested at least one grade level below their peers. Five Foster Grandparents spent a total of 100 hours a week tutoring the children in reading and writing.

The 1995 CAT data showed that, as a result of this program, the school had achieved a 41 percent gain on the CAT compared with a national average gain of 4 percent. HOST program administrators attribute the success, in large measure, to the services of the Foster Grandparents.

SENIOR COMPANION PROGRAM

Program Overview

In fiscal year 1996, almost **12,000 Senior Companion volunteers** served **40,000 frail older persons.**

The Senior Companion Program awarded funds to its first projects in August 1974. This program recruits low-income persons age 60 and over to provide assistance and friendship to frail adults, mostly the elderly who are homebound and living alone. The services Senior Companions provide help others to live independently in their own homes instead of moving to expensive institutional care. Senior Companions also provide respite care for short periods of time to relieve live-in caretakers.

By assisting clients with simple chores, providing transportation to medical appointments, and offering needed contact to the outside world, Senior Companions often provide the supportive services that the frail need to continue to live independently. Because Senior Companions spend significant amounts of time with their clients, they are often a critical part of the client's "care team." Senior Companions alert doctors and family members of potential health problems, allowing them to provide immediate care to the client.

Senior Companions serve three to four clients in an average week, predominately in the clients' own homes. Community organizations that address health needs of the elderly such as home health care agencies, hospitals, or centers on aging serve as volunteer stations. These organizations identify individuals who need assistance and then work with Senior Companion projects to match them with available Senior Companions.

Like Foster Grandparents, Senior Companions serve 20 hours per week. They also receive pre-service orientation, training throughout
their service, and a modest stipend to offset the cost of volunteering. They are provided transportation, some meals during service, an annual physical, and accident and liability insurance while on duty.

Compared with the average cost of nursing home care, which exceeds $38,000 annually, the annual cost for Senior Companion services is $3,850. This is a very cost-effective way to provide supportive services to an average of five frail adults per Senior Companion, who might otherwise be at risk for premature institutionalization.

Non-Federal Support and Return on Federal Investment

In 1996, almost 12,000 Senior Companions served almost 40,000 frail adults annually through 191 projects sponsored by local public and private nonprofit agencies. These projects are jointly funded by the federal government, state and local governments, and the private sector. The federal budget for Senior Companions was $31 million in fiscal year 1996. The non-federal local contribution to these projects was $18.8 million. This non-federal contribution represented a match

of 61 percent, or 61 cents for every federal dollar invested – well above the 10 percent match required by law.

In fiscal year 1996, the 12 million hours of service provided annually by Senior Companions was estimated to be worth $150 million, according to a study by the Independent Sector. This represents almost a five-fold return on the federal dollars invested in the program.

NATIONAL PROFILE OF SENIOR COMPANION VOLUNTEERS

Characteristics	Percent (%)
Distribution by Gender:	
Female	86%
Male	14%
Distribution by Age:	
60 - 69 years	37%
70 - 79 years	50%
80 - 89 years	10%
85 and over	3%
Distribution by Ethnicity:	
White	51%
African American	32%
Hispanic/Latino	11%
Asian/Pacific Islander	4%
American Indian/Alaskan Native	3%
Population Served	
Urban	63%
Rural	37%
The federal cost of a Senior Companion serving 20 a week is $3,850 annually	

SENIOR COMPANION PROJECT EXAMPLES

Preventing Isolation and Loneliness in Homebound Older Persons
Boston Senior Companions – Boston, Massachusetts

Throughout 1996, an 88-year-old Cape Verdean Senior Companion visited an 87-year-old homebound senior every week - a relationship that continues to this day. The match is nearly perfect. The client lives alone, is asthmatic, and on a respiratory machine. He recently had surgery that makes it difficult to maneuver physically. The visiting nurse provides home health services that he requires, and the Senior Companion offers the socialization necessary to prevent isolation. A unique aspect of this partnership is the fact that both the client and the Companion speak the same language and are from the same culture. On a recent home assessment visit, the client expressed his gratitude for the Companion, saying that his children are not able to give him the attention he needs, but the Companion is kind, gentle, and has the time to spend with him.

SENIOR COMPANION PROJECT EXAMPLES (Continued)

Providing Respite to Caregivers
Fort Hays Senior Companions - Hays, Kansas

Fort Hays Senior Companions are meeting an increasing need for respite care by relieving family caregivers of Alzheimer's patients who are often on the verge of "burn out." Twenty-two Senior Companions provided more than 23,000 of services to thirty-one families in 1996. The time that Companions spend with the frail family members allows caregivers to run errands, tend to personal business, or merely have the opportunity to refresh and visit friends or spend quiet time. The population of seniors ages 85 and over is the fastest growing segment of the older adult population, and over 80 percent rely on family and friends for non-medical supportive services. Senior Companions become a lifeline to helping families deal with the pressures, demands and stresses of daily caregiving – a service that will only expand in the future.

Expanding Services Available in Residential Long-Term Care Facilities
Wages SCP - Goldsboro, North Carolina

The staff at the Brain Center in Goldsboro, NC implemented a program that allows six residents with Alzheimer's Disease to eat lunch in the main dining room, rather than in the Alzheimer's Unit. This program was credited to the four Senior Companions who serve at the center. The Companions helped residents set up their lunch trays, encouraged them to eat, and monitored their wandering behavior. After lunch, the Companions walked the residents back to their unit. The program gives Alzheimer's residents a change of environment, exercise, and social interaction with other residents. The nursing staff normally assigned to these duties are able to spend more time and give individualized attention to other residents who need more care.

Offering Flexibility and Service Options to Meet the Needs of Clients
Central West Virginia SCP - Buckhannon, West Virginia

The Central West Virginia SCP implemented a flex time schedule for five Senior Companions, enabling the SCP staff to target individual needs of clients. Senior Companions typically serve four hours a day, five days a week. In this project, however, Senior Companions in respite settings are assigned for five-hour time frames to enable the caregiver time to go to medical appointments and/or attend to other activities that require more than four hours to complete. Several short-term emergency needs arose in which a Senior Companion was needed for six hour a day. In one case, a client released from the hospital needed someone to check on her every day for a period of several weeks. The Companion assigned to clients in the same senior high rise housing building was able to make schedule adjustments. Senior Companions maintain a 20-hour service week, but the availability of flex time scheduling allows better service to special needs of clients.

Serving Frail Tribal Elders on Native American Reservations
Great Lakes Inter-Tribal Council SCP - Lac Du Flambeau, Wisconsin

All forty-one Senior Companions serving at the Great Lakes Inter-Tribal Council Senior Companion Program are Native Americans who serve other Native Americans on reservations. Senior Companions work to delay or prevent premature institutionalization of Native American elders and provide supportive services to elders who are terminally ill. The average annual cost of one Senior Companion is approximately $3,850 - while the average cost for one year of residential long-term care is $38,000. Each Senior Companion served three clients, and provides services that are unduplicated and desperately needed in the communities they serve.

RETIRED AND SENIOR VOLUNTEER PROGRAM (RSVP)

Program Overview

The Retired and Senior Volunteer Program (RSVP) was launched in 1971. RSVP matches the personal interests and skills of seniors age 55 and older with opportunities to help solve the problems in their communities and meet the needs of their fellow citizens. RSVP volunteers choose how and where they want to serve -- from a few to over 40 hours a week in a wide range of community organizations such as hospitals, youth recreation centers, schools, and local police stations.

In fiscal year 1996, **RSVP volunteers** assisted almost **300,000 families** and **108,000 patients** receiving health care support and helped to prepare and deliver over **23 million meals** to homebound neighbors, homeless individuals, or victims of disasters.

RSVP volunteers provide hundreds of community services. They tutor at-risk youth, computerize information systems for community health organizations, get children immunized, teach parenting skills to teen parents, provide respite care for caregivers of Alzheimer's victims, establish neighborhood watch groups, plan community gardens, and a myriad of other community services. Through such efforts, RSVP is meeting community needs that strained local budgets cannot afford to address.

In 1996, over 450,000 RSVP volunteers served through 757 projects sponsored by local public and private nonprofit agencies. RSVP volunteers contributed approximately 85 million hours of service to their communities annually in approximately 1,400 counties nationwide.

RSVP projects are jointly funded by the federal government, state and local governments, and the private sector. RSVP's federal budget was $34.3 million in fiscal year 1996. The non-federal local contribution to RSVP projects was $38.9 million, demonstrating broad support for RSVP across the country. For every federal dollar invested, $1.13 was matched from non-federal sources in 1996.

Of the combined RSVP cost, federal funding provided 47 percent, while 53 percent of the costs were borne by local funding sources, including 28 percent from the private and philanthropic sectors.

According to the study conducted by the Independent Sector, the 85 million hours of service provided annually by RSVP volunteers had an estimated worth of over $1 billion. This represented approximately a 30-fold return on the federal dollars invested in RSVP.

NATIONAL PROFILE OF RSVP VOLUNTEERS

Characteristics	Percent (%)
Distribution by Gender:	
Female	75%
Male	25%
Distribution by Age:	
55 - 59	4%
60 - 69 years	27%
70 - 79 years	46%
80 - 89 years	15%
85 and over	8%
Distribution by Ethnicity:	
White	85%
African American	9%
Hispanic/Latino	4%
Asian/Pacific Islander	1%
American Indian/Alaskan Native	1%
Population Served	
Urban	54%
Rural	46%

The federal cost of an RSVP volunteer serving is approximately 40 cents per hour of service

RSVP PROJECT EXAMPLES

Supporting Education
Humboldt-Del Norte RSVP - Eureka, California

The Humboldt-Del Norte RSVP involved its volunteers in three roles to support elementary and special education: in-class volunteers, resource speakers, and pen pals. Sixty-three RSVP volunteers served in 28 school districts, 47 schools and 204 classrooms as teachers' assistants. They primarily tutored children in need of special assistance in reading, writing, and math. Another 177 RSVP volunteers were pen pals to 5th and 6th graders. The letter writing activity promoted written communication skills and intergenerational relationships. Thirty-five volunteers with special expertise (disabilities, wilderness, Native American culture) made 236 presentations to students.

Creating a Safer Environment Through Groundwater Protection
City of El Paso RSVP - El Paso, Texas

Two dozen RSVP volunteers in El Paso, Texas, spent more than 700 hours identifying 2,000 potential sources of groundwater contamination around 140 community water supply wells, including underground storage tanks and septic systems. They also identified 19 abandoned wells, with contributions saving the state an estimated $35,000. Volunteers also created and continue to serve on a standing advisory committee to protect the community's groundwater supply.

RETIRED AND SENIOR VOLUNTEER PROGRAM (RSVP)
PROJECT EXAMPLES (Continued)

Helping to Keep Communities Safe
RSVP of Brevard County - Cocoa, Florida

Brevard County, a narrow strip of land along Florida's Atlantic coast, experienced a 42 percent growth in population during the 1980s. The local police departments were faced with diminishing resources and a growing population, a combination that resulted in increased crime and decreased community safety. The population of older persons increased 92 percent during the same time period. RSVP of Brevard County implemented the "Citizen Observer Program" (COP) in partnership with two police departments – which resulted in Brevard's first ever citizen patrol volunteers. The volunteers patrolled a large recreational park, partly by boat and partly on foot. They were trained in first aid, CPR and rescue procedures. Thanks to their efforts, auto burglaries decreased significantly in the patrol area in the first year. In nearby Titusville, a business watch was formed by local businesses and COP/RSVP volunteers. The volunteers patrolled late at night and early in the morning alongside local business owners. Times varies to prevent a pattern from emerging. The result – drastically decreased numbers of burglaries and fewer petty crimes in the early morning hours, according to Community Services Office Melissa Otto. A total of 158 RSVP volunteers have served in citizen patrol programs in Brevard County, and have contributed more than 20,000 hours to the safety of their communities.

Connecting Young and Old Through Summer Education and Enrichment
RSVP of the Capital Region, Inc. - Harrisburg, Pennsylvania

"Summer Horizons," an intergenerational summer education program for at-risk middle school youth, began in 1993 as a demonstration project. RSVP of the Capital Region worked with more than a dozen community partners to create enriching alternatives to unstructured summer vacation - a time when too many Harrisburg middle-school students became "lost" and disenchanted with school. "Summer Horizons 1996" brought more than 35 middle school students from 3 public school districts together with 30-35 RSVP volunteers for a five week program packed with educational experiences and opportunities. Community partners provided space, classrooms, instructors, transportation, meals, field trip guides, counselors, and professionals for a structured program of literacy, art, science, history and self-exploration. The relationships that developed between the students and the RSVP volunteers created intergenerational bonds, awareness across the generations, new friendships, and role models. RSVP also facilitated "carryover" opportunities for the school year, with RSVP volunteers serving as mentors to the students. During 1993-1996, "Summer Horizons" created opportunities for more than 100 middle-school students to experience summer as a time of learning and adventure.

Building Affordable Housing
RSVP of West Central Minnesota - Elbow Lake, Minnesota

One low-income family of four was presented the keys to their new hours in 1996 as the result of the first Habitat for Humanity project in Grant County, Minnesota. Just four RSVP volunteers logged more than 700 hours to complete the project. One served as the building coordinator, contacting contractors and suppliers to obtain no-cost or discounted labor and materials, supervising dozens of Habitat volunteers on the actual construction, and lending his own carpentry skills. Two other RSVP volunteers helped on the construction phase, while a fourth scheduled and supervised community groups that served the work group lunches during the construction.

Helping Juvenile Offenders Learn From Mistakes
Harvey County RSVP, Newton, Kansas

RSVP and the Offender/\Victim Ministries of Newton have experienced dramatic results preventing juvenile first-time shoplifters from repeating their actions. Success, in part, is attributed to the ages of the RSVP volunteers. It is also attributed to the fact that each RSVP volunteers meets with both t he juvenile offender and his/her family for an intensive 90-day program. The RSVP volunteers hosted a series of meeting during which parents discussed their reactions to the child's crime. In turn, the children explained why they shoplifted or were involved in other illegal activities. Their actions were also discussed in group settings where grocers, shop owners, and other professionals were asked to share their thoughts on the impact of crime on the community. A collective outing to the scene of each crime was then coordinated by each volunteer to give the children the opportunity to apologize to their victims. Only 15 percent of the 500 young shoplifters who have been helped through this collaboration in the past 10 years have been arrested again.

ITEM 17—ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL PROTECTION AGENCY—SENIOR ENVIRONMENTAL EMPLOYMENT (SEE) PROGRAM

The SEE Program was established by the Environmental Programs Assistance Act, P.L. 98–313. This law authorizes EPA to enter into grants or cooperative agreements with organizations authorized by the Secretary of Labor under Title V of the Older Americans Act. The EPA funded cooperative agreements with six national aging organizations during calendar years 1995 and 1996 that included the American Association of Retired Persons, National Council on the Aging, National Caucus and Center on Black Aged, Inc., National Association for Hispanic Elderly, National Senior Citizens Education and Research Center, and the National Asian Pacific Center on Aging.

The SEE Program draws upon the vast pool of talent, experience and skills possessed by retired and older workers age 55 or older. The Program has two major benefits, to support the Environmental Protection Agency (EPA) staff in administering projects necessary for the support of environmental programs and to give older workers an opportunity to remain active using their matured skills in meaningful tasks.

SEE enrollees performed a wide range of technical assistance for EPA from answering telephones to performing clerical support to providing assistance in radiation and air pollution monitoring. No matter what is the critical environmental concern of the day, from understanding and explaining in a credible manner the analyzed data of nearby toxic substance exposures to local citizens or providing the temporary technical talent of local monitors to spot check underground storage tanks, the SEE program provides support where it is most needed. The work being done by the many SEE participants demonstrates the effectiveness of older Americans in helping to prevent, abate and control environmental pollution.

SEE Program participants work in one year temporary positions at EPA Headquarters offices, ten EPA Regional offices, EPA Laboratories, and in other federal, state, and local environmental offices. The utilization of the SEE Program offers EPA a golden opportunity for achieving the environmental challenges of today.

ITEM 18—EQUAL EMPLOYMENT OPPORTUNITY COMMISSION

FY 1995 Annual Report

Office of Program Operations



U. S. Equal Employment Opportunity Commission

INTRODUCTION

FY 1995 was a year of major change for the Equal Employment Opportunity Commission (EEOC). The Commission adopted Priority Charge Handling Procedures that initiated significant new approaches in the Agency's charge resolution process. The revised policies and procedures, coupled with a National Enforcement Plan to be implemented in FY 1996, provided a new direction for the overall framework for field office operations. During the latter part of FY 1995, with greater discretion in carrying out enforcement activities, field offices began to employ more flexible charge resolution methods and to operate more independently. The Office of Program Operations (OPO) worked in concert with field offices to streamline their operating systems and procedures, and to enhance the new multi-faceted charge resolution approach.

During FY 1995, OPO headquarters redefined its role to better augment field office operations. The new OPO headquarters role places greater emphasis on providing technical assistance and support to field office operations, including coordination of activities across field office jurisdictions, proactive problem-solving, and maximizing resource use to meet the challenge of managing large and complex workloads with reduced budgets.

Through its headquarters program components and the field offices, OPO ensures that EEOC's charge resolution mission is accomplished in accordance with the Agency's legislative mandate and mission statement. The Director of the Office reports to the Chairman, providing direction and overall supervisory, managerial and fiscal responsibility for all OPO activities. At headquarters, the Director carries out the mission of OPO with an organization consisting of four staffed program areas and an administrative unit. OPO field staff conduct EEOC law enforcement activities in 50 offices - 24 district offices, the Washington, D.C. field office and 25 area and local offices.

In FY 1995, largely as a result of the changes in charge handling procedures discussed above, charge receipts declined for the first time since FY 1989. Charge resolutions were the highest annual total in the Agency's history. As a result, the Agency's pending inventory increased only one percent over the previous year, reversing the trend of the previous four-year period when the pending inventory increased, cumulatively by 112.1 percent. In addition, field offices continued their efforts to provide education, technical assistance and outreach to a large number of employers and to a broad range of protected groups.

This report contains information on specific OPO activities and accomplishments during FY 1995 and is divided into *six sections*:

- ***FY 1995 Highlights.*** Graphics and information on major OPO accomplishments during the fiscal year.
- ***Overview of the Office of Program Operations.*** The mission, functions, and organization of OPO headquarters and field offices.
- ***Organization.*** Headquarters OPO organizational chart.
- ***Program Accomplishments.*** Details on FY 1995 achievements and enhancements.
- ***Outreach, Technical Assistance and Education.*** A description of OPO efforts to increase public awareness of EEOC's mission.
- ***Data Table Appendix.*** Agency statistics on charge/complaint performance trends.

OFFICE OF PROGRAM OPERATIONS

SIGNIFICANT ACCOMPLISHMENTS

FY 1996

ORGANIZATION OVERVIEW

Office of Program Operations (OPO)

OPO administers the Agency's administrative enforcement programs and is responsible for the resolution of charges and complaints of employment discrimination filed under Title VII of the Civil Rights Act of 1964, as amended; the Age Discrimination in Employment Act (ADEA) of 1967, as amended; the Equal Pay Act of 1963 (EPA); and the Americans With Disabilities Act (ADA) of 1990. OPO is organized in four program areas and an administrative staff.

Office of the Director (OD)

OD provides overall direction, coordination, leadership, and administrative support to OPO program areas, retains overall supervisory and fiscal responsibility for OPO.

Field Management Programs (East and West) (FMP)

FMP provides guidance and technical assistance for the 50 field offices on all aspects of field operations and management activities and is responsible for field offices operations. FMP is the primary liaison with field staff in coordinating activities and problem-solving situations with other headquarters offices. In providing assistance to the field offices, FMP conducts regular on-site visits to assess field operations, provides feedback and gives technical assistance when needed. Each field office, assigned a jurisdiction with specific geographic boundaries, is charged with accomplishing the statutory enforcement responsibilities of the Commission through investigation and resolution of charges filed within its jurisdiction. Field offices are also responsible for conducting education and outreach activities and maintaining the deferral relationship with State and local FEP agencies. District offices also conduct hearings to adjudicate EEO complaints against Federal agencies and implement the Federal affirmative action program.

Systemic Investigations and Review Programs (SIRP)

SIRP initiates, investigates and resolves those systemic and limited scope charges brought by the Commission which are investigated in Headquarters. Generally, the systemic docket consists of charges filed by Commissioners against a diverse assortment of industries.

Charge Resolution and Review Program (CRRP)

CRRP conducts activities intended to strengthen the EEOC's administrative enforcement process and the agency's partnership with State and Local Fair Employment Practices Agencies (FEPAs) and Tribal Employment Rights Organizations (TEROs); serves as liaison between FEPAs and EEOC on policy and procedural issues, provides oversight for FEPA worksharing agreements and charge resolution contracts; certifies FEPA 706 Agency status; and provides training for both TERO and FEP agency personnel. Also, investigates charges transferred from field offices in order to alleviate the field office workload.

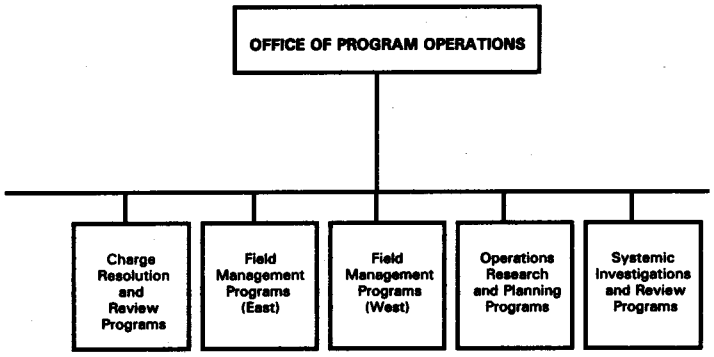
Operations Research and Planning Programs (ORPP)

ORPP produces summary statistical reports of data required by OPO in planning and carrying out its functions; designs and conducts national surveys of employment sector data; analyzes data from employment sectors and from OPO field and headquarters offices and produces research and analytical reports; conducts reviews and issues reports on effective field office investigative strategies; provides investigative support and analytic services to field offices in the investigation of class and pattern and practice investigations; and provides long- and short-range planning systems from which decisions regarding operational plans and goals, and workload distribution may be made.

Administrative Support Services Staff (ADM)

ADM provides administrative and technical support services to all OPO components; and in addition, conducts comparative analyses of financial transactions and monitors their impact on budget allocations, and administers the OPO management reporting system.

ORGANIZATION



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inventory was reduced by 13,076 charges or 11.7 percent from the 111,345 charges pending as of June 30, 1995.

The field offices resolved 91,896 charges in FY 1995, 20,319 or 28.4 percent more charges than in FY 1994. The average charge resolution activity level for each field office investigator increased by 23.5 percent over the previous year -- from 97.8 to 120.8. The following table shows significant trends that were developing at the end of the fiscal year.

	FY 1991	FY 1992	FY 1993	FY 1994	FY 1995	
					6/30/95	9/30/95
RECEIPTS	63,836	72,096	87,842	91,185	67,273	87,608
RESOLUTIONS	64,028	68,278	71,704	71,577	56,578	91,896
AVG. RESOLUTIONS/ STAFF AVAIL	88.1	92.7	97.1	97.8	98.2	120.8
STAFF AVAILABLE	727.1	736.3	738.3	732.1	767.8	760.9
PENDING	45,717	52,856	73,124	96,945	111,345	98,269
AVG. CASELOAD/ STAFF AVAIL	62.9	71.8	99.0	132.4	145.0	129.1

Individual District Office Achievements. Highlighted below are some significant OPO field office accomplishments from FY 1994 to FY 1995:

- Charge receipts declined in 18 of 25 districts.
- Resolutions increased in 24 districts.
- Average charge resolution activity level per investigator available increased in 24 districts.
- In 11 districts total monetary benefits paid to aggrieved individuals increased.
- In 14 districts the average monetary benefits paid to aggrieved individuals increased.

Charge Resolution Activity. Below is a summary of FY 1996 charge resolution activity.

Merit Resolutions. The number of charges resolved as merit resolutions declined slightly from FY 1994 to FY 1995, from 11,215 such resolutions to 10,958. Merit resolutions are charges with outcomes favorable to charging parties and/or charges with meritorious allegations. They include successful and unsuccessful conciliations, negotiated settlements, and withdrawals with benefits. Merit resolution activity in FY 1995 is discussed in more detail below.

Reasonable Cause Resolutions. During FY 1995, the number of reasonable cause resolutions increased by 152 from 1,928 in FY 1994 to 2,080. The total number of resolutions increased with emphasis on weeding out non-meritorious charges as quickly as possible, therefore the agency experienced a decrease in the relative percentage of reasonable cause resolutions. Of additional interest is the fact that 2,664 cause findings -- made prior to final resolution (conciliation) of charges -- were issued during FY 1995. This is 33.6 percent greater than the 1,994 issued in FY 1994. During the last three months of FY 1995, field offices were using the new procedures to identify and focus resources on charges that were likely to result in cause findings, such as allocating staff to specific units or special teams to provide expedited processing of potential cause cases.

Settlements. Another indicator of positive outcomes for charging parties are settlements negotiated by the Commission which provide benefits for charging parties. In FY 1995, 3,840 charges were resolved through settlement agreements. It is anticipated that the number of settlements will rise as the new priority charge handling procedures identify more vehicles appropriate for this type of resolution and as staff receive more training in settlement techniques.

Withdrawals with Benefits. Charging parties may reach agreements with their employers independently of the Agency. As a result, the charging party will withdraw the charge in return for either monetary or non-monetary benefits. In FY 1995, 5,038 resolutions or 5.5 percent of all charges were resolved in this manner, a decline from the 5,248 charges resolved in this manner in FY 1994.

Benefits to Charging Parties. In FY 1995, $133,922,559 in monetary benefits was obtained for over 8,500 charging parties, a 4.9 percent decrease from enforcement benefits secured in FY 1994. This comparative decrease resulted

from several large ADEA cases with multiple charges parties that were resolved during FY 1994 that caused the monetary benefits for that year to exceed the average benefits for the previous five years ($123.9 million). When benefits gained from Commissioner charge processing were added to enforcement benefits, total monetary benefits of $135,955,776 were secured for 9,030 individuals at an average of $15,056 per person in FY 1995. While total monetary benefits declined by 7.1 percent from $146.3 million in FY 1994 to $135.9 million in FY 1995, average monetary benefits increased by 37.5 percent from $10,948 per person in FY 1994 to 15, 056 in FY 1995. In addition, 2,532 individuals received non-monetary benefits during FY 1995. Benefits include backpay or other monetary awards as well as non-monetary benefits such as training or changes in policy which affect protected groups.

Charge Resolutions by District. The following is a sample of charges resolved by EEOC district, area, and local offices in FY 1995. This sample reflects a broad range of the bases and issues present in EEOC's workload. Field offices used innovative strategies and techniques in the investigation and resolution of these charges. The resolutions cited below include pre-determination settlement agreements as well as post-determination conciliation agreements and consent decrees. They address some novel issues, provide for the adoption of non-discriminatory employment policies and practices, and/or include substantial monetary and non-monetary benefits for aggrieved individuals.

The ***Albuquerque District Office*** settled a charge for $91,000 in which the charging party alleged sexual harassment and retaliation for having complained about sexual comments made on a daily basis. As a result of the hostile environment, the charging party took a six-month medical leave of absence. EEOC intervened and the charging party remained in a paid status. In addition, the settlement agreement provided for backpay, payment of over $70,000 in medical benefits, and expunging all references to having filed the charge from the charging party's file. The charging party remained employed with the company.

The ***Atlanta District Office*** successfully negotiated a settlement agreement with a major city government in which the charging party raised allegations of sexual harassment. The settlement resulted in the charging party receiving $70,000 in compensatory damages, reassignment to a comparable position with equal wages, and appropriate training with no new probationary period required. The agreement also stipulated that the city's entire workforce will receive training on the employer's sexual harassment policy.

The ***Baltimore District Office*** successfully settled a charge in which the charging party, a nurse, alleged she was harassed because of her national origin. The charging party requested and received a notice of right to sue and filed in Federal district court. While still working for the employer hospital, she filed a second charge alleging retaliation. Both cases were successfully settled by an investigator during a factfinding conference. The charging party did not want to continue employment and the employer accepted her resignation. She received one year's salary of $41,558, career counseling through an independent consultant group for eight months, expungement of her records, attorney fees of $3,500, a positive letter of recommendation and references, tuition-free nursing courses, and consideration for future employment with the employer's other facilities after one year.

In a Title VII/ADEA charge resolved by the ***Birmingham District Office***, the charging party alleged that because of his race and age, he was laid off and not recalled. The charging party had been an employee of the company for 28 years. The settlement was obtained within six months of filing, and included $100,000 in benefits for the charging party and $2,000 in attorney fees.

The ***Charlotte District Office*** resolved a Title VII charge filed on the basis of race by a supervisory employee of a knitting mill and clothing manufacturer. The charging party alleged that his was the only supervisory position eliminated, and added that he was discharged on the day his employer was purchased by a successor company. This charge resolution resulted in a determination of reasonable cause that was conciliated for $21,252 in backpay and compensatory damages. The company also agreed to post notices of non-discrimination on all employee bulletin boards.

As the result of an ADEA directed investigation, the ***Chicago District Office*** brought an employer and union into compliance with the law. A provision in the collective bargaining agreement prohibited employees age 65 and older from accruing sick leave. Five affected class members received relief, including restoration of deferred accumulated sick leave amounts ranging from 44 to 421 hours. One class member received $4,530 in lieu of sick leave, and one other class member received an extension of his retirement date. The discriminatory policy was removed and the collective bargaining agreement was amended accordingly.

The ***Cleveland District Office*** successfully conciliated sexual harassment charges filed against a local university. Three charging parties each received $80,000 in compensatory and punitive damages, and one charging party received $48,000 in punitive damages only. In addition, the employer agreed to develop a committee to report and act on all sexual harassment complaints, to change the policy to allow complaints of sexual harassment to be reported to the Vice President of Student Development as well as to the Office of Affirmative Action, and to conduct sexual harassment training for all administrators, faculty, and student employees.

The ***Dallas District Office*** successfully settled a Title VII charge in which the employer allegedly discriminated against employees in working conditions and wages because of their national origin. A settlement agreement was obtained from the company and the union. The $45,760 settlement restored several harmed employees to their jobs and every employee of that national origin received backpay and a raise. Over 400 employees in the protected group benefitted from the remedy.

The ***Denver District Office*** resolved an ADA charge that alleged failure to hire because of deafness. The investigation established that the charging party was denied the right to apply for employment with the employer, a grocery store. The case was successfully conciliated for $30,000 in damages. The charging party declined the employer's job offer. In addition, the employer agreed to reaffirm its policies prohibiting discrimination because of disability; to provide training for all managers and supervisors; to post a notice of EEOC's finding; and to report semi-annually on any complaints of disability-based discrimination and the results of its investigations.

The ***Detroit District Office*** resolved a charge brought under Title VII by a charging party who alleged that she was replaced as a training instructor by a less qualified individual of another race. Through a factfinding conference, the charge was settled for $19,337 in backpay, a pay increase of $317 per week, rightful place in seniority, and reinstatement of all benefits.

The ***Houston District Office*** expanded a Title VII and ADEA charge filed against a state university by a woman who alleged that females were continually classified in a lower job category than males because of their sex and age. During the investigation, the district office identified other females who were also denied promotions. The investigation showed that females were classified as Custodian I workers, regardless of related experience, while men were classified as Custodian II workers largely without relevant experience. Females were also "chilled" from applying for promotion due to statements made by supervisors. Age was determined not to be a factor in the case. The case was settled for $97,000 in total monetary awards, which included backpay and salary adjustments for 16 females. Also, the job classification system was revised with appropriate pay grades.

In a charge filed under the ADEA with the ***Indianapolis District Office***, six charging parties alleged that, because of their age, they were selected for a Reduction In Force by a committee composed of three members that were not in the protected age group. After a preliminary on-site investigation, a 7(d) conciliation conference was held, and the charge was conciliated for $79,000 for the six charging parties. The district office reported that successful conciliation of this charge was facilitated by the face-to-face conference.

The ***Los Angeles District Office*** resolved a race and sex based charge filed by a woman against a major aerospace government contractor. The charging party alleged that she was laid off in 1991 and replaced by a male of another race who sat at her work station and assumed her duties. The investigation proved the allegations to be true and the employer conciliated the charge for $125,948 (which included three and one-half years backpay and one year of front pay).

In a charge filed under the ADA and resolved by the ***Memphis District Office***, the charging party alleged that he was denied a reasonable accommodation in the testing process and that the employer, a state Agency, asked unlawful pre-offer questions on its application. The employer administers personnel activities for the state, including testing job applicants and preparing registers of eligible candidates. The charging party alleged that he was denied the use of a large-print format of a written test for various positions despite his severe visual impairment. Additionally, the employer's application asked for self-identification of disabilities without stating a reason for collecting such information. The district office successfully conciliated the charge and required the employer to provide for large-print tests or use of equipment to enlarge print. In addition, the employer's application form was modified to comply with the ADA. The impact of this conciliation agreement was state-wide and now allows people with visual disabilities to compete for state government jobs.

The ***Miami District Office*** resolved a charge filed against an airline services company by 14 workers who alleged they were laid off and not rehired because of their national origin. The charging parties did not speak English and their attorney could not communicate with them in their language. The investigator had correspondence to the charging parties translated into their language by the office translator who also interpreted at subsequent meetings with all the charging parties present. Under the terms of the negotiated settlement agreement 11 charging parties were rehired; one withdrew the charge with a monetary settlement, one received a monetary settlement, and one failed to cooperate with the Agency's efforts. Monetary benefits totaling $115,086 were obtained for the charging parties.

In a Title VII charge resolved by the ***Minneapolis Area Office*** in the ***Milwaukee District***, the charging party alleged that the employer, a fast food restaurant chain, retaliated against him for participating as a witness in another Title VII investigation. The charging party also alleged that he was told not to hire certain applicants because of their race. Evidence substantiated both allegations, and the charge was conciliated with the following agreement: the employer would advertise and recruit from minority areas in Minneapolis, the employer would establish a program in a community college having a significant minority student population that would support the school's curriculum development activities, provide students with jobs, provide introductory managerial assignments, and provide graduates with job placement. The employer also agreed to participate in minority job fairs and secure advertising in job fair brochures, to employ a recruiter in the Minneapolis area to recruit applicants from diverse backgrounds, to employ a training manager in Minneapolis to train employees and work with the recruiter, and to assign mentors to newly hired managers and assistant managers from diverse backgrounds to facilitate their success with the company. In addition, the employer paid the charging party $75,000.

The ***New Orleans District Office*** resolved an ADEA charge filed against a school system and the Teachers Retirement System. It was found that the state established and maintained a retirement system which provided a lower level of benefits to disability retirees over age 60 than to younger disability retirees. In addition, the retirement plan did not allow persons over age 60 on disability to return to full

Teachers Retirement System service, while it did allow persons under 60 on disability retirement to return to such service in violation of the ADEA. The employer's policy impacted 176 potential employers in the state. Although the employer did not conciliate the charge to avoid the potential risk of ADEA directed investigations against 176 employers, the state law, which mandated the illegal retirement provisions, was amended to comply with the ADEA. An independent actuarial firm stated that the prospective value of relief in terms of increased benefits to retirees over age 60 would be $67,965,905.

The ***New York District Office*** legal unit, following a thorough investigation by enforcement staff, settled the largest class sex harassment case in the Agency's history. Three former female employees alleged that they were fired or forced to leave because the head of the company had engaged in a long-standing practice of sexually harassing women who worked for him. The case was assigned to a special team comprised of investigators and attorneys because of the need for close legal/investigative coordination. The case was settled for $1.2 million and received wide media attention.

In a charge filed under the ADA and resolved by the ***Philadelphia District Office***, the charging party alleged that she was forced to take disability leave after she became disabled with a knee injury (off the job) and returned to work with restrictions. The charging party also alleged that the employer, a state Agency, denied her another position which she could perform without an accommodation. A settlement was secured with the following terms: the charging party was reinstated without loss of seniority and received $79,591 for lost wages, received up to $1,600 for medical expenses, was credited with 24 sick days; and had her anniversary date recalculated to place her at the proper step of her salary range.

The ***Phoenix District Office*** resolved a charge in which the charging party alleged, in an ADEA/Title VII charge, that she was refused night shift work and that her hours were subsequently reduced, compelling her to resign. The charging party was a food server and was terminated after two weeks of her four-week notice period. The charging party alleged that after complaining about the night shift denial, the employer, in retaliation, hired young, inexperienced males for the day shift, which further reduced her hours. The investigation substantiated the charging party's allegations and the charge was conciliated for $12,500 (including $7,000 in backpay, $2,000 in interest and $3,500 in compensatory damages). The employer agreed to provide positive employment references for the charging party, update and distribute its employment policies to all employees, and to designate a person to whom employees could take employment discrimination complaints for necessary action. The employer further agreed to provide training on Title VII and the ADEA to employees, to advertise as an EEO employer, to maintain employment applications for one year, and not to segregate its food servers by age or sex.

The ***San Antonio District Office*** investigated a charge brought by a former employee of a major Texas hospital. The charging party alleged that he was discharged because of his race. Through extensive interviewing, the investigator discovered that the hospital had falsified its records, some after receiving notice of the charge, to buttress its discharge decision. The charge was conciliated for $47,500 in lost wages for the charging party.

The ***San Francisco District Office*** resolved a Title VII charge filed by a female who stated that because of her sex she was segregated by the employer (a major fruit and juice packer) into a lower-paying, dead-end job and discharged in retaliation for complaining about the discrimination. The district office found that there was almost 100 percent sex segregation by jobs, with females assigned to the lower paying, dead-end fruit sorter positions. Furthermore, females, unlike males, were unable as a class to obtain more than seasonal work. Complete job segregation was observed during the on-site investigation. A reasonable cause determination was issued, finding job and wage segregation and retaliatory termination resulting from complaints about differential terms and conditions of employment. As a result of the conciliation agreement, the charging party received $28,318 and the company agreed to report on hiring, positions and wages, to advertise positions by internal posting and in newspapers, to offer preferential transfers for qualified females, and to provide training for all employees on the laws administered by EEOC.

A charge filed under Title VII on the basis of race and resolved by the ***Seattle District Office***, alleged that after being hired as a store manager by the employer's local manager, the charging party was discharged by the regional director after two days because of his race. The employer's director, known by others to make racial slurs and to avoid hiring minorities, trained charging party. He subjected the charging party to harassment and ordered the charging party's supervisor to discharge him for failure to keep the store clean and improperly reconciling the cash drawer. Interviews revealed a pattern on the part of the director of making racial slurs, discharging, and generally harassing minorities in his region. The employer, a nationwide automobile service chain, settled the charge with payment of $50,000 to the charging party in compensatory damages and agreed to train all local and regional supervisors and managers on their responsibilities under the statutes enforced by the Commission. The employer also developed a complaint process for all employees, and agreed to post the EEOC notice. The employer will be monitored for compliance for a two-year period.

In a joint effort between enforcement and legal personnel, the ***St. Louis District Office*** secured a Federal district court consent decree against a major aerospace manufacturer providing $976,760 and 20 jobs for 82 claimants who had been discharged on the basis of their race during a layoff. Resolution of the charge was achieved through a high level of cooperation between the enforcement and legal units.

The ***Washington Field Office***, in conjunction with the legal unit in the ***Baltimore District Office***, resolved two sexual

harassment charges for $750,000 against an educational facility. The investigation revealed that a manager engaged in egregious harassment against female employees. When the women complained, they were fired. The settlement provided for the payment of $375,000 to each woman, a two-year injunction against Title VII violations, sexual harassment training for all employees, and a posting of the EEOC notice.

Class Charges. One strategy for increasing the efficiency of charge processing activities is to initiate class charges that target broad-based discriminatory practices. This strategy, designed to raise the level of compliance with Agency statutes in specific industries or jobs having a high incidence of non-compliance, is an essential element of the Agency's charge processing efforts. Among the Charge Processing Task Force recommendations adopted by the Commission in late FY 1995 was one encouraging field offices to expand their investigation of class charges and EEOC-initiated charge activities to include more directed investigations on ADEA and EPA cases. As a result, field offices are now placing a greater priority on these areas. In addition, the Agency streamlined the process by which field offices initiate Commissioner-signed charges under all statutes. Field offices were encouraged to increase the emphasis on investigating charging party-initiated class charges and to broaden their overall efforts to identify and address discrimination in a systematic manner.

Commissioner Charge Activity. Significant resolutions of Commissioner charges in FY 1995 included the following examples:

- The ***Birmingham District Office*** resolved a charge against a food supplier which resulted in $195,000 in backpay to 22 people. In addition, the company agreed to eliminate or otherwise remedy discriminatory recruitment and promotion practices.

- The ***Los Angeles District Office*** negotiated a conciliation agreement against a restaurant where a total of $750,000 in monetary benefits was obtained for 32 people. Backpay was awarded in the amount of $500,000 and the company agreed to provide training that would cost $250,000.

- The ***Memphis District Office*** negotiated a conciliation agreement against an employment Agency where 209 female applicants benefited from a total of $135,000 when the company agreed to change its practices for referring pregnant applicants.

- The ***Miami District Office*** negotiated a settlement against a restaurant where over $250,000 in monetary benefits was obtained for 56 people. The issues were hiring and recruitment for service positions.

- The ***Headquarters Systemic Investigations Division*** negotiated a successful conciliation agreement with an airline, resulting in nearly $400,000 in benefits for applicants rejected for pilot's positions.

Federal Sector Activity

Federal Affirmative Employment. Federal agencies are required to maintain affirmative employment programs and to report to EEOC annually on the status of those programs. Nine District offices have Federal Affirmative Action (FAA) units, which approve and monitor Federal affirmative employment plans, evaluate plan updates and agency accomplishment reports for compliance with EEOC direction, and provide technical assistance to agencies. In FY 1995, 18 on-site reviews at Federal installations were conducted by FAA units.

Hearings. The Federal EEO complaint regulations, 29 C.F.R. Part 1614, provide a complainant the right to request a hearing before EEOC. The Federal EEO hearings process is conducted by EEOC Administrative Judges, who are located nationwide in each EEOC District Office and the Washington Field Office. During FY 1995, the Commission's hearings units nationwide received 10,515 requests for hearings. This was a 1.8 percent decrease from the 10,712 hearing requests received in FY 1994, and the first decline in hearing requests since the implementation of the current employment discrimination regulations in October 1992.

In response to workload growth, OPO redistributed the Hearings workload among the field offices in an effort to maximize resources and resolve Hearings cases more expeditiously. Administrative Judge (AJ) productivity remained close to the record levels seen in the prior two years and the number of AJs available to conduct hearings remained relatively static. Field office Hearings units still received nearly 1,190 more requests for Hearings than were resolved in FY 1995. This difference, led to a 23.0 percent increase in the FY 1995 pending inventory (from 5,177 to 6,367).

Significant Hearings Resolutions. Examples of significant Hearings resolutions follow.

The ***Cleveland District Office*** Hearings unit decided a complaint from the only female security guard at a military base who alleged that she was sexually harassed by a male guard and subsequently became the victim of reprisal after filing an EEO complaint regarding that egregious harassment. The AJ found in the complainant's favor. The agency accepted the AJ's decision, in whole, including the recommendation for compensatory damages. The complainant was awarded $75,000 for emotional pain and suffering and attorney fees. The agency also agreed to provide sexual harassment training for the security force.

The ***Detroit District Office*** Hearings unit decided a case in which a legally blind applicant for employment with a Federal agency was denied a reasonable accommodation to complete the normal application (test) procedures and therefore was denied consideration for employment along with non-disabled applicants. The complainant is able to

read, although slowly, with the use of special glasses and vision aids; however, the agency would not allow her an accommodation in the testing process. The complainant was also told that she would not be considered for hire through the agency's "handicap program" and only the competitive register would be utilized. At the hearing, one agency management official admitted that he rejected non-competitive hiring because the agency had defended against a prior complaint based on disability in 1986. The agency offered no evidence that it could not reasonably accommodate the complainant in the competitive process without incurring undue hardship. Thus, the agency violated the Rehabilitation Act. The AJ also found direct evidence, the management official's statement, that the agency refused to hire the complainant because she is disabled. The relief recommended by the AJ included placing the complainant into a career position with all wages plus interest since November 1993 upon completion of the normal 90 day probationary period. The AJ also found that the agency had a continuing obligation to provide reasonable accommodation that would allow the complainant to perform the essential functions of the job.

The agency was ordered to cease its practice of excluding persons with disabilities from being considered for hiring in the competitive process, the management official was disciplined, management personnel with hiring authority were given training concerning the requirements of hiring persons with disabilities under the Rehabilitation Act, and the agency was required to post a notice indicating the actions it has taken to ensure that such discriminatory conduct will not recur. This resolution is significant in that it not only provided relief for the complainant but ended the agency's policy of excluding persons with disabilities from the competitive hiring process.

The ***New Orleans District Office*** Hearings unit resolved two complaints filed by an auditor for a Federal agency. The complainant alleged initially that she was subjected to discrimination because of her race and sex. In a second complaint, she alleged that she was subjected to harassment and reprisal for having filed the initial complaint. Specifically, she alleged that following the filing of the first complaint, her work was given extra scrutiny including a "second opinion" and she was asked to attend a meeting to evaluate her performance. During that meeting, which lasted several hours and became heated, complainant's EEO activity was mentioned. The day following the meeting, the complainant sought and received medical treatment for depression. Following a two-day hearing, a finding was made in the complainant's favor and equitable relief recommended. The complainant was awarded compensatory damages for the actions of the agency, reasonable attorney fees and costs. The agency was required to train its personnel so as to not interfere with the EEO process by subjecting employees to less favorable treatment because of their EEO activity.

The ***Seattle District Office*** Hearings unit decided a complaint filed by an employee of a Federal agency based on race and national origin in which he alleged that he had been harassed, ultimately causing him to lose his desirable bid position as a bulk mail clerk. Following a hearing, the Administrative Judge issued a bench decision finding that the agency had discriminated against the complainant and found that the complainant was entitled to both equitable relief and compensatory damages. After receiving the AJ's findings and conclusions, the agency settled the case with the following relief: return of the complainant to his bulk mail clerk bid position with unbroken seniority, rescission of disciplinary action the agency had taken against the complainant, restoration of over 200 hours of annual leave and 580 hours of sick leave the complainant used as a result of the harassment, payment of $2,700 to cover out-of-pocket medical expenses, payment of $25,000 for emotional distress, and payment of attorney's fees in the amount of $29,000.

State and Local Fair Employment Practices Agencies (FEPAs)

During FY 1995, FEPAs received 67,080 charges, slightly less than one percent from the 67,393 charges received in FY 1994. Resolutions increased by 3.5 percent from 54,268 in FY 1994 to 56,156 in FY 1995. Although resolutions increased, receipts exceeded resolutions by more than 10,000 charges. The FY 1995 FEPA pending inventory increased by 2.0%, from 82,271 in FY 1994 to 83,888 at the end of FY 1995. Net FEPA transfers (charges transferred to EEOC for investigation) increased by 35.0 percent during FY 1995, from 4,258 in FY 1994 to 5,750 in FY 1995.

Alternative Dispute Resolution

In the area of new initiatives, OPO provided a report to the Commission on the results of its pilot ADR Program conducted in four district offices in FY 1994. In the pilot program, mediation was offered to the parties as an alternative early option for resolving charges of discrimination. The results of the pilot demonstrated that, in appropriate circumstances, mediation could be an effective method of early resolution for some types of charges.

The recommendations of the ADR Task Force, including the findings from the pilot, laid the groundwork for the use of mediation-based ADR in the charge processing system. Existing charge resolution procedures emphasize settlement and conciliation as the preferred methods for resolving charges. The Commission proposed to provide an additional voluntary mediation option, facilitated by a neutral third-party, to promote early dispute resolution where such agreement is possible. The statement stressed the need for flexibility in applying ADR in field offices. Subsequently, OPO issued guidelines for the program and solicited specific proposals from district offices for local implementation of ADR into charge handling procedures. At the end of the fiscal year, proposals submitted by field offices were being evaluated in light of the severe resource constraints and legal limitations on the use of volunteers. The Agency anticipated that if funds were available, offices would contract for both outside mediation services on a case-by-case basis and for ADR training for in-house staff who must transition into managing and utilizing ADR methods.

Surveys Activity

The employment survey data collected by OPO contains employment information on approximately 60.9 million employees--about half of the U.S. workforce. In FY 1995, OPO instituted the use of optical scanners for storing and retrieving the employment data collected in the Commission's national surveys of employment data. This technology substantially reduced the cost of storage and retrieval. In addition, employers are now able to submit their survey data on diskettes or magnetic tape instead of in hard copy formats. This improvement resulted in reduced costs for both employers and the government. Also, in FY 1995, an interactive diskette (which operates on any IBM- compatible personal computer) for the EEO-1 survey which provides cues for employers was piloted for filing employment data, enabling employers to enter the data easily. This innovation will provide further savings. Aggregated data were developed on diskettes and magnetic tapes, enabling the Agency to provide more complete and timely statistics to researchers and other users at minimal cost. In addition, the survey filing requirements for elementary and secondary schools and state and local governments were restructured so that all data requirements were met, but the number of forms filed were reduced by 80 percent. This reduced the cost to reporting employers by more than seven million dollars and reduced the cost to the Commission by $200,000.

Data Analysis and Dissemination

During FY 1995, a variety of data analyses were prepared for use in preparing the Agency budget and for dissemination to headquarters office and field office directors. These analytical reports provided headquarters and field directors with data for addressing workload imbalances and for decision making and planning purposes.

Data Integrity. Each quarter, guidance and computer reports were provided to assist field offices in more accurately reporting charge processing actions. Also, OPO staff performed and coordinated the reconciliation of charge data in the automated and manual reports submitted quarterly by field offices. Summaries of various indicators of data integrity (e.g., missing data fields) were generated from the CDS national data base each quarter and provided to field offices and FEPAs, assisting them in making timely identification and correction of inaccuracies.

Training

During the year, OPO, in conjunction with the Office of General Counsel (OGC) and the National Institute of Occupational Safety and Health (NIOSH), developed a comprehensive training program on the ADA and Ergonomics for EEOC attorneys and investigators. OPO and OGC staff worked together to develop the curriculum and to train investigators and attorneys to deliver the training to the field offices. The training was critical for field office staff who analyze the "essential functions of a job" and reasonable accommodations under the ADA in order to resolve ADA charges. In addition, OPO, in coordination with the Office of Legal Counsel developed ADA Case Studies Training for delivery to all field offices in FY 1996. This training is to provide analysis and discussion of typical disability scenarios to aid investigators in the proper development of such charges. Training in Priority Charge Handling Procedures was developed for delivery in FY 1996. This training included modules on identification and assessment of priority charges as either A, B, or C, settlement techniques, interviewing skills and a refresher on theories.

EDUCATION, TECHNICAL ASSISTANCE AND OUTREACH

In FY 1995, the Commission continued its efforts to enhance public awareness of EEOC and its laws prohibiting employment discrimination. The Commission's education and outreach efforts included Technical Assistance Program Seminars (TAPS) and other appearances in which EEOC representatives addressed members of the public.

Technical Assistance Program Seminars. Under the auspices of the Agency's Education, Technical Assistance and Training Revolving Fund, specialized, in-depth training was provided to employers through Technical Assistance Program Seminars (TAPS). EEOC district office staff conducted 49 TAPS in FY 1995, attended by more than 5,700 managers, human resource specialists, legal and other officials representing private and public employers, unions and other organizations. The seminars provided information regarding rights and obligations under laws enforced by the Commission. Fees paid into the Revolving Fund were used to finance seminar costs. The seminars were highly rated by participants. Some of the seminars were held in previously underserved geographical areas.

Outreach Activities. Outreach activities are defined as public presentations on EEOC policies and procedures made to outside organizations. Extensive education, training and technical assistance to the public on rights and obligations under the laws enforced continued in FY 1995. Field offices reached a large audience with information about EEOC and the laws it enforces through their outreach activities. In FY 1995, Agency staff provided information to almost 65,000 people who attended over 1,100 presentations made in a variety of settings, including workshops, conferences, and on radio and television. Field office representatives made presentations to professional organizations for attorneys, human resources professionals, business owners and other groups (39.8 percent); advocacy groups (15.8 percent); students (13.4 percent); representatives and employees of other Federal and state agencies (19.4 percent); and employers (10.4%).

The topic most often addressed was general EEOC information (62.3 percent). Presentations under this topic included those covering more than one statute, the Civil Rights Act of 1991, and other issues of concern to participants. The ADA was the topic addressed next most frequently (21.8 percent), while sexual harassment was the topic of discussion in 14.1 percent of the presentations. The remainder of the presentations (1.8 percent) concerned specific Title VII and ADEA issues.

EEOC field office staff at all levels participated in these presentations. Of over 1,100 public appearances made, office directors represented EEOC on 191 occasions (17.0 percent); managers and supervisors addressed public gatheringso on 578occasions (51.4 percent); and other staff represented EEOC on 355 occasions (31.6 percent).

Examples of presentations made at the request of outside organizations are provided below:

- A manager in the ***Albuquerque District Office*** delivered a speech on EEOC and the laws it enforces to 150 members of an association for the blind.
- The ***Baltimore District Director*** delivered a speech on EEOC and the laws it enforces to 150 fire fighters.
- A manager in the ***Birmingham District Office*** delivered a speech on sexual harassment to 50 members of an association of women in higher education.
- The ***Dallas District Director*** addressed 150 members of an African-American civil rights organization on the laws enforced by EEOC.
- A ***Houston District Office*** manager spoke to 50 retail automobile parts store managers about the ADA.
- Managers in the ***Miami District Office*** conducted six training sessions on sexual harassment for a municipal county police department.
- A ***New York District Office*** manager spoke to 50 people at a workshop sponsored by an Asian-Pacific American organization about EEOC and the laws it enforces.
- A manager in the ***Philadelphia District Office*** gave a speech on EEOC and the laws it enforces to 400 members of a Puerto Rican advocacy organization.
- A ***San Francisco District Office*** manager spoke to 200 members of an association of counties on the ADA as part of a panel discussion.

Other Presentations/Events. Field offices also initiated other presentations on EEOC matters, made presentations to the public on topics other than EEOC policies and procedures, attended meetings, conferences and other events, and held briefings for members of the public. They reached more than 41,000 people at nearly 900 events or presentations in addition to the nearly 65,000 reached in the outreach presentations discussed above. These presentations were a pa rt of field office efforts to reach underserved constituencies throughout the year. Also, in FY 1995, more than 20 headquarters OPO staff made presentations to a variety of audiences nationwide.

EEOC ADMINISTRATIVE ENFORCEMENT/SYSTEMIC UNITS TOTAL MONETARY BENEFITS

Table 8

	Monetary Benefits and People Benefitted			EEOC Total Monetary Benefits	
Fiscal Year		**Number**	**Change**	**Number**	**Change**
1991	Monetary Benefits (In Thousands)	$88,694	15.1%		
	People Receiving Monetary Benefits	8,946	-9.3%		
	Total Monetary Benefits (In Thousands)			$93,469	14.0%
	Enforcement (In Thousands)			$88,694	15.1%
	Systemic In Thousands)			$4,775	-4.2%
1992	Monetary Benefits (In Thousands)	$112,242	26.5%		
	People Receiving Monetary Benefits	7,991	-10.7%		
	Total Monetary Benefits (In Thousands)			$117,708	25.9%
	Enforcement (In Thousands)			$112,242	26.5%
	Systemic In Thousands)			$5,466	14.5%
1993	Monetary Benefits (In Thousands)	$125,501	11.8%		
	People Receiving Monetary Benefits	8,266	3.4%		
	Total Monetary Benefits (In Thousands)			$126,827	7.7%
	Enforcement (In Thousands)			$125,501	11.8%
	Systemic (In Thousands)			$1,327	-75.7%
1994	Monetary Benefits (In Thousands)	$140,869	12.2%		
	People Receiving Monetary Benefits	9,051	9.5%		
	Total Monetary Benefits (In Thousands)			$146,321	15.4%
	Enforcement (In Thousands)			$140,869	12.2%
	Systemic (In Thousands)			$5,452	310.9%

DATA TABLES

EEOC/FEPA RECEIPTS
Table 1

Fiscal Year		Total	EEOC	FEPA
1991	Total	118,807	63,836	54,971
	Percent	100.0%	53.7%	46.3%
	Change 1990-91	5.4%	2.5%	8.8%
1992	Total	131,156	72,096	59,060
	Percent	100.0%	55.0%	45.0%
	Change 1991-92	10.4%	12.9%	7.4%
1993	Total	152,281	87,854	64,427
	Percent	100.0%	57.7%	42.3%
	Change 1992-93	16.1%	21.9%	9.1%
1994	Total	158,612	91,185	67,427
	Percent	100.0%	57.5%	42.5%
	Change 1993-94	4.2%	3.8%	4.7%
1995	**Total**	**154,059**	**87,606**	**66,451**
	Percent	**100.0%**	**56.9%**	**43.1%**
	Change 1994-95	**-2.9%**	**-3.9%**	**-1.4%**

Notes:
1. In order to simplify and improve the accuracy of reporting, beginning with FY 1993, EEOC charge filings are reported as total receipts (i.e., charges filed initially with the agency); rather than receipts to process (charges in the workload pursuant to Federal/State and local workload sharing agreements). Total EEOC workload, as in past years, remains a combination of net transfers to EEOC from State and local agencies added to charges filed with EEOC.

2. EEOC receipts data includes all charges filed with the Agency, including Commissioner charges.

Source: EEOC and FEPA receipts data are taken from the CDS National Database

EEOC RECEIPTS BY STATUTE
Table 2

Fiscal Year	Statutes	Total	Percent of Total
1991	Title VII w/ Concurrents	51,058	80.0%
	Title VII Only	45,779	71.7%
Total Receipts 63,836	ADEA w/ Concurrents	17,071	26.7%
	ADEA Only	12,655	19.8%
	EPA w/ Concurrents	1,056	1.7%
	EPA Only	88	0.1%
1992	Title VII w/ Concurrents	57,344	79.5%
	Title VII Only	50,748	70.4%
Total Receipts 72,096	ADEA w/ Concurrents	19,255	26.7%
	ADEA Only	13,818	19.2%
	EPA w/ Concurrents	1,294	1.8%
	EPA Only	66	0.1%
	ADA w/ Concurrents	999	1.4%
	ADA Only	754	1.0%
1993	Title VII w/ Concurrents	62,662	71.3%
	Title VII Only	53,627	61.0%
Total Receipts 87,854	ADEA w/ Concurrents	19,871	22.6%
	ADEA Only	12,646	14.4%
	EPA w/ Concurrents	1,328	1.5%
	EPA Only	78	0.1%
	ADA w/ Concurrents	15,245	17.4%
	ADA Only	11,056	12.6%

Fiscal Year	Statute	Total	Percent of Total
1994 Total Receipts 91,185	Title VII w/ Concurrents	64,105	70.3%
	Title VII Only	53,977	59.2%
	ADEA w/ Concurrents	19,623	21.5%
	ADEA Only	11,891	13.0%
	EPA w/ Concurrents	1,360	1.5%
	EPA Only	67	0.1%
	ADA w/ Concurrents	18,853	20.7%
	ADA Only	13,300	14.6%
1995 **Total Receipts** **87,608**	**Title VII w/ Concurrents**	**62,212**	**71.0%**
	Title VII Only	**51,908**	**59.3%**
	ADEA w/ Concurrents	**17,430**	**19.9%**
	ADEA Only	**9,535**	**10.9%**
	EPA w/ Concurrents	**1,280**	**1.5%**
	EPA Only	**51**	**0.1%**
	ADA w/ Concurrents	**19,811**	**22.6%**
	ADA Only	**13,916**	**15.9%**
Note: EEOC receipts data includes all charges filed with the Agency, including Commissioner charges.			
Source: Receipts data are taken from the CDS National Database.			

EEOC RESOLUTIONS BY STATUTE
Table 3

Fiscal Year	Statutes	Number	Percent of Total	Change from Prior Year
1991 Total Resolutions 64,028 Change 1990-91 -3.8%	Title VII w/ Concurrents	51,324	80.2%	-5.8%
	Title VII Only	45,221	70.6%	-7.6%
	ADEA w/ Concurrents	17,563	27.4%	8.2%
	ADEA Only	12,584	19.7%	4.9%
	EPA w/ Concurrents	1,368	2.1%	-6.2%
	EPA Only	102	0.2%	22.9%
1992 Total Resolutions 68,278 Change 1991-92 6.6%	Title VII w/ Concurrents	53,520	78.4%	4.3%
	Title VII Only	46,945	68.8%	3.8%
	ADEA w/ Concurrents	20,110	29.5%	14.5%
	ADEA Only	14,632	21.4%	16.3%
	EPA w/ Concurrents	1,282	1.9%	-6.3%
	EPA Only	78	0.1%	-23.5%
	ADA w/ Concurrents	28	0.0%	N/A
	ADA Only	24	0.0%	N/A
1993 Total Resolutions 71,704 Change 1992-93 5.0%	Title VII w/ Concurrents	53,718	74.9%	0.4%
	Title VII Only	46,216	64.5%	-1.6%
	ADEA w/ Concurrents	20,493	28.6%	1.9%
	ADEA Only	14,205	19.8%	-2.9%
	EPA w/ Concurrents	1,284	1.8%	0.2%
	EPA Only	79	0.1%	1.3%
	ADA w/ Concurrents	4,299	6.0%	152.5 times
	ADA Only	3,196	4.5%	132.2 times

Fiscal Year	Statute	Total	Percent of Total	Change From Prior Year
1994 Total Resolutions 71,577 Change 1993-94 -0.2%	Title VII w/ Concurrents	51,202	71.5%	-4.7%
	Title VII Only	43,880	61.3%	-5.1%
	ADEA w/ Concurrents	15,681	22.0%	-23.5%
	ADEA Only	10,014	14.0%	-29.5%
	EPA w/ Concurrent	1,302	1.8%	1.4%
	EPA Only	87	0.1%	10.1%
	ADA w/ Concurrents	12,408	17.3%	1.89 times
	ADA Only	9,090	12.7%	1.84 times
1995 **Total Resolutions 91,896** **Change 1994-95 28.4%**	**Title VII w/ Concurrents**	**64,744**	**70.5%**	**26.4%**
	Title VII Only	**54,518**	**59.3%**	**24.2%**
	ADEA w/ Concurrents	**19,735**	**21.5%**	**25.9%**
	ADEA Only	**11,867**	**12.9%**	**18.5%**
	EPA w/ Concurrents	**1,419**	**1.5%**	**9.0%**
	EPA Only	**84**	**0.1%**	**-3.4%**
	ADA w/ Concurrents	**18,874**	**20.5%**	**52.1%**
	ADA Only	**13,390**	**14.6%**	**47.3%**

Note: Resolutions data includes all charges filed with the Agency, including Commissioner charges.

Source: Resolutions data are taken from the CDS National Database.

EEOC RESOLUTIONS BY TYPE
Table 4

Fiscal Year	Resolution Type	Total	Percent of Total	Change from Prior Year
1991	Merit Resolutions	11,003	17.2%	-14.0%
	Settlements	5,036	7.9%	-9.4%
Total Resolutions 64,028	Withdrawals with Benefits	4,266	6.7%	-0.5%
	Unsuccessful Conciliations	1,146	1.8%	-51.7%
	Successful Conciliations	555	0.9%	-2.8%
	No Reasonable Cause	38,140	59.6%	0.4%
	Administrative Resolutions	14,885	23.2%	-5.6%
1992	Merit Resolutions	10,621	15.6%	-3.5%
	Settlements	4,352	6.4%	- 13.6%
Total Resolutions 68,278	Withdrawals with Benefits	4,683	6.9%	9.8%
	Unsuccessful Conciliations	1,034	1.5%	-9.8%
	Successful Conciliations	552	0.8%	-0.5%
	No Reasonable Cause	41,656	61.0%	9.2%
	Administrative Resolutions	15,999	23.4%	7.5%
1993	Merit Resolutions	11,297	15.8%	6.4%
	Settlements	4,185	5.8%	-3.8%
Total Resolutions 71,704	Withdrawals with Benefits	5,163	7.2%	10.3%
	Unsuccessful Conciliations	1,348	1.9%	30.4%
	Successful Conciliations	601	0.8%	8.9%
	No Reasonable Cause	40,105	55.9%	-3.7%
	Administrative Resolutions	20,302	28.3%	26.9%
1994	Merit Resolutions	11,215	15.7%	-0.7%
	Settlements	4,039	5.6%	-3.5%
Total Resolutions 71,577	Withdrawals with Benefits	5,248	7.3%	1.6%
	Unsuccessful Conciliations	1,309	1.8%	-2.9%
	Successful Conciliations	619	0.9%	3.0%
	No Reasonable Cause	34,400	48.1%	-14.2%
	Administrative Resolutions	25,962	36.3%	27.9%

Fiscal Year	Resolutions by Statute	Total	Percent of Total	Change From Prior Year
1995	Merit Resolutions	10,958	11.9%	-2.3%
	Settlements	3,840	4.2%	-4.9%
Total Resolutions 91,896	Withdrawals with Benefits	5,038	5.5%	-4.0%
	Unsuccessful Conciliations	1,567	1.7%	19.7%
	Successful Conciliations	513	0.6%	-17.1%
	No Reasonable Cause	46,767	50.9%	36.0%
	Administrative Resolutions	34,171	37.2%	31.6%
Note: Resolutions data includes all charges filed with the Agency, including Commissioner charges.				
Source: Resolutions data are taken from the CDS National Database.				

EEOC DETERMINATIONS ON THE MERITS
Table 5

Fiscal Year		Number	Percent of Total	Change from Prior Year
1991	Total on the Merits	39,841	62.2%	-2.7%
Total Resolutions 64,028	Reasonable Cause	1,701	2.7%	-42.3%
	No Reasonable Cause	38,140	59.6%	0.4%
1992	Total on the Merits	43,242	63.3%	8.5%
Total Resolutions 68,278	Reasonable Cause	1,586	2.3%	-6.8%
	No Reasonable Cause	41,656	61.0%	9.2%
1993	Total on the Merits	42,054	58.6%	-2.7%
Total Resolutions 71,704	Reasonable Cause	1,949	2.7%	22.9%
	No Reasonable Cause	40,105	55.9%	-3.7%
1994	Total on the Merits	36,328	50.8%	-13.6%
Total Resolutions 71,577	Reasonable Cause	1,928	2.7%	-1.1%
	No Reasonable Cause	34,400	48.1%	-14.2%
1995	**Total on the Merits**	**48,847**	**53.2%**	**34.5%**
Total Resolutions 91,896	**Reasonable Cause**	**2,080**	**2.3%**	**7.9%**
	No Reasonable Cause	**46,767**	**50.9%**	**36.0%**

Note: Resolutions data includes all charges filed with the Agency, including Commissioner charges.

Source: Resolutions data are taken from the CDS National Database.

EEOC CHARGE RESOLUTION ACTIVITY LEVEL
Table 6

Fiscal Year	Resolutions Per Staff Available	Change from Prior Year
1991	88.1	0.1%
1992	92.7	4.9%
1993	97.1	4.6%
1994	97.8	0.7%
1995	**120.8**	**23.5%**

EEOC RECEIPTS, RESOLUTIONS, AND PENDING INVENTORY
Table 7

Fiscal Year		Number	Change from Prior Year
1991	Receipts	63,836	2.5%
	Total Resolutions	64,028	-3.8%
	Pending Inventory	45,717	8.9%
1992	Receipts	72,096	12.9%
	Total Resolutions	68,278	6.6%
	Pending Inventory	52,856	15.6%
1993	Receipts	87,854	21.9%
	Total Resolutions	71,704	5.0%
	Pending Inventory	73,124	38.3%
1994	Receipts	91,185	3.8%
	Total Resolutions	71,577	-0.2%
	Pending Inventory	96,945	32.6%
1995	**Receipts**	**87,608**	**-3.9%**
	Total Resolutions	**91,896**	**28.4%**
	Pending Inventory	**98,269**	**1.4%**

Note: Receipts and resolutions data includes all charges filed with the Agency, including Commissioner charges.

Source: Receipts and resolutions data are taken from the CDS National Database.

EEOC ADMINISTRATIVE ENFORCEMENT/SYSTEMIC UNITS TOTAL MONETARY BENEFITS

Table 8

	Monetary Benefits and People Benefitted			EEOC Total Monetary Benefits	
Fiscal Year		**Number**	**Change**	**Number**	**Change**
1991	Monetary Benefits (In Thousands)	$88,694	15.1%		
	People Receiving Monetary Benefits	8,946	-9.3%		
	Total Monetary Benefits (In Thousands)			$93,469	14.0%
	Enforcement (In Thousands)			$88,694	15.1%
	Systemic In Thousands)			$4,775	-4.2%
1992	Monetary Benefits (In Thousands)	$112,242	26.5%		
	People Receiving Monetary Benefits	7,991	-10.7%		
	Total Monetary Benefits (In Thousands)			$117,708	25.9%
	Enforcement (In Thousands)			$112,242	26.5%
	Systemic In Thousands)			$5,466	14.5%
1993	Monetary Benefits (In Thousands)	$125,501	11.8%		
	People Receiving Monetary Benefits	8,266	3.4%		
	Total Monetary Benefits (In Thousands)			$126,827	7.7%
	Enforcement (In Thousands)			$125,501	11.8%
	Systemic (In Thousands)			$1,327	-75.7%
1994	Monetary Benefits (In Thousands)	$140,869	12.2%		
	People Receiving Monetary Benefits	9,051	9.5%		
	Total Monetary Benefits (In Thousands)			$146,321	15.4%
	Enforcement (In Thousands)			$140,869	12.2%
	Systemic (In Thousands)			$5,452	310.9%

EEOC ADMINISTRATIVE ENFORCEMENT/SYSTEMIC UNITS TOTAL MONETARY BENEFITS

Table 8 (Continued)

	Monetary Benefits and People Benefitted			EEOC Total Monetary Benefits	
Fiscal Year		**Number**	**Change**	**Number**	**Change**
1995	Monetary Benefits (In Thousands)	$133,923	-4.9%		
	People Receiving Monetary Benefits	8,574	-5.3%		
	Total Monetary Benefits (In Thousands)			$135,956	-7.1%
	Enforcement (In Thousands)			$133,923	-4.9%
	Systemic (In Thousands)			$2,033	-62.7%

OVERVIEW OF COMMISSIONER CHARGE (SYSTEMIC) RECEIPTS AND RESOLUTIONS

Table 9

Fiscal Year		Number	Percent of Total
1991	New Charges	35	57.4%
	Resolutions	26	42.6%
Total New Charges and Resolutions	Resolutions by Type		
	Settlements	4	15.4%
61	Withdrawals	0	0.0%
	Unsuccessful Conciliations	8	30.8%
	Conciliations	7	26.9%
	No Reasonable Cause	7	26.9%
1992	New Charges	50	54.3%
	Resolutions	42	45.7%
Total New Charges and Resolutions	Resolutions by Type		
	Settlements	12	28.6%
92	Withdrawals	1	2.4%
	Unsuccessful Conciliations	10	23.8%
	Conciliations	16	38.1%
	No Reasonable Cause	3	7.1%
1993	New Charges	28	40.6%
	Resolutions	41	59.4%
	Resolutions by Type		
Total New Charges and Resolutions	Settlements	9	22.0%
	Withdrawals	0	0.0%
69	Unsuccessful Conciliations	19	46.3%
	Conciliations	8	19.5%
	No Reasonable Cause	5	12.2%
1994	New Charges	*57	55.9%
	Resolutions	45	44.1%
	Resolutions by Type		
Total New Charges and Resolutions	Settlements	13	28.9%
	Withdrawals	0	0.0%
102	Unsuccessful Conciliations	10	22.2%
	Conciliations	14	31.1%
	No Reasonable Cause	8	17.8%

Fiscal Year		Number	Percent of Total
1995	New Charges	44	51.2%
	Resolutions	42	48.8%
	Resolutions by Type		
	Settlements	15	35.7%
	Withdrawals	0	0.0%
Total New Charges and Resolutions	Unsuccessful Conciliations	11	26.2%
	Conciliations	12	28.6%
86	No Reasonable Cause	4	9.5%

Note: FY 1992 resolutions were previously reported as 41; however, one additional resolution has since been added to the database.

* Two of the new charges were reported as being reopened for further processing after being resolved in prior years.

EEOC/FEPA RESOLUTIONS

Table 10

Fiscal Year		Total	EEOC	FEPA
1991	Total	118,420	64,028	54,392
	Percent	100.0%	54.1%	45.9%
	Change 1990-91	9.3%	-3.8%	30.2%
1992	Total	119,126	68,278	50,848
	Percent	100.0%	57.3%	42.7%
	Change 1991-92	0.6%	6.6%	-6.5%
1993	Total	124,177	71,704	52,473
	Percent	100.0%	57.7%	42.3%
	Change 1992-93	4.2%	5.0%	3.2%
1994	Total	125,430	71,577	53,853
	Percent	100.0%	57.1%	42.9%
	Change 1993-94	1.0%	-0.2%	2.6%
1995	**Total**	**150,229**	**91,896**	**58,333**
	Percent	**100.0%**	**61.2%**	**38.8%**
	Change 1994-95	**19.8%**	**28.4%**	**8.3%**

Note: EEOC resolutions data includes all charges filed with the Agency, including Commissioner charges.

Source: EEOC and FEPA resolutions data are taken from the CDS National Database

HEARINGS RESOLUTIONS BY TYPE
Table 11

Fiscal Year		Total	Percent of Total
1991	Recommended Decisions	1,800	35.6%
	Settlements	1,584	31.4%
Total Resolutions	Withdrawals	701	13.9%
5,051	Remands	896	17.7%
	Class	70	1.4%
1992	Recommended Decisions	2,125	34.8%
	Settlements	1,939	31.8%
Total Resolutions	Withdrawals	798	13.1%
6,100	Remands	1,138	18.7%
	Class	100	1.6%
1993	Recommended Decisions	3,008	33.8%
	Settlements	3,182	35.7%
	Withdrawals	1,231	13.8%
Total Resolutions	Remands	1,260	14.1%
	Administrative	115	1.3%
8,906	Class	110	1.2%
1994	Recommended Decisions	3,185	33.5%
	Settlements	3,112	32.7%
	Withdrawals	1,399	14.7%
Total Resolutions	Remands	1,573	16.5%
	Administrative	146	1.5%
9,507	Class	92	1.0%
1995	**Recommended Decisions**	**3,001**	**32.2%**
	Settlements	**2,952**	**31.7%**
	Withdrawals	**1,474**	**15.8%**
Total Resolutions	**Remands**	**1,667**	**17.9%**
	Administrative	**153**	**1.6%**
9,324	**Class**	**77**	**0.8%**

HEARINGS RECEIPTS, RESOLUTIONS, AND PENDING INVENTORY
Table 12

Fiscal Year		Number	Change from Prior Year
1991	Receipts	5,773	6.6%
	Resolutions	5,051	-2.6%
	Inventory	3,147	30.0%
1992	Receipts	6,907	19.6%
	Resolutions	6,100	20.8%
	Inventory	3,977	26.4%
1993	Receipts	8,882	28.6%
	Resolutions	8,906	46.0%
	Inventory	3,991	0.4%
1994	Receipts	10,712	20.6%
	Resolutions	9,507	6.7%
	Inventory	5,177	29.7%
1995	**Receipts**	**10,515**	**-1.8%**
	Resolutions	**9,324**	**-1.9%**
	Inventory	**6,367**	**23.0%**

HEARINGS RESOLUTION ACTIVITY LEVEL
Table 13

Fiscal Year	Resolutions Per Administrative Judge	Change from Prior Year
1991	94.6	5.5%
1992	113.5	20.0%
1993	126.1	11.1%
1994	124.3	-1.4%
1995	121.5	-2.3%

OFFICE OF GENERAL COUNSEL

AGE DISCRIMINATION IN EMPLOYMENT

LITIGATION ACTIVITIES IN FISCAL YEARS 1995 AND 1996

I. CURRENT STRUCTURE AND FUNCTION OF THE OFFICE OF GENERAL COUNSEL

A. The Mission of the Office of the General Counsel

The Office of General Counsel was established by the Equal Employment Opportunity Act of 1972, which amended Title VII of the Civil Rights Act of 1964 to provide for a General Counsel, appointed by the President and confirmed by the Senate, with responsibility for conducting the Commission's litigation. Following transfer of enforcement functions from the U.S. Department of Labor to the Commission in 1979, the General Counsel was also vested with responsibility to conduct Commission litigation under the Equal Pay Act and the Age Discrimination in Employment Act. With the enactment of the Americans with Disabilities Act, the General Counsel was granted responsibility for Commission litigation under that statute as well.

B. Organizational Structure

The Office of General Counsel is divided into nine organizational units: (1) the District Office Legal Units; (2) Litigation Management Services; (3) Appellate Services; (4) Systemic Litigation Services; (5)Litigation Advisory Services; (6)Research and Analytic Services Staff; (7) Administrative and Technical Services Staff; (8) the General Counsel's immediate staff; and (9) the Deputy General Counsel's immediate staff.

The District Office Legal Units are located in the Commission's 23 District Offices. Each legal unit is responsible for prosecuting enforcement litigation. In addition to their prosecutorial function, legal unit attorneys provide legal advice to enforcement units, which are responsible for investigating charges of discrimination. The legal advice function includes, among other things, completing written reviews of certain proposed "reasonable cause" findings to ensure uniformity with legal standards, drafting determinations for the District Director on objections to administrative subpoenas, and making determinations on Freedom of Information Act requests.

Each District Office legal unit is under the direction of a Regional Attorney who is appointed by the General Counsel and the Chairman of the Commission. The Regional Attorney manages the legal staff of the District Office under the legal direction of the General Counsel. In addition, many Regional Attorneys supervise a Hearings Unit, which is composed of administrative judges who conduct hearings and render decisions on claims of discrimination in federal employment.

Litigation Management Services is one of the three headquarters prosecutorial divisions of the Office of General Counsel. Litigation Management Services is managed by an Associate General Counsel under the supervision of the Deputy General Counsel. Litigation Management Services performs the following functions, pursuant to a delegation of authority from the General Counsel: (1) manages and oversees the Commission's litigation enforcement program in the 23 District Offices of the Commission; and (2) in conjunction with the Office of Program Operations, oversees the integration and interaction of District Office legal units into the administrative enforcement structure of the District Office.

Appellate Services of the Office of General Counsel is managed by an Associate General Counsel who reports through the Deputy General Counsel to the General Counsel. Appellate Services is responsible for conducting all appellate litigation where the Commission is a party or where the Commission participates as *amicus curiae*, usually in cases involving novel issues. Appellate Services also represents the Commission in the United States Supreme Court through the Solicitor General of the United States.

Appellate Services is responsible for reviewing every case in which the Commission receives an adverse judgment. The attorneys of Appellate Services then prepare written recommendations analyzing the facts and legal issues in the case for review by the General Counsel, who makes the final decision on whether to appeal. In *amicus* cases, Appellate Services drafts memoranda recommending Commission participation which, if approved by the General Counsel, is submitted to the Commission for authorization.

Systemic Litigation Services, located in the EEOC's Washington, D.C. headquarters office, operates under the supervision of an Associate General Counsel who reports through the Deputy General Counsel to the General Counsel. Systemic Litigation Services conducts litigation on behalf of the Commission in certain complex cases alleging patterns or practices of employment discrimination or involving complex legal or factual issues. The responsibilities of Systemic Litigation Services include evaluating and preparing litigation recommendations in certain complex cases for Commission consideration and, upon Commission approval, prosecuting those cases. Further, Systemic Litigation Services provides legal advice to Systemic Investigations and Individual Compliance Programs within the Office of Program Operations during the investigation and conciliation of systemic charges. In addition, the General Counsel has delegated to Systemic Litigation Services the responsibility for coordinating the representation of the Commission in bankruptcy proceedings nationwide.

Litigation Advisory Services is composed of two Assistant General Counsels who report directly to the Deputy General Counsel and who are responsible for the daily operations of Litigation Advisory Services Division I and II. The Divisions of Litigation Advisory Services

review and prepare recommendations to the Commission from the General Counsel on certain litigation recommendations submitted from the 23 District Offices by the Regional Attorneys. In addition, they review litigation recommendations from the Regional Attorneys to the General Counsel.

The Research and Analytic Services Staff reports directly to the Deputy General Counsel. The Research and Analytic Services Staff is the principal source within the EEOC of expert and analytical services for cases in litigation as well as cases under investigation. The Research and Analytic Services Staff has a professional staff of experts in the fields of the social sciences, economics, statistics, and psychology as well as a technical staff of research and statistical assistants. The Office of General Counsel has estimated that the Research and Analytic Services Staff saves the Commission nearly two million dollars per year in expert service costs and other types of contract costs.

The Administrative and Technical Services Staff is the central control unit for the Office of General Counsel and is responsible for providing administrative and technical services to all components of the Office, including the 23 field legal units.

II. ADEA LITIGATION HIGHLIGHTS FROM FISCAL YEARS 1995 AND 1996

A. Litigation Statistics[1]

In fiscal year 1995, the Commission filed a total of 348[2] lawsuits in district court. Of these, 318 were cases filed on the merits; an additional 30 suits were filed to enforce subpoenas issued during the administrative process. Of the cases filed on the merits, 187 were filed under Title VII, 77 were filed under the Americans with Disabilities Act ("ADA"), one was filed under the Equal Pay Act ("EPA"), and 38 were filed under the ADEA. Another 15 cases filed on the merits were filed under more than one statute, including five under the ADEA and another statute - three under the ADEA and the ADA, one under the ADEA and Title VII, and one under the ADEA, Title VII and the ADA. In addition, of the 30 lawsuits filed to enforce subpoenas, nine were filed under the ADEA (including one under the ADEA and another statute).

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1 These statistics are current as of March 20, 1998 and may differ from previously released statistics because the database is constantly being updated and corrected.

2 This number does not include any Temporary Restraining Orders or Preliminary Injunctions filed in fiscal year 1995.

Also in fiscal year 1995, the Commission resolved a total of 362[3] lawsuits in district court. Of these, 342 were cases resolved on the merits; another 20 were case resolutions on subpoena enforcement actions. Of the cases resolved on the merits, 226 were resolved under Title VII, 29 were resolved under the ADA, two were resolved under the EPA and 70 were resolved under the ADEA. Another 15 cases resolved on the merits involved more than one statute, including eight resolved under the ADEA and another statute - one resolved under the ADEA and the ADA, and seven resolved under the ADEA and Title VII. In addition, of the 20 subpoena enforcement actions resolved, six were under the ADEA (including one under the ADEA and another statute). Of the total $23,865,757 in monetary benefits obtained through lawsuits in fiscal year 1995, $15,273,790 were obtained from lawsuits litigated under the ADEA. (See Attachment I for a chart of FY 95 ADEA Litigation Activities, broken down by district office and including all ADEA cases.)

In fiscal year 1996, the Commission filed a total of 178[4] lawsuits in district court. Of these, 158 were cases filed on the merits; an additional 20 suits were filed to enforce subpoenas issued during the administrative process. Of the cases filed on the merits, 100 were filed under Title VII, 36 were filed under the Americans with Disabilities Act ("ADA"), two were filed under the Equal Pay Act ("EPA"), and 13 were filed under the ADEA. Another seven cases filed on the merits were filed under more than one statute, including one under the ADEA and Title VII. In addition, of the 20 lawsuits filed to enforce subpoenas, five were filed under the ADEA (including one under the ADEA and another statute).

Also in fiscal year 1996, the Commission resolved a total of 278[5] lawsuits in district court. Of these, 263 were cases resolved on the merits; another 15 were case resolutions on subpoena enforcement actions. Of the cases resolved on the merits, 164 were resolved under Title VII, 49 were resolved under the ADA, and 34 were resolved under the ADEA (there were no EPA resolutions in fiscal year 1996). Another 16 cases resolved on the merits involved more than one statute, including eight resolved under the ADEA and another statute - one resolved under the ADEA and the ADA, and six resolved under the ADEA and Title VII, and one resolved under the ADEA, the ADA, and Title VII. In addition, of the 15 subpoena enforcement actions resolved, six were under the ADEA (including one under the ADEA and another statute). Of the total

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3 This number d Injunctions resolved oes not include any Temporary Restraining Orders or Preliminary in fiscal year 1995.

4 This number does not include any Temporary Restraining Orders or Preliminary Injunctions filed in fiscal year 1996.

5 This number does not include any Temporary Restraining Orders or Preliminary Injunctions resolved in fiscal year 1996.

$49,530,309 monetary benefits obtained through lawsuits in fiscal year 1995, $29,380,384 were obtained from lawsuits litigated under the ADEA. (See Attachment II for a chart of FY 96 ADEA Litigation Activities, broken down by district office and including all ADEA cases.)

B. Supreme Court ADEA Decisions

In fiscal years 1995 and 1996, the Supreme Court decided two important cases under the ADEA. In *O'Conner v. Consolidated Coin Caterers Corp.*, 116 S.Ct. 1307 (1996), in which the Commission filed an *amicus* brief jointly with the Office of the Solicitor General, the Supreme Court determined that a plaintiff in an ADEA discharge action is not required to show replacement by someone outside the protected age group as an element of his or her *prima facie* case. Instead, the Court held that the plaintiff need only show replacement by a substantially younger individual. And in *McKennon v. Nashville Banner Pub. Co.*, 115 S. Ct. 879 (1995), the Supreme Court determined that after-acquired evidence of misconduct which the employer claimed would have resulted in the plaintiff's immediate discharge does not bar all relief for a violation. The Supreme Court ruling was consistent with the position urged in the joint brief of the United States and the Commission as *amici curiae*.

C. Significant Briefs Filed in Appellate Court

The following appellate and *amicus* briefs were filed in fiscal years 1995 and 1996 in appellate court on significant issues under the ADEA.

In *EEOC v. Papé Lift, Inc.*, Nos. 94-35603 & 94-35654 (9th Cir. Brief as Appellant filed October 25, 1994), the Commission appealed adverse district court rulings on issues of willfulness and front pay. Although the jury had found that the defendant had willfully violated the ADEA and had awarded the Commission $377,266.65 in back pay, liquidated damages and front pay, the court granted judgment for the company on willfulness and the front pay award. The lower court determined that comments calling the charging party "old and burnt out" were not evidence that the defendant knew it was violating the ADEA when it fired him because of age. In addition, the court eliminated the front pay award, stating that even if most older workers cannot gain comparable work after being fired, the charging party was still obligated to search for another job and "lower his sights" if necessary. The Commission argued in its appellate brief that where there is evidence that an individual was fired because of his age and no good faith defense is proffered, the jury may decide whether the ADEA violation was willful, without additional evidence that the decision maker knew that termination based on age was a violation of the ADEA. In addition, the Commission contended that the jury was entitled to find that, given the charging party's age and management-level status, suitable jobs were not available to him; the jury was further entitled to find that the defendant had not met its burden of proving that the charging party failed to mitigate his damages.

In *Kalvinskas v. California Institute of Technology*, No. 94-55958 (9th Cir. Brief as *Amicus Curiae* filed October 31, 1994), the plaintiff received long-term disability benefits from CalTech. The disability plan provided that benefits would be reduced by retirement benefits paid or payable at "normal retirement age" under CalTech's retirement plans. When the plaintiff turned 65 (normal retirement age), CalTech offset his disability benefits with the pension benefits that he could receive if he retired. CalTech required him to retire before it would agree to distribute those pension benefits. Because the plaintiff did not retire, the effect of the offset was to reduce his income. The plaintiff argued that the offset "required or permitted" involuntary retirement in violation of the ADEA. CalTech countered that the offset was expressly permitted by the Older Workers Benefits Protection Act ("OWBPA"). The district court granted summary judgment to CalTech. In its *amicus* brief before the court of appeals, the Commission argued that CalTech violated the ADEA by offsetting the plaintiff's disability benefits with pension benefits that he could receive only by retiring. Under OWBPA, long-term disability benefits can be offset with pension benefits only if the pension plan permits the distribution of pension benefits while the employee is still employed. Otherwise, the offset illegally "requires or permits" involuntary retirement.

In *Lautner v. American Telephone & Telegraph*, No. 95-3756 (6th Cir. Brief as *Amicus Curiae* filed September 6, 1995), the Commission has filed an *amicus* brief in support of the plaintiff who was denied eligibility for a post-termination benefit because of his pension status. The district court, relying on *Lyon v. Ohio Educ. Ass'n & Professional Staff*, 53 F.3d 135 (6th Cir. 1995), granted summary judgment for the defendant on the ground that the plaintiff had not shown that age was the motivating factor in the employer's decision. The Commission argued in its brief that where, as in the present case, pension eligibility is explicitly defined at least in part by age, age is a but-for cause of the employment action.

In *EEOC v. Texas Instruments, Inc.*, No. 95-10586 (5th Cir. Brief as Appellee filed Nov. 6, 1995; Brief as Cross-Appellant filed Feb. 12, 1996), the Commission appealed an adverse summary judgment ruling by the district court. The Commission alleged that the defendant discharged six individuals between the ages of 50 and 59 because of their age. During a reduction-in-force in its Defense Systems Electronic Group, the defendant laid off seven of the 18 manufacturing supervisors age 50 and older (38%) but only two of the 27 manufacturing supervisors under age 50 (7%). The court rejected the Commission's evidence of age-related statements by two of defendant's management personnel on the grounds that one statement related to a manufacturing supervisor not a part of the Commission's case and the other statement was made by a personnel director not responsible for the layoff decisions. The court found that the defendant had provided legitimate nondiscriminatory reasons for the layoffs: a decrease in customer orders that reduced the number of production supervisors needed and evidence that the six supervisors in question possessed skills that were either obsolete in view of the defendant's

future needs or redundant when compared to other manufacturing supervisors. The court held that neither the Commission's statistical evidence nor its showing that the defendant had failed to follow established written procedures in selecting individuals for layoff was sufficient to establish pretext.

The Commission appealed the district court's opinion in *Texas Instruments, Inc.*, arguing that the district court erred in viewing each type of circumstantial evidence in isolation when the totality of proof, viewed most favorably to the Commission, would permit a reasonable fact finder to conclude that the defendant improperly used age as a factor in selecting employees for the RIF. The defendant cross appealed on the district court's denial of summary judgment on timeliness grounds, the issue being whether subsequent to the amendment of section 7(e) of the ADEA by the Civil Rights Act of 1991, any statute of limitations applies to Commission actions.

In *Smith v. City of Des Moines,* No. 95-3802 (8th Cir. Brief as *Amicus Curiae* filed April 15, 1996), the plaintiff filed suit after he was discharged from his fire captain position at the age of 56 because he failed to obtain minimum passing scores on cardio-pulmonary fitness tests that the city used to evaluate fire fighters' ability to wear respirators while fighting fires. Although four doctors maintained that the plaintiff was fully capable of performing his job safely and efficiently, the city's pulmonologist claimed that the fitness tests indicated that he could not perform all firefighting tasks safely in an acceptable time. The suit before the district court claimed that the fitness tests and scores had an illegal disparate impact on older fire fighters. Granting summary judgment, the lower court ruled that the city had shown that "a high level of fitness" has a "'manifest relationship'" to firefighting and that such a level was "'necessary to safe and efficient job performance." In its *amicus* brief before the appellate court, the Commission argued that the ADEA, like Title VII, should be read to prohibit neutral practices that have a disparate impact on employees in a protected class.

In *EEOC v. Massey Yardley*, No. 96-4129 (11th Cir. Brief as Appellee filed August 15, 1996), the EEOC alleged that the defendant harassed and constructively discharged Deloris Paigo, a title clerk, because of her age. Evidence at trial indicated that, daily for some time, Paigo's supervisor and the general manager had made offensive comments to Paigo about her body, clothes, memory and the fact that she was going through menopause. Paigo eventually sent a letter, demanding a raise and an end to the harassment. The company immediately advertised for a title clerk and told Paigo she would just have to put up with the harassment because the general manager would or could not stop it and Paigo was in fact "an old lady." Paigo then quit and was immediately replaced. Paigo subsequently rejected the company's "unconditional offer of reinstatement." The jury found the defendant liable for harassing and constructively discharging Paigo because of her age, but found the violation non-willful and awarded only about six months back pay. Without opinion, the court denied both parties' motions for judgment as a matter of law and EEOC's motion for injunctive relief.

On appeal, the Commission argued that the district court erred in denying EEOC's motion for judgment as a matter of law on willfulness. Even assuming the court of appeals would not hold that all actionable harassment is willful, the specific facts here mandate a willfulness finding. The facts are similar to or stronger than facts in other cases where willfulness has been found. Moreover, the jury was (erroneously) instructed that the employer would be liable for constructive discharge if it "deliberately" made Paigo's working conditions so intolerable that she was forced to quit. Since "willful" and "deliberate" are synonymous, a reasonable jury could not find that the defendant acted "deliberately" in constructively discharging Paigo without also finding the conduct was "willful." The Commission further argued that the lower court also erred in refusing to amend the back pay award to conform to the evidence. Back pay should normally run until the date of judgment unless the defendant proves the claimant failed to mitigate her damages. Here, the only evidence that Paigo failed to mitigate was her rejection of the "unconditional offer of reinstatement." Accordingly, back pay should run until that time. Finally, the Commission contended that the district court abused its discretion in denying EEOC's request for injunctive relief since there was no evidence the discriminatory conduct would not recur.

D. Significant District Court and Appellate Resolutions by Issue

1. Benefits

Benefit Accruals

In *EEOC v. Minnesota State Retirement System*, No. 4-93-989 (D. Minn. October 29, 1994), the Commission alleged that the defendant violated the ADEA by terminating the pension benefit accruals of a class of conservation officers and crime bureau officers once they reached age 60. The case was resolved by a consent decree in which the defendant agreed to recalculate the pension benefits of those class members who continued to work past age 60 and who retired after December 31, 1987. (The amendments to the ADEA that prohibited the cessation of pension benefit accruals because of age became effective January 1, 1988.) Under the terms of the decree, these persons will receive pension annuity credit for all years after they reached age 60, including for those years prior to December 31, 1987. In addition, the defendant agreed to pay those class members the difference between the original pension calculation and the recalculated pension benefit retroactive to September 1, 1989 or to the date that the pension annuity began to accrue, whichever is later. The estimated value of the enhanced pension benefits and the back pension awards is $300,000.

Ruling that the employer's violation was willful under the ADEA, the district court struck down the defendant's annuity investment program, which required employees who worked past age 65 to forfeit some or all of the employer's contributions to the plan. *See EEOC v. Jefferson County Board of Education*, No. 91-C-1248-S (N.D. Ala. November 30, 1994). In this case, the court granted summary judgment on liability to the Commission, finding that the investment

program on its face violated section 4(I) of the ADEA. The court also determined that the program could not survive under the exemption in section 4(f)(2) for bona fide employee benefit plans either. First, the court found that the program constituted a subterfuge to evade the purposes of the ADEA because a purpose of the plan was to replace older workers with younger workers. In addition, the court held that the program encouraged the involuntary retirement of older workers. A trial was held on relief issues and the court ruled in favor of the Commission. While defendant's appeal was pending, the case was settled for a payment of $131,503 to the 15 affected individuals.

Betts Related

In *EEOC v. Commonwealth of Massachusetts*, No. 94-01306-RWZ (D. Mass. July 14, 1995), *aff'd* 77 F.3d 572 (1st Cir. 1996), the Commission alleged that a provision of the Massachusetts retirement system excluding individuals hired after age 65 from participation in state and local retirement plans violated the ADEA. Both parties moved for summary judgment on liability and the court granted summary judgment to the Commission. In a 1990 amendment to section 4(f)(2) of the ADEA, Congress incorporated the portion of Commission regulation 29 C.F.R. § 1625.10, which provides an "equal cost/equal benefit" defense for employee benefit plans that provide lower benefits to older employees. Although this was not a defense in the present case, where the defendant had provided no retirement benefits to individuals 65 and older, the defendant argued that the reference in section 4(f)(2) to 29 C.F.R. § 1625.10 incorporated the entire regulation, part of which provides that employees hired less than five years prior to normal retirement age can be excluded from defined benefit retirement plans. The court rejected this argument, finding that the language of the statute clearly incorporated only the equal cost/equal benefit portion of the regulation. In addition, the court held that a narrow reading of exemptions from the general rule against age based discrimination was consistent with the remedial purpose of the 1990 legislation, which was to overturn the Supreme Court's decision in *Public Employees Retirement System of Ohio v. Betts*. On appeal, the First Circuit found that section 4(f)(2) did not provide a defense for the Commonwealth's practice because the Commonwealth does not incur costs on behalf of workers excluded from the pension system at least equal to the costs incurred on behalf of younger workers. The appellate court also agreed with the Commission that section 4(f)(2) incorporates only those elements of the regulation that conform to the "equal cost/equal benefit" principle.

Other Benefits Cases

In *Quinones v. City of Evanston*, 58 F.3d 275 (7th Cir. 1995), the plaintiff challenged the Illinois statute that limited eligibility for the Firefighters' Pension Fund to people under age 35 at the time of their application. The statute also precluded municipalities from providing their firefighters with any pension coverage other than that authorized by state law. In reliance on this state statute, the City of Evanston denied pension coverage to the plaintiff, who was age 43 when

he applied. The district court ruled that the city violated the ADEA when it denied pension coverage to the plaintiff. The Seventh Circuit affirmed. The appellate court agreed with the Commission as *amicus curiae* that Illinois was not a necessary party, that the City could not rely on an invalid state law to escape liability under the ADEA, and that the state law at issue was facially invalid because the ADEA does not permit age-based pay differences among employees. The court of appeals held that neither the City of Evanston nor any other governmental body could rely on the invalid state law to exclude older firefighters from pension coverage.

In *EEOC v. State of Illinois*, No. 94-2700 (7th Cir. 1995), the Commission alleged that the Illinois state statute that created pension funds for municipal firefighters violated the ADEA because it precluded them from receiving pension benefits if they were age 35 or older when hired. The district court had granted the State's motion to dismiss for lack of subject matter jurisdiction, holding that the Commission did not have standing to challenge the state statute because the individual firefighters who initiated this action by filing charges with the Commission had settled their individual claims and because the State was not the direct employer of the firefighters.

The EEOC appealed the lower court decision, arguing that the State, while not the direct employer of the firefighters, is nevertheless an employer under the ADEA and its obligation not to discriminate on the basis of age extends to all individuals, not just its own employees. The Commission also argued that the Seventh Circuit has conclusively held that preclusion doctrines do not bar the Commission from maintaining an enforcement action where, as here, the charging parties have settled their underlying discrimination charges. While the appeal was pending, however, the State of Illinois on May 9, 1995, adopted an amendment to its pension law that eliminated the age 35 restriction. Consequently, the Commission voluntarily moved to dismiss the appeal, which was granted on September 5, 1995.

In *Lyon v. Ohio Educational Association, et al.*, 53 F.3d 135 (6th Cir. 1995), the Sixth Circuit affirmed the district court's entry of summary judgment for the employer in this ADEA challenge to the employer's early retirement incentive plan. The retirement benefits offered by the employer were based on a formula that takes into account an employee's salary and years of service. Under the early retirement plan, years of service were imputed to eligible employees in amounts that increased according to the number of years an individual was short of the normal retirement age of 62. As a result, older employees received a smaller monthly pension benefit than similarly-situated younger employees. The Commission filed an *amicus* brief arguing that the retirement plan was facially discriminatory and that it did not fall under the defense for certain early retirement incentive plans provided under the Older Workers Benefit Protection Act. Nonetheless, the appellate court concluded that the plaintiffs had failed to establish a *prima facie* case of disparate treatment age discrimination. According to the court, there was no indication that the employer intended the early retirement incentive plan to discriminate against older employees or that it was aware of a disparate effect on older employees, which may have allowed an inference of intent.

In *Riva v. Massachusetts*, 61 F.3d 1003 (1st Cir. 1995), the First Circuit held that public employees do not have to wait until their benefits are reduced to challenge a state law governing their retirement benefits as violative of the ADEA. Massachusetts has a disability retirement program for public employees in which retirees usually receive 72% of their final income for life. Massachusetts amended that law in 1987 to provide that disability retirees who are 55 or older when they retire and who have fewer than 10 years of public service receive 72% of their final income until they turn 65, but then receive much less. Three plaintiffs sued to challenge this amendment as a violation of the ADEA. The First Circuit affirmed the district court's dismissal of the claims of two of the plaintiffs because they started receiving their benefits before the Older Workers Benefit Protection Act ("OWBPA") became effective, and were therefore exempt from OWBPA's protections under that Act's grandfather clause. The third plaintiff, Keenan, did not start receiving benefits until after the OWBPA's effective date, but his payments will not be reduced until 2002, and the district court therefore dismissed his claim as not ripe. The First Circuit agreed with the Commission's *amicus* position that Keenan's claim is ripe, because the reduction is quite likely to happen, and the threat of the future reduction is causing present problems for Keenan in arranging his financial affairs.

EEOC v. General Dynamics Corp., No. 4:96CV99731 (E.D. Mo. April 7, 1996), was resolved by a settlement agreement filed with the complaint. The complaint alleged that the defendant violated the ADEA by providing employees who are age 50 and older fewer benefits than it provided to employees under the age of 50 in its corporate headquarters retention and outplacement program. The defendant agreed to pay $2,532,295.70 in increased pension benefits to 31 class members. The company also agreed to revise its corporate headquarters retention and outplacement program to provide that all persons eligible to receive benefits under the program will receive five additional years of credited service, regardless of age.

2. Burden Of Proof

Direct Evidence

In *Futrell v. J.I. Case*, 38 F.3d 342 (7th Cir. 1994), the Seventh Circuit reversed a district court's grant of judgment as a matter of law in favor of the defendant. The court of appeals ruled that the plaintiff had presented sufficient evidence to sustain the jury's verdict in his favor. Tracking arguments made by the Commission as *amicus curiae*, the court held that an official's age-biased statement could support an inference of discrimination even though the statement was not made in reference to the employment decision at issue and, arguably, was not attributable to the individual with ultimate decision making authority. The court also ruled that a decision maker's statement that an older worker was not a "forward enough thinker" was probative of an

age bias, since the jury could have viewed the statement as "a discriminatory remark, perhaps one with a double meaning." Finally, the court agreed with the Commission that the plaintiff's claim was buttressed by the fact that the decision making official was ten years younger than the plaintiff.

In *Schnidrig v. Columbia Machine, Inc.*, 80 F.3d 1406 (9th Cir. 1996), the Court of Appeals for the Ninth Circuit reversed the district court's grant of summary judgment in favor of the defendant. The court of appeals held that the plaintiff's proof was sufficient to withstand summary judgment and that the after-acquired evidence cited by the defendant could not be a bar to the plaintiff's suit. The court rejected the defendant's argument that the plaintiff was required to show that he was "qualified for the job" to make out a prima facie case, ruling that because the plaintiff had "offered direct evidence of discriminatory motives," the plaintiff's "qualifications [were] irrelevant to the existence of a prima facie case."

Hicks And Pretext Issues

In *Gaworski & EEOC v. ITT Commercial Finance Corp.*, 17 F.3d 1104 (8th Cir.), *cert. den.* 115 S. Ct. 355 (1994), which alleged discriminatory discharge, a divided panel of the Eighth Circuit affirmed the jury verdict finding discrimination and resolved each of the various relief issues in the manner the Commission advocated. Over a strong dissent, the majority opinion held that under *St. Mary's Honor Center v. Hicks*, 113 S. Ct. 2742 (1993), a jury verdict for a plaintiff must be affirmed if the plaintiff submitted sufficient evidence for the jury to find a *prima facie* case and to find pretext. In the instant case, the panel determined that the plaintiff had done so. Further, in response to the Commission's cross-appeal, the court declared that unemployment compensation benefits derive from a collateral source and therefore should not be deducted from a back pay award.

In *EEOC v. Ethan Allen, Inc.*, 44 F.3d 116 (2d Cir. 1994), the Second Circuit reversed the district court's entry of judgment as a matter of law for the defendant and remanded for a new trial. At trial the defendant had given different and inconsistent reasons for the discharge in issue than it had given in the earlier investigation by the state attorney general. Nevertheless, the district court had granted the defendant's motion for judgment as a matter of law, concluding that the EEOC failed to present sufficient evidence from which a jury could conclude that the decision was age-based. The court of appeals held that the district court should have sent the case to the jury since inconsistencies in the reasons the defendant gave for its decision could persuade a reasonable jury that the explanation the defendant gave was a pretext for age discrimination.

In *Miller v. Cigna*, 47 F.3d 586 (3d Cir. 1995), an ADEA pretext case, the Third Circuit sitting *en banc* held that the district court had erred in instructing the jury that the plaintiff had to prove that age was the "sole cause" of the plaintiff's discharge. The court of appeals relied on the Supreme Court's decisions in *Price Waterhouse*, *Hazen Paper Co. v. Biggins*, and *Hicks*.

Adopting the position of the Commission as *amicus*, the court held that these cases make clear that "because of age" does not mean "solely because of age." The court concluded that, in non-mixed motive cases, a district court should instruct a jury that the plaintiff must prove that "age played a role in the employer's decision making process and that it had a determinative effect on the outcome of that process."

In *EEOC v. Insurance Company of North America*, 49 F.3d 1418 (9th Cir. 1995), the Ninth Circuit affirmed a grant of summary judgment in favor of the defendant. The court held that the Commission had failed to present sufficient evidence to support a finding of age discrimination. The defendant claimed that the charging party had been rejected because he was "overqualified" for the entry-level position at issue. The appellate court agreed with the lower court and found that the Commission had not produced any evidence to show that this "neutral reason" was pretextual.

In *Waldron v. SL Industries, Inc., et al.*, 56 F.3d 491 (3d Cir. 1995), the plaintiff, a marketing manager of electrical and electronic components, complained that he was fired not because his job was eliminated in a reorganization but rather because of his age. The district court granted summary judgment to the defendant, but the court of appeals reversed. The court held, consistent with the Commission's position as *amicus curiae*, that the district court applied an improper legal standard. To withstand summary judgment under *McDonnell Douglas*, the court held, the plaintiff did not need separate evidence that the proffered reason for his discharge was false and the true reason was discrimination. Rather, he simply needed to raise a triable issue of fact as to pretext. The court then found that the plaintiff's evidence was sufficient under this legal standard. The court also expressly rejected the defendant's suggestion that it adopt the reasoning in *Proud v. Stone*, 945 F.2d 796 (4th Cir. 1991), and find a strong inference of no age discrimination because the plaintiff was hired at age 61 and fired at age 63. In the court's view, while the employer could argue that discrimination should not be found under these circumstances, such evidence was not entitled to any presumptive weight.

In *Brewer v. Quaker State*, 72 F.3d 326 (3d Cir. 1995), the Commission filed an *amicus* brief urging the court of appeals to reverse the district court's grant of summary judgment in favor of the defendant. The Commission argued that the district court erred in ruling that the plaintiff had not presented sufficient evidence to raise a question of fact as to the credibility of the defendant's performance-based explanation for terminating the plaintiff where plaintiff had consistently been rated higher in sales -- the sole criteria identified by the company as critical to a good performance rating. The Commission also argued that the court erred in dismissing the evidence of age bias advanced by the plaintiff. The court of appeals agreed with the Commission's position on both issues and reversed the district court's grant of summary judgment.

The Commission filed an amicus brief in *Burns v. AAF-McQuay*, Inc., 96 F.3d 728 (4th Cir. 1996), arguing that the district court erred in entering summary judgment for the employer

because the plaintiff, by offering evidence refuting all of the many performance deficiencies advanced by the employer to justify her demotion except one or two trivial deficiencies, had created a triable issue of fact with respect to pretext. The court of appeals disagreed with the argument that a plaintiff can ever withstand summary judgment based solely on the weakness of an unrefuted employer justification, but reversed the court's judgment because it concluded that in this case the weakness of the employer's reason combined with direct evidence of age discrimination was sufficient to create a jury issue.

Protected Age Group (PAG) Status Of Comparators

In *O'Conner v. Consolidated Coin Caterers Corp.*, 116 S.Ct. 1307 (1996), in which the Commission filed an *amicus* brief jointly with the Office of the Solicitor General, the Supreme Court settled the issue of whether a plaintiff in an ADEA discharge action is required to show replacement by someone outside the PAG as an element of his or her *prima facie* case. In reversing a decision of the Fourth Circuit Court of Appeals, the Court held this was not a requirement and that the plaintiff need only show replacement by a substantially younger individual. The court said that the PAG status of the replacement is irrelevant because the statute bans discrimination against individuals because of their age, not because they are 40 or older, even though only individuals in that age group are protected by the statute.

3. Subjective Intent As Proof Requirement In Disparate Treatment Cases

In *Lyon v. Ohio Educational Association, et al.*, 53 F.3d 135 (6th Cir. 1995), the Sixth Circuit affirmed the district court's entry of summary judgment for the employer in this ADEA challenge to the employer's early retirement incentive plan. The retirement benefits offered by the employer were based on a formula that takes into account an employee's salary and years of service. Under the early retirement plan, years of service were imputed to eligible employees in amounts that increased according to the number of years an individual was short of the normal retirement age of 62. As a result, older employees received a smaller monthly pension benefit than similarly-situated younger employees. The Commission filed an *amicus* brief arguing that the retirement plan was facially discriminatory and that it did not fall under the defense for certain early retirement incentive plans provided under the Older Workers Benefit Protection Act. Nonetheless, the appellate court concluded that the plaintiffs had failed to establish a *prima facie* case of disparate treatment age discrimination. According to the court, there was no indication that the employer intended the early retirement incentive plan to discriminate against older employees or that it was aware of a disparate effect on older employees, which may have allowed an inference of intent.

4. Demotion And Discharge

In General

In *EEOC v. Rinker Materials Corporation*, No. 94-45-CIV-ORL-19 (M.D. Fla. Sept. 29, 1995), the Commission alleged that the defendant, a manufacturer and supplier of concrete building materials, terminated the charging party because of his age, 56. The jury returned a verdict for the Commission. The charging party began working for defendant in 1973, and from 1978 held the position of operations foreman. In April 1991 the charging party's supervisor told him the company was changing and suggested he take early retirement. The Commission presented evidence that following the charging party's refusal, his work was more closely scrutinized, his support staff was reduced, and he was criticized for seemingly minor problems. Six months later he was discharged for poor performance and replaced by a management trainee in his 30s. The Commission presented testimony that the charging party's performance had been satisfactory and that his supervisor had made derogatory references to his age. The jury awarded the charging party $218,000 in back pay and also found that the defendant's violation was wilful, which would entitle the charging party to an additional $218,000 in liquidated damages.

In *Flavel and EEOC v. Svedala Industries, Inc.*, No. 92-C-1095 (E.D. Wis. April 5, 1995), a consent decree resolved the claims that the defendant engaged in a pattern and practice of age discrimination, including failure to hire, failure to promote, and discharge, against professional employees age 40 and older. A private action was filed by 11 individuals and the Commission intervened on behalf of five others. The case was tried for nine weeks in late 1994, but the jury failed to reach a verdict, deadlocking nine to one in the plaintiffs' favor. The defendant agreed to pay a total of $4,225,000 to be allocated as follows: $295,327.50 in back pay for the five claimants represented by the EEOC; an identical amount in liquidated damages to those five claimants; $42,250 in costs to the EEOC; and $3,592,095 to the private litigants in back pay, damages, costs, and attorneys' fees. *EEOC v. Ion Laboratories, Inc.*, No. 3:CV-95-1369-P (N.D. Tex. September 9, 1996), was resolved by a consent decree providing $120,000 in back pay to the charging party and training for the defendant's managers on the requirements of the ADEA. The suit alleged that the charging party was the defendant's oldest sales representative and was laid off five days after his 65th birthday and replaced by less qualified younger employees.

After-Acquired Evidence

In *McKennon v. Nashville Banner Pub. Co.*, 115 S. Ct. 879 (1995), a private action claiming discriminatory discharge in violation of the ADEA, the Supreme Court reversed the Sixth Circuit's affirmance of summary judgment entered against the plaintiff based on after-acquired evidence of misconduct that the employer claimed would have resulted in the plaintiff's immediate discharge. Consistent with the position urged in the joint brief of the United States and the Commission as *amici curiae*, a unanimous Court (Kennedy, J.) held that after-acquired evidence

of wrongdoing which would have resulted in discharge does not bar all relief for a violation of federal fair employment laws. The Court further held that an employer seeking to rely on after-acquired evidence of misconduct "must first establish that the wrongdoing was of such severity that the employee in fact would have been terminated on those grounds alone if the employer had known of it at the time of the discharge."

In *Mardell v. Harleysville Life Insurance Co.*, 65 F.3d 1072 (3d Cir. 1995), on remand following the Supreme Court's decision in *McKennon v. Nashville Banner Publishing Co.*, 115 S.Ct. 879 (1995), the Court of Appeals for the Third Circuit reinstated, with one modification, its original opinion in *Mardell v. Harleysville Life Insurance Co.*, 31 F.3d 1221 (3d Cir. 1994). The court held that after acquired evidence of resume fraud is irrelevant and inadmissible "for the purpose of defending against liability" in a suit alleging violations of Title VII and/or the ADEA. Because its ruling as to the effect of such evidence on back pay was inconsistent with *McKennon*, however, the court modified its decision to hold that back pay runs only until the date that the employer discovered the conduct for which it would have fired the employee. The Commission appeared as *amicus curiae*.

Mandatory Retirement - In General

In *EEOC v. Johnson & Higgins, Inc.*, 887 F. Supp. 682 (S.D.N.Y. 1995) *aff'd* 91 F.3d 1529 (2d Cir. 1996), the Commission alleged that the defendant's mandatory retirement policy for members of its Board of Directors violated the ADEA. The Commission moved for summary judgment on liability and the court granted the motion. The defendant is an insurance brokerage and employee benefits consulting firm organized as a privately owned corporation. The defendant is managed by a Board of Directors, consisting of between 20 and 44 members, who jointly own almost all of the capital stock of the corporation. All directors are active officers of the defendant, or of one or more of its subsidiaries, and retain their prior duties upon election to the Board. The defendant's retirement policy for directors provides that they must retire by the earlier of the year they reach age 62 or the end of the year they reach age 60 with 15 years of service on the Board. The defendant requires individuals retiring pursuant to the above policy to also resign from service as an officer and employee. The court rejected the defendant's argument that because its directors not only controlled and managed the corporation but were also co-owners, they were in effect "partners" rather than covered employees under the ADEA.

On appeal a divided panel of the Second Circuit Court of Appeals affirmed the district court's decision to grant partial summary judgment in favor of the Commission and to enjoin permanently the defendant from enforcing its early retirement policy against its directors. The court of appeals held that the ADEA authorizes the Commission to bring a lawsuit against an employer to challenge its employment practices even if no one affected by the practice has filed a charge with the Commission and even if no one wishes the Commission to proceed on his behalf. The court of appeals also affirmed the district court's holding that the defendant's directors

should be considered employees for purposes of the ADEA, that the defendant's mandatory retirement policy for its directors violated the statute and could not be justified by "reasonable factors other than age," and that the district court acted properly in enjoining the defendant from enforcing its unlawful policy. Finally, the court of appeals affirmed the district court's holding that the Commission filled its obligation to attempt conciliation before filing suit in the district court. The dissent argued that the defendant's directors should not be treated as "employees" under the ADEA.

Mandatory Retirement - Law Enforcement Officers

In *EEOC v. New York State Police*, No. 84-12 (N.D.N.Y. March 1996), the EEOC resolved by consent decree a suit challenging the mandatory retirement of state police offers at age 55. The decree provides for the payment of $1.2 million to approximately 50 retired officers. The decree also provides that through December 29, 1996, the defendant will not involuntarily retire any officer due to age unless Congress amends the ADEA to permit such retirement. If after that date defendant seeks to involuntarily retire officers using age as a bona fide occupational requirement, it must notify the EEOC, and if the EEOC objects, defendant must apply to the court where it will have the burden of proof to establish a BFOQ.

The EEOC won favorable court orders in *EEOC v. Kentucky State Police Department*, No. 84-62 (E.D. Ky. May 23, 1994). In 1992, following a decision by the Sixth Circuit that defendant's 55-year-old age limit for police officers was not a bona fide occupational requirement, *see EEOC v. Kentucky State Police Department*, 860 F.2d 665 (6th Cir. 1988), *cert. denied*, 490 U.S. 1066 (1989), the district court found in favor of EEOC's claims that the defendant's mandatory retirement of officers at age 55 violated the ADEA. The court ordered monetary relief of $5.9 million for individuals forced to retire between October 19, 1981 (the beginning of the two-year statute of limitations, with tolling for conciliation), and December 31, 1986 (the date of enactment of the law enforcement officer/firefighter exemption to the ADEA).

In 1994, the court found that because defendant had failed to post the required ADEA notices and had omitted age discrimination from the list of prohibited practices in its employee manual, the limitations period should be tolled for individuals forced to retire between January 1, 1979 (the date alleged in the Commission's original complaint as the start of defendant's violations), and October 19, 1981, and awarded an additional 35 class members more than $10,000,000, including approximately $6.3 million in pension benefits and pension adjustments, $2.3 million in back pay, and $1.3 million in prejudgment interest.

The defendant appealed on a number of statute of limitations and relief issues and the Commission cross appealed on (1) the district court's refusal to toll the statute of limitations during the period from April 6, 1978 (the date the ADEA was amended to prohibit mandatory retirement based on age), to January 1, 1979, (2) the court's refusal to allow the Commission to

add three officers whose names defendant had not disclosed to the Commission because they retired prior to age 55 in anticipation of the mandatory retirement rule, and (3) the court's denial of prejudgment interest during the period between each officer's retirement and December 31, 1986. The court of appeals ruled in favor of the Commission on all issues. *EEOC v. Kentucky State Police Department*, 80 F.3d 1101 (6th Cir. 1996). The favorable rulings on the Commission's cross-appeal will add seven individuals to the Commission's class and increase the total monetary recovery by $1-4 million.

Pilot Mandatory Retirement Cases

In *EEOC v. International Paper Co.*, No.92 Civ. 0062 (S.D.N.Y. Jury Verdict June 6, 1995; final judgment May 21, 1996), which charged that the defendant violated the ADEA by requiring its corporate pilots to retire at age 60, the Commission won a jury verdict after a two-month trial. The pilots were not subject to the FAA's age-60 rule, but defendant claimed that its retirement policy was a bona fide occupational qualification and was reasonably necessary for safety reasons. In returning a verdict in favor of the EEOC, the jury rejected the defendant's claims that age was a proxy for whether a corporate pilot is qualified to continue flying and that pilots 60 and older cannot be individually assessed to determine whether they can continue to fly. The court, agreed however, denied injunctive relief on the ground that the company had already eliminated its age 60 policy.

Reductions-In-Force

In *Gormin and EEOC v. Brown-Forman Corp.*, No. 89-1331-CIV-T-25 (M.D. Fla. May 26, 1995), a settlement agreement resolved an ADEA class discharge action against a beverage wholesaler. A private action had been brought by 44 individuals terminated in a nationwide reduction of the defendant's alcohol sales force. The Commission later filed suit on behalf of 85 former salespeople, including the 44 private plaintiffs, and the cases were consolidated. The Commission recovered $2,140,063 for the individuals it alone represented, while the privately represented individuals settled separately for an undisclosed amount.

In *EEOC v. Kloster Cruise Ltd.*, 897 F. Supp. 1422 (S.D. Fla. 1995), the Commission alleged that the defendant, an operator of cruise ships, laid off five district sales managers age 41, 44, 51, 51, and 61 because of their ages. The court granted summary judgment for the defendant. In 1991 the defendant had been experiencing financial difficulties and implemented a company wide reduction-in-force, terminating 132 shore side employees, including the Commission's five claimants. The defendant presented evidence that the claimants had poor sales records as well as other performance problems, such as failing to get along with travel agents, the defendant's primary customers. The Commission presented evidence questioning the defendant's sales figures and the reliance of the decision maker on the claimants' written performance evaluations. The Commission also presented evidence that the defendant's Executive Vice President, who approved

the layoff decisions, had said at a cocktail party in 1990 that he wanted the company to be more like one of its competitors in that he wanted "a lot of younger type" district sales managers. The court found that the sales figures relied on by the defendant supported its decision to lay off the claimants and that the decision maker was aware of the claimants' other performance deficiencies through conversations with their direct supervisors. The court held that the Executive Vice President's statement was insufficient to establish age discrimination without further inference or presumption.

In *Binder v. Long Island Lighting Co.*, 57 F.3d 193 (2d Cir. 1995), the plaintiff, whose position had been eliminated, alleged that his employer had discriminated against him on the basis of his age by not offering him any other position, in spite of his having expressed interest in continuing his employment. The jury found for Binder, but the judge then required the jury to identify the specific positions the employer should have offered Binder. Finding fault with the jury's responses, the judge granted the employer judgment as a matter of law. The Second Circuit reversed, holding that the district court had abused its discretion by requiring the jury to answer its supplemental interrogatories. The court of appeals also held, in agreement with the Commission's *amicus* brief, that under *Hicks*, Binder's evidence of pretext was sufficient to support the jury's finding of discrimination.

5. Disparate Impact Analysis

In *EEOC v. Francis W. Parker School*, 41 F.3d 1073 (7th Cir. 1994), *cert. den.* 115 S. Ct. 2577 (1995), the defendant school had a hiring policy that set salaries for new teachers based on their years of teaching experience. When seeking to fill an opening with a $28,000 salary cap, the school allegedly refused to consider applicants with over six years of teaching experience. The Commission argued that this practice had a disparate impact on older applicants. The district court granted summary judgment for defendant, and the Seventh Circuit affirmed, holding that the ADEA does not prohibit disparate impact discrimination. In the petition for *certiorari* before the Supreme Court, the United States and the EEOC argued that the language of the ADEA and the parallels to Title VII, support allowing disparate impact challenges, and that *Hazen Paper Co. v. Biggins*, 113 S. Ct. 1701 (April 20, 1993), did not rule such challenges out. The Supreme Court, however, denied *certiorari*.

In *Ellis v. United Airlines, Inc.*, 73 F.3d 999 (10th Cir. 1996), the Tenth Circuit joined the Seventh Circuit in holding that a disparate impact analysis may not be used to establish ADEA violations. The two plaintiffs had applied several times for flight attendant positions with the defendant and had been consistently rejected on the ground that they weighed too much according to the defendant's height/weight tables setting forth the maximum allowed weight. The plaintiffs argued that the maximum weight allowed by the defendant for flight attendant applicants discriminated against them on the basis of age. Because older women of any given height generally tend to weigh more than younger women of the same height, the plaintiffs contended

that requiring older women to weigh the same as younger women disqualified disproportionate numbers of older women. Although the lower court assumed that disparate impact challenges were available under the ADEA, it granted summary judgment to the defendant for other reasons. On appeal, the Tenth Circuit held that disparate impact claims were not cognizable under the ADEA, in part based on dicta in *Hazen Paper Co. v. Biggins*, 113 S. Ct. 1701 (April 20, 1993), that suggested the ADEA prohibits only discrimination based explicitly on age. The Commission had filed an *amicus* brief, urging the court to recognize ADEA disparate impact claims.

6. Failure To Promote

In *EEOC v. State of California Public Utilities Commission*, Nos. C-90-0378 & C-91-2195-MHP (N.D. Cal. January 13, 1995), a consent decree resolved claims that the defendant discriminated against individuals 40 years of age and older in promotions to management and professional (engineer and economist) positions. The defendant agreed to pay $1,783,000 in monetary relief apportioned among 47 class members, and $300,000 in attorney's fees to 35 class members who had filed a related action. The decree also ordered injunctive relief, including a comprehensive plan for the development and administration of promotional examinations for four job classifications.

7. Failure To Refer/Hire

In General

In *EEOC v. Newport Mesa School District*, 893 F. Supp. 927 (C.D. Cal. 1995), the Commission alleged that the defendant school district's practice of hiring inexperienced teachers had a disparate impact on applicants age 40 and above. The court granted summary judgment for the school district and the labor organization representing the district's teachers, which had also been named as a defendant. A provision in the collective bargaining agreement between the school district and the union requires that teachers' starting salaries be increased for years of outside teaching experience. The court assumed for purposes of the defendants' summary judgment motions that the Commission would be able to establish a *prima facie* case of disparate impact. The court held, however, that the school district's cost justification for its hiring practices constituted a reasonable factor other than age defense. The court also held that the salary scale in the collective bargaining agreement constituted a seniority system protected by section 4(f)(2)(A) of the ADEA, and thus that the school district did not have a less discriminatory alternative of offering more experienced teachers lower salaries than those established in the agreement.

In *EEOC v. James River Company*, 91-169WD (W.D. Wash. March 17, 1995), a consent decree resolved claims that the defendant's stamina step test, which used age in calculating passing scores, had a disparate impact in hiring older workers. Under the decree, 44 class members will share $95,000 in back pay. The decree further provides for injunctive relief, including restructuring the test and eliminating the age-based formula in scoring.

On December 6, 1995, the United States District Court for the District of Columbia approved the settlement with *Jostens* resolving this enforcement action, *EEOC v. Jostens Learning Corporation,* C.A. No. 95-2218 (D.D.C.), brought under Title VII and the ADEA for breach of a conciliation agreement. Among other things, the original suit alleged discrimination based on age in recruiting and hiring persons age 40 and older for Educational and Technical consultant positions. Among other relief, JLC was required to pay a total of $265,000, including $235,000 to 67 class members as back pay, $26,000 to 13 current and former male employees who remained employed for six months, and $30,000 to develop and present a training program to benefit incumbent class members.

EEOC v. Delta Airlines, Inc., No. 1:93-CV-2637-RHH (N.D. Ga. August 27, 1996). This ADEA case was resolved by a settlement agreement providing relief valued at $127,000, including travel passes, to a class of former Pan American World Airways Field and Traffic Management Department employees. The suit alleged that because of the former Pan American employees's ages, 50 and older, the defendant had refused to hire them.

Pilot Hiring Cases

In *EEOC v. Piedmont Airlines, Inc. and U.S. Air, Inc.*, No. 6:91CV00028 (M.D.N.C. December 14, 1994), the Commission alleged that the defendants failed to hire pilots age 40 and older in violation of the ADEA. On October 5, 1994, after extended and vigorously contested negotiations, the parties filed a joint motion for preliminary approval of the consent decree and for a fairness hearing, which the court granted on October 11, 1994. The EEOC issued notices of the fairness hearing to 435 claimants or potential claimants pursuant to this order. During the fairness hearing, which was held on December 14, 1994, the court overruled the claims of the ten persons who had filed objections and entered the consent decree on the same day. The consent decree provides that USAir will pay $300,000 in back pay and liquidated damages to 33 claimants and fill up to 32 pilot positions from among those 398 identified claimants who successfully complete USAir's selection process before giving non-claimant applicants consideration for those positions. Twelve positions will include enhanced benefits, such as fourth year starting salary; furlough pay of $2,500 a month for up to three years if a claimant is furloughed; and additional payments if USAir does not commence hiring until after December 31, 1995.

The Commission alleged in *EEOC v. Northwest Airlines, Inc.*, No. 3-93-547 (D. Minn. May 12, 1995) that the defendant discriminated in hiring against pilot applicants who were 50 years of age and older. The parties entered into a consent decree, providing $400,000 in monetary relief to the class and job offers to 26 class members. Each of the ten charging parties were also given pass privileges for themselves and their families.

In *EEOC v. American Airlines, Inc.*, 48 F.3d 164 (5th Cir. 1995), the Fifth Circuit affirmed summary judgment against the EEOC on classwide claims that American Airlines refused to hire older pilot applicants in violation of the ADEA. The Commission challenged the defendant's "Years to Captain" (YTC) rule, which precluded hiring any pilot applicant who, based on age, is not projected to become Captain before the FAA-mandated retirement at age 60. The Commission further alleged that a statistical analysis of the defendant's applicant flow data for those not excluded by the YTC rule demonstrated a gross disparity in the hiring rates of applicants 40 and over compared with applicants under 40. The court of appeals held that the Commission's challenge to the defendant's age restrictions for pilot applicants was barred by collateral estoppel, in specific by *Murnane v. American Airlines*, 482 F. Supp. 135 (D.D.C.1979), *aff'd*, 667 F.2d 98 (D.C.Cir. 1981), *cert. den.*, 456 U.S. 915 (1982), in which the Commission had intervened and which upheld the defendant's prior policy of hiring only pilots age 35 and younger as a safety-related BFOQ. Further, the court found that the Commission's statistical evidence was flawed because it was not based on a pool comprised solely of qualified pilot applicants.

8. Jurisdiction

Eleventh Amendment

In *Hurd v. Pittsburg State University*, 29 F.3d 564 (10th Cir. 1994), *cert. den.*, No. 94-292 (October 11, 1994), the plaintiff alleged age discrimination by a state university. In defense, the State of Kansas argued that the Eleventh Amendment rendered it immune to suit in federal court. The Tenth Circuit rejected that argument, adopting the reasoning of the district court and the Commission as *amicus*. First, the district court had held that when Congress amended the ADEA in 1974 to cover state employees, it exercised its power under § 5 of the Fourteenth Amendment, and therefore had the power to abrogate the states' Eleventh Amendment immunity. Second, the district court had held that Congress made its intent to abrogate Eleventh Amendment immunity sufficiently clear in the statutory language of the ADEA.

First Amendment

In *Weissman v. Congregation Shaare Emeth*, 38 F.3d 1038 (8th Cir. 1994), the Eighth Circuit reversed the district court's dismissal of this ADEA action. The court of appeals, following the approach advanced by the Commission as *amicus curiae*, held that the district court erred in holding that application of the ADEA to plaintiff's claim that he was fired by the defendant, a Jewish temple, because of his age, would raise significant First Amendment concerns. According to the court, ADEA actions do not require extensive or continuous administrative or judicial intrusion into the function of religious institutions. The court also determined that a fact finder can decide whether the institution's proffered reason for the challenged employment decision is a pretext for age discrimination without inquiring into the validity of any underlying religious belief. In the instant case, where the defendant had not proffered a religious reason for firing the plaintiff, he could challenge the stated reasons as pretextual without having to call into question any aspect of religious doctrine or practice.

Foreign Corporations

In *EEOC v. Kloster Cruise Limited*, No. 93-2465-Civ-Moore (S.D. Fla. May 9, 1995), the Commission alleged that the defendant, an operator of cruise ships, laid off five district sales mangers because of their ages. The defendant is a Bermuda subsidiary of a Norwegian corporation and the district sales mangers were employed in its Florida offices. The parties filed cross motions for summary judgment on the issue of whether the defendant was a covered employer under the ADEA. The defendant argued that because it is a foreign corporation not controlled by a United States entity, it was exempted from coverage by section 4(h)(2), which provides: "The prohibitions of this section shall not apply where the employer is a foreign person not controlled by an American employer." The court analyzed related sections of the ADEA, their legislative history, and the goals of the statute and concluded that the purpose of section 4(h)(2) was to exclude the foreign operations of foreign employers; otherwise, a literal interpretation of the ADEA would subject a foreign employer's worldwide operations to coverage if the employer maintained an office in the United States. The court thus concluded that the defendant's Florida's operations were covered by the ADEA and granted summary judgment to the Commission on this issue.

Prior Private Actions

In *EEOC v. G-K-G, Inc.*, 39 F.3d 740 (7th Cir. 1994), the Court of Appeals for the Seventh Circuit unanimously reversed the district court's dismissal of the Commission's ADEA lawsuit against G-K-G. The Seventh Circuit ruled that the Commission has an absolute right to pursue an ADEA enforcement action, even when the charging party has already filed a suit raising the same claims and seeking the same relief.

Other Jurisdiction Cases

In *City of St. Louis v. Milentz and Horne*, 887 S.W.2d 709 (Mo. Cir. Ct. 1994), a state court declaratory judgement action in which the Commission participated as *amicus curiae*, the Missouri Circuit Court agreed with the Commission that it did not have jurisdiction over the City of St. Louis's suit seeking a judgment that its mandatory retirement policy is lawful. The court dismissed the suit, permitting Horne's federal court ADEA action to go forward.

The Eleventh Circuit Court of Appeals affirmed the district court order in *EEOC v. Tire Kingdom, Inc.*, 80 F.3d 449 (11th Cir. 1996), enforcing an EEOC administrative subpoena requesting information about claims of age discrimination against Tire Kingdom. The Court agreed with the Commission that whether the underlying charge was timely filed is irrelevant since EEOC's authority to investigate age claims is not dependent upon the filing of a charge. According to the Court, nothing in the language of the ADEA or the provisions incorporated into the ADEA suggests that EEOC's investigative power depends upon the filing of a charge, and case law from the Supreme Court and lower courts confirms that a timely charge is unnecessary. The court added that, while EEOC's right to sue under the ADEA was subject to the Portal-to-Portal Act statute of limitations before 1991, § 115 of the 1991 Civil Rights Act deleted that reference to the Portal-to-Portal Act, and, so, the statute of limitations no longer applies.

9. Older Workers Benefits Protection Act - Waivers

In *Elliott v. United Technologies Corp.*, No. 3:94-CV-01577 (AVC) (D. Conn. May 19, 1995), the United States District Court for the District of Connecticut agreed with the position advanced by the Commission as *amicus curiae* that the conditions for valid waivers in the context of a group termination imposed by the Older Workers Benefit Protection Act ("OWBPA") apply to an involuntary reduction-in-force, and that an invalid waiver procured by an employer is not "ratified" if the plaintiff fails to return the money he or she received as consideration for the waiver. The court accordingly granted the plaintiff's motion for partial summary judgment, clearing the way for the adjudication of the merits of his claim.

In *EEOC v. Sears Roebuck and Company*, 875 F. Supp. 1233 (N.D. III. 1995), the defendant, in connection with a restructuring of its compensation agreement for employees selling "Big Ticket" items, offered these employees the opportunity to resign and participate in a "Big Ticket Severance Allowance Plan." The plan required employees to decide within five days whether to resign or remain employed under the new compensation agreement, and gave those who resigned 45 days to decide whether to execute a waiver to obtain severance benefits. The Commission's original complaint alleged that the plan violated section 4(d) of the ADEA because it conditioned severance benefits on a wavier that did not comply with section 7(f) of the Act and that required the release of claims unrelated to an employee's termination. The court dismissed the complaint without prejudice, holding that the Commission failed to state a claim under section

4(d), and granted the Commission 20 days to file an amended complaint consistent with the court's discussion of a possible violation of section 4(a). The Commission timely filed an amended complaint alleging a violation of section 4(a), but the court then dismissed the entire case with prejudice. The court had said in its first opinion that the Commission could establish that the defendant's plan violated the 45-day waiver consideration period in section 7(f) of the ADEA for group termination plans. However, the court held in its second opinion that the Commission had failed to identify any individual adversely affected by the plan, and that although the failure to comply with section 7(f) would bar the employer from relying on the release as a defense, a violation of section 7(f) did not constitute a separate claim under the ADEA.

10. Retaliation

In *Padilla & EEOC v. Metro-North Commuter Railroad*, Nos. 88 Civ. 8659 (LMM) and 89 Civ. 2113 (LMM) (S.D.N.Y. 1995), *aff'd*, 92 F.3d 117 (2d Cir. 1996) the jury returned a verdict for the plaintiffs on the claim that the charging party had been demoted from his Superintendent of Train Operations position in retaliation for participating in an EEOC investigation of the age discrimination complaint of an employee he supervised. The jury also found that the violation was willful. The court awarded the charging party back pay of $108,720, interest from June 10, 1988, and $108,720 in liquidated damages. The court refused to reinstate the charging party into his superintendent position because of the damage to his relationship with defendant's upper management caused by the litigation. However, the court held charging party was entitled to equitable relief and awarded him front pay to the age of 67 (the date he will become eligible for a full pension), calculated as the difference between what he earns in the position to which he was demoted and what he would have earned in his former position. The charging party was 43 years old as of the date of judgment. The defendant appealed on the merits and on the award of front pay.

On appeal, the Second Circuit affirmed the lower court on all points, holding that defendant failed to bear its burden of showing it would have demoted Padilla for misconduct even absent his protected activity, as well as its burden of showing (in connection with its failure-to-mitigate argument) that better-paying positions were available for persons with Padilla's credentials. The court also rejected defendant's argument that the front pay award was an abuse of discretion because of its length. The court held the lengthy award was necessary to make Padilla whole.

11. State Laws (Other Than Mandatory Retirement)

In *Quinones v. City of Evanston*, 58 F.3d 275 (7th Cir. 1995), the plaintiff challenged the Illinois statute that limited eligibility for the Firefighters' Pension Fund to people under age 35 at the time of their application. The statute also precluded municipalities from providing their

firefighters with any pension coverage other than that authorized by state law. In reliance on this state statute, the City of Evanston denied pension coverage to the plaintiff, who was age 43 when he applied. The district court ruled that the city violated the ADEA when it denied pension coverage to the plaintiff. The Seventh Circuit affirmed. The appellate court agreed with the Commission as *amicus curiae* that Illinois was not a necessary party, that the City could not rely on an invalid state law to escape liability under the ADEA, and that the state law at issue was facially invalid because the ADEA does not permit age-based pay differences among employees. The court of appeals held that neither the City of Evanston nor any other governmental body could rely on the invalid state law to exclude older firefighters from pension coverage.

In *EEOC v. State of Illinois and Bourbonnais Elementary Board of Education*, No. 88-CV-2261 (C.D. Ill. Oct. 31, 1994), *rev'd, EEOC v. State of Illinois*, 69 F.3d 167 (7th Cir. 1995), the Commission challenged an Illinois state law that revoked the tenure of public school teachers and placed them on annual contracts when they reached age 70. Bourbonnais entered into a consent decree with the Commission on behalf of the charging party and was dismissed from the lawsuit. The district court granted summary judgment in EEOC's favor on liability vis-a-vis two other teachers who had been forced to retire when their tenure was revoked. According to the lower court, changing the teachers' status to employees at will violated the ADEA and the ADEA preempted the state law. After trial, the lower court also awarded more than $500,000 in back pay. The district court further found that the state's violation was willful because the state was aware by March 23, 1988, that it was in violation of the ADEA, but made no effort to repeal the statute until January 1, 1989. On appeal, the Seventh Circuit reversed, holding that a state is not liable for failing to repeal a discriminatory state law despite its failure to take any steps to notify affected persons of the law's invalidity.

12. Terms And Conditions Of Employment

A consent decree was entered in *EEOC v. Trans World Airlines, Inc.*, No. 990-5865 9TJH (Tex) (C.D. Cal. October 30, 1995), resolving the Commission's allegations that defendant's weight requirements for incumbent flight attendants had a disparate impact on women age 40 and older. Defendant agreed to eliminate its weight standards for incumbent flight attendants and to not take future adverse action against a flight attendant based on weight alone. Defendant also agreed to reinstate all flight attendants suspended or terminated for exceeding its former weight standards, with full restoration of line and company seniority.

13. Willfulness

In *Glover v. McDonnell Douglas Corp.*, 12 F.3d 845 (8th Cir. 1994), in which the Supreme Court had granted *certiorari*, vacated and remanded for reconsideration in light of *Hazen Paper Co. v. Biggins*, 113 S. Ct. 1701 (1993), a panel of the Eighth Circuit Court of Appeals reaffirmed its earlier holding that the plaintiff failed to present sufficient evidence to sustain the jury's finding that his discharge constituted a willful violation of the ADEA. In its prior opinion, the panel had held that there was sufficient evidence to support the jury's determination that Glover was chosen for layoff and not considered for transfer because of his age. Further, it acknowledged that, before he made the decision to fire Glover, the official had been briefed on the prohibitions of the ADEA. However, the panel held that this evidence was insufficient to support the finding of a willful violation. The Commission participated as *amicus curiae*.

III. ATTACHMENTS

ATTACHMENT I

FY 1995 ADEA LITIGATION ACTIVITIES

DISTRICT OFFICE[1]	ADEA CASES FILED[2]	ADEA CASES RESOLVED[3]	MONETARY BENEFITS OBTAINED
ATLANTA	2	4	$115,428.46
BALTIMORE	2	3	$8,014,000.99
BIRMINGHAM	3	3	$236,612.04
CHARLOTTE	1	1	$6,937.95
CHICAGO	2	9	$1,218,409.00
CLEVELAND	0	6	$135,951.04
DALLAS	2	2	$29,000.00
DENVER	1	0	N/A
DETROIT	2	2	$60,000.00
HOUSTON	0	0	N/A
INDIANAPOLIS	1	2	$39,500.00
LOS ANGELES	4	3	$67,500.00
MEMPHIS	2	2	$3,000.00
MIAMI	6	14	$318,642.00
MILWAUKEE	1	5	$993,655.00
NEW ORLEANS	2	1	$81,729.00
NEW YORK	7	10	$164,500.00
PHILADELPHIA	8	7	$36,000.00
PHOENIX	2	2	$41,500.00
SAN ANTONIO	0	0	N/A
SAN FRANCISCO	0	2	$3,156,000.00
SEATTLE	0	2	$110,000.00
ST. LOUIS	4	3	$145,424.80
SLS	0	1	$300,000.00
TOTAL	52[4]	84[5]	$15,273,790.28

[1] Includes Systemic Litigation Services ("SLS") located in EEOC's Headquarters.

[2] Includes six cases filed under the ADEA and other statutes.

[3] Includes nine cases resolved under the ADEA and other statutes.

[4] Includes 18 cases filed on behalf of a class or similarly-situated persons.

[5] Includes 24 cases resolved on behalf of a class or similarly-situated persons.

ATTACHMENT 2

FY 1996 ADEA LITIGATION ACTIVITIES

DISTRICT OFFICE[1]	ADEA CASES FILED[2]	ADEA CASES RESOLVED[3]	MONETARY BENEFITS OBTAINED
ATLANTA	0	1	$4,000.00
BALTIMORE	2	2	$0.00
BIRMINGHAM	1	2	$4,982.40
CHARLOTTE	0	1	$7,000.00
CHICAGO	0	3	$5,472,859.00
CLEVELAND	0	0	N/A
DALLAS	1	3	$171,000.00
DENVER	0	1	$35,000.00
DETROIT	1	2	$2,297.35
HOUSTON	1	1	$0.00
INDIANAPOLIS	2	1	$0.00
LOS ANGELES	1	3	$52,203.00
MEMPHIS	0	0	N/A
MIAMI	0	3	$256,300.00
MILWAUKEE	0	0	N/A
NEW ORLEANS	0	0	N/A
NEW YORK	2	7	$1,762,500.00
PHILADELPHIA	2	8	$355,960.00
PHOENIX	2	4	$91,767.30
SAN ANTONIO	1	0	N/A
SAN FRANCISCO	1	0	N/A
SEATTLE	0	0	N/A
ST. LOUIS	1	4	$20,854,295.70
SLS	1	2	$310,219.36
TOTAL	19[4]	48[5]	$29,380,384.11

[1] Includes Systemic Ligitation Services ("SLS") located in EEOC's Headquarters.

[2] Includes Systemic Litigation Services ("SLS") located in EEOC's Headquarters. Includes two cases filed under the ADEA and other statutes.

[3] Includes nine cases resolved under the ADEA and other statutes.

[4] Includes eight cases file on behalf of a class or similarly-situated persons.

[5] Includes 17 cases resolved on behalf of a class or similarly-situated persons.

INTRODUCTION

During FY 1996, the Equal Employment Opportunity Commission (EEOC) fully integrated the Priority Charge Handling Procedures into its operations. The new procedures, coupled with implementation of the National and Local Enforcement Plans, provided a coordinated approach to achieving the agency's mission through investigation, conciliation, and litigation, in addition to technical assistance and public education.

Through its headquarters program components and the field offices, the Office of Program Operations (OPO) ensures that EEOC's charge resolution mission is accomplished in accordance with the Agency's legislative mandate and mission statement. The Director of the Office reports to the Chairman, providing direction and overall supervisory, managerial and fiscal responsibility for all OPO activities. At headquarters, the Director carries out the mission of OPO with an organization consisting of four staffed program areas and an administrative unit. OPO field staff conduct EEOC law enforcement activities in 50 offices - 24 district offices, the Washington, D.C. Field Office and 25 area and local offices.

FY 1996 Highlights

Streamlining the Charge Process

Some of the most significant actions on behalf of the Commission during FY 1996 were those efforts, begun in FY 1995, directed at streamlining the organization and modifying the charge process to address the agency's overwhelming charge inventory.

In FY 1996, the Office of Program Operations (OPO) headquarters provided technical assistance and support to the field offices in streamlining their operating systems and enhancing the new multi-faceted charge resolution approach. OPO headquarters also coordinated activities across field office jurisdictions and met the challenge of managing large and complex workloads with less staff available.

In FY 1996, with the aid of the new charge handling procedures discussed above, field offices realized the highest annual total charge resolutions in the Agency's history. As a result, FY 1996 witnessed the largest inventory reduction in a 12-month period in the Agency's history. In addition, field offices continued their efforts to provide education, technical assistance and outreach to employers and to a broad range of protected groups.

HIGHLIGHTS

■ Workload Reduction

During FY 1996, the pending workload declined for the first time since FY 1990. It represents the largest inventory reduction in a 12-month period in the Agency's history. In an atmosphere of increased flexibility in managing their workloads, field offices increased their charge resolution activity levels, employed innovative charge prioritization methods and adjusted staffing structures to effectively address their individual workloads. Resolutions increased by 12.7 percent from FY 1995 to FY 1996.

The increase in resolutions combined with the decline in receipts resulted in a 19.2 percent reduction in the pending inventory (from 98,269 in FY 1995 to 79,448 in FY 1996); contrasting with the average increase in pending inventory of 24.0 percent per year from FY 1992 through FY 1995.

	FY 95	FY 96*	Difference
Receipts	87,529	77,990	-10.9%
Resolutions	91,774	103,467	12.7%
Charge Resolution Activity Level (Individual)	120.6	139.0	15.3%
Pending	98,269	79,448	-19.2%

* FY 1996 data includes Commissioner Charge activity reported separately in prior years.

■ Charge Resolution Quality

During FY 1996, there were 749 successful conciliations and 1,509 unsuccessful conciliations, a total of 2,258 charges resolved after a finding of reasonable cause. Reasonable cause resolutions increased by 8.8 percent from 2,075 in FY 1995. The FY 1996 merit factor rate, or the percentage of charges in the enforcement workload that were resolved in favor of charging parties, was 9.1 percent.

Total monetary benefits increased by 6.8 percent from $136.0 million in FY 1995 to $145.2 million in FY 1996. A total of 8,144 persons received monetary benefits in FY 1996. Average benefits per person who benefitted monetarily increased by 18.5 percent from $15,056 in FY 1995 to $17,835 in FY 1996.

	FY 95	FY 96	Difference
Monetary Benefits*	$135,956	$145,248	6.8%
Average Monetary Benefits	$15,056	$17,835	18.5%
Persons Benefitted Monetarily	9,030	8,144	-9.8%
Merit Factor	11.9%	9.1%	-2.8 percentage points

*Monetary benefits in thousands

■ Federal Sector Hearings

In FY 1996, 10,677 requests for hearings were received, a slight increase (1.5 percent) from FY 1995. Hearings resolutions totaled 8,760 for the fiscal year. There was a 2.5 percent decrease in staffing of Administrative Judges (AJ) during the fiscal year. The FY 1996 pending inventory increased by 30.0 percent or 1,908 cases over the pending inventory at the end of FY 1995.

Hearings	FY 95	FY 96	Difference
Receipts	10,515	10,677	1.5%
Resolutions	9,324	8,760	-6.0%
Pending	6,367	8,275	30.0%
AJs Available	76.8	74.9	-2.5%

ORGANIZATION OVERVIEW

Office of Program Operations (OPO)

OPO administers the Agency's administrative enforcement programs and is responsible for the resolution of charges and complaints of employment discrimination filed under Title VII of the Civil Rights Act of 1964, as amended; the Age Discrimination in Employment Act of 1967 (ADEA), as amended; the Equal Pay Act of 1963 (EPA); and the Americans With Disabilities Act of 1990 (ADA). OPO is organized in four program areas and an administrative staff.

Office of the Director (OD)

OD provides overall direction, coordination, leadership, and administrative support to OPO program areas, and retains overall supervisory and fiscal responsibility for OPO.

Field Management Programs (East and West) (FMP)

FMP provides guidance and technical assistance for the 50 field offices on all aspects of field operations and management activities and is responsible for field office operations. FMP is the primary liaison with field staff in coordinating activities and problem-solving situations with other headquarters offices. In providing assistance to the field offices, FMP conducts regular on-site visits to assess field operations, provides feedback and gives technical assistance when needed. Each field office, assigned a jurisdiction with specific geographic boundaries, is charged with accomplishing the statutory enforcement responsibilities of the Commission through investigation and resolution of charges filed within its jurisdiction. Field offices are also responsible for conducting education and outreach activities and maintaining the deferral relationship with State and Local FEP agencies. District Offices also conduct hearings to adjudicate EEO complaints against Federal agencies and implement the Federal affirmative action program.

Systemic Investigations and Review Programs (SIRP)

SIRP initiates, investigates and resolves those systemic and limited scope charges brought by the Commission which are investigated in headquarters. Generally, the systemic docket consists of charges filed by Commissioners against a diverse assortment of industries.

Charge Resolution and Review Program (CRRP)

CRRP conducts activities intended to strengthen the EEOC's administrative enforcement process and the agency's partnership with State and Local Fair Employment Practices Agencies (FEPAs) and Tribal Employment Rights Organizations (TEROs). Serves as liaison between FEPAs and EEOC on policy and procedural issues, provides oversight for FEPA worksharing agreements and charge resolution contracts; certifies FEPAs' 706 Agency status; and provides training for both TERO and FEP agency personnel. Also, investigates charges transferred from field offices in order to alleviate the field office workload.

Operations Research and Planning Programs (ORPP)

ORPP produces summary statistical reports of data required by OPO in planning and carrying out its functions; designs and conducts national surveys of employment sector data; analyzes data from employment sectors and from OPO field and headquarters offices and produces research and analytical reports; conducts reviews and issues reports on effective field office investigative strategies; provides investigative support and analytic services to field offices in the investigation of class and pattern and practice investigations; and provides long- and short-range planning systems from which decisions regarding operational plans and goals, and workload distribution may be made.

Administrative Support Services Staff (ADM)

ADM provides administrative and technical support services to all OPO components. In addition, conducts comparative analyses of financial transactions and monitors their impact on budget allocations, and administers the OPO management reporting system.

PROGRAM AREA ACCOMPLISHMENTS

Charge Prioritization

Effective inventory prioritization and resource allocation consistent with field office goals have been essential elements of the Agency's Priority Charge Handling Procedures (PCHP) that were first implemented in late June 1995. At the end of FY 1996, 18.1 percent, or 14,387 of all pending charges, were Priority "A"; 69.4 percent, or 55,144 were Priority "B", and 7.6 percent, or 6,029 charges, were Priority "C". In terms of resolution activity, Priority "A" charges accounted for 9.8 percent (10,095) of total FY 1996 resolutions, Priority "B" charges were 52.6 percent (54,411), and Priority "C" charges 34.9 percent (36,159) of total resolutions. This trend reflects field office implementation strategies of first addressing the accumulated inventory of non-meritorious Priority "C" charges, then directing attention to Priority "A" and "B" charges.

Workload Reduction

By the end of FY 1996, EEOC's pending inventory showed the dramatic effects of the new procedures. There was a dramatic increase in resolutions. Consequently, the number of charges pending at the end of FY 1996 (79,448) was 19.2 percent lower than at the end of FY 1995 (98,269). By comparison, the average annual growth in the pending inventory from FY 1992 through FY 1995 was 24.1 percent.

Field offices accomplished the reduction in workload by employing a variety of innovative techniques to meet their specific local workload needs. Among methods used to increase charge processing effectiveness were: restructuring intake processes to provide more effective counseling to charging parties; scheduling on-site investigations soon after intake; and holding fact-finding conferences that expedited charge resolutions. The field offices resolved 103,467 charges in FY 1996, 11,693 or 12.7 percent more charges than in FY 1995.

The following table shows significant trends that developed in FY 1995 and continued in FY 1996.

	FY 1992	FY 1993	FY 1994	FY 1995	FY 1996
RECEIPTS	72,302	87,942	91,189	87,529	77,990
RESOLUTIONS	68,366	71,716	71,563	91,774	103,467
AVG. RESOLUTIONS/ STAFF AVAIL	92.8	97.1	97.8	120.6	139.0
STAFF AVAILABLE	736.3	738.3	732.1	760.9	744.2
PENDING	52,856	73,124	96,945	98,269	79,448
AVG. CASELOAD/ STAFF AVAIL	71.8	99.0	132.4	129.1	106.8

Charge Resolution Activity

Merit Resolutions. Merit resolutions are charges with outcomes favorable to charging parties and/or charges with meritorious allegations. They include successful and unsuccessful conciliations, negotiated settlements, and withdrawals with benefits. The number of charges resolved as merit resolutions declined by 13.7 percent from 10,921 in FY 1995 to 9,430 in FY 1996. Merit resolution activity in FY 1996 is discussed in more detail below.

Reasonable Cause Resolutions. Field offices used flexible and innovative methods to identify and focus resources on charges that were likely to result in cause findings, such as prioritizing the workload to identify potential cause cases and allocating staff to specific units or task forces to provide expedited processing of potential cause cases. During FY 1996, the number of reasonable cause resolutions increased by 183 from 2,075 in FY 1995 to 2,258. Of additional interest is the fact that 2,547 cause findings -- made prior to final resolution of charges -- were issued during FY 1996. This is 18.5 percent greater than the 2,150 issued in FY 1995.

Settlements. Another indicator of positive outcomes for charging parties are settlements negotiated by the Commission which provide benefits for charging parties. In FY 1996, 3,163 charges were resolved through settlement agreements. It is anticipated that the number of settlements will rise as the PCHP identify more vehicles appropriate for this type of resolution.

Withdrawals with Benefits. Charging parties may reach agreements with their employers independently of the Agency. As a result, the charging party will withdraw the charge in return for monetary and/or non-monetary benefits. In FY 1996, 4,009 resolutions, or 3.9 percent of all charges, were resolved in this manner, a decline from 5,035 in FY 1995.

Benefits to Charging Parties. Charging parties may receive benefits when the outcome of the investigation or the resolution of the charge is favorable to them. Benefits include back pay or other monetary awards as well as non-monetary benefits such as training or changes in policy which affect protected groups. Total monetary benefits increased by 6.8 percent from $135,955,776 in FY 1995 to $145,248,006 in FY 1996. Average monetary benefits per person benefitted monetarily increased by 18.5 percent from $15,056 in FY 1995 to $17,835 in FY 1996. In addition, 2,776 individuals received non-monetary benefits during FY 1996.

Charge Resolutions by District

The following is a sample of charges resolved by EEOC district, area and local offices in FY 1996. This sample reflects a broad range of the bases and issues present in EEOC's workload. These resolutions reflect the efforts of field offices to fully integrate the PCHPs into their operations. Each of the resolutions may reflect innovative strategies and techniques; address priority issues under the National and Local Enforcement Plans; provide for the adoption of non-discriminatory employment policies and practices; and/or include substantial monetary and non-monetary benefits for aggrieved individuals.

The ***Atlanta District Office*** successfully conciliated 11 charges alleging denial of promotion of Blacks to management positions and retaliation against Whites who objected to the retaliatory treatment. Close interaction between the enforcement and legal units during the investigation of these charges resulted in the payment of $3.7 million in monetary benefits as well as the inclusion of affirmative action, recordkeeping and training provisions in the conciliation agreement.

The ***Baltimore District Office*** found reasonable cause to believe that a mentally impaired 19 year old female employee of a fast food restaurant had been subjected to egregious sexual harassment. The male co-worker who had assaulted the charging party was fired after the incident. The conciliation agreement provided for the payment of $300,000 in compensatory and punitive damages. Due to the fact that the charging party has the mental capacity of a nine year old, a trust was established by her family to administer the monetary benefits.

The ***Birmingham District Office*** resolved a charge filed against a manufacturing firm. The charging party alleged that the respondent retaliated against him by failing to pay him severance benefits after he had filed a charge under the Age Discrimination in Employment Act. In addition, it was alleged that the respondent violated the Older Workers' Benefit Protection Act (OWBPA) by failing to give the charging party 21 days to consider a waiver of his rights and failing to indicate that the waiver may be revoked within seven days of its execution. Under the terms of the consent decree, the charging party received $2,494 in severance benefits, $2,071 in liquidated damages, $266 in medical expenses and $151 in prejudgment interest. The defendant was also required to post a notice to its employees and to revise its waivers in order to comply with the OWBPA.

The ***Chicago District Office*** resolved ten concurrent Title VII/EPA charges filed against a department of a municipal government. The ten charges were consolidated and processed as an "A" case under the PCHPs. The charging parties alleged that they were paid less than males who performed the same or similar clerical duties but who had followed different career paths prior to moving into the clerical jobs. Under the terms of the negotiated settlement agreement, eight of the women received $10,000 each, and a charging party who retired prior to the charge filing date received $1,000. Another charging party settled her wage claim with the respondent prior to the close of the investigation.

The ***Denver District Office*** found reasonable cause to believe that nine female employees were sexually harassed by one of the respondent's managers. The charges were served in person at which time an on-site investigation was conducted. The on-site revealed a notice posted in the break room warning employees not to discuss matters of alleged sexual harassment. It was concluded that such a warning has a chilling effect on identifying and eradicating sexual harassment in the workplace. Within 48 hours the respondent agreed to remove the notice and to replace it with a new notice drafted by the District Office's investigative staff. The new notice informed the respondent's employees of their rights to file charges with the EEOC. A conciliation agreement was subsequently reached. It provided for the payment of $75,000 in monetary benefits and the development and dissemination of a respondent policy prohibiting sexual harassment.

The ***Detroit District Office*** negotiated the settlement of an ADEA charge filed against a manufacturing firm. The charge was designated as "potential merit" case during intake due to the strength of supporting

evidence presented by the charging party. The respondent was engaged in "downsizing" and restructuring its operations by creating (renaming) certain positions, functions and responsibilities while eliminating others. The respondent planned to move the charging party into a lateral position. By contrast, it created a new position and reassigned a younger, less experienced and less qualified employee into the position to which the charging party could have been reassigned (promoted). The entire settlement package was valued at $350,000.

The ***Houston District Office*** entered into a consent decree resolving an ADEA directed charge filed against an accounting firm. The respondent failed to hire older workers for entry level accounting and tax positions. The consent decree provided that $600,000 will be distributed to 24 job applicants who were denied employment due to their age. The respondent also hired three of the aggrieved individuals and expanded its recruitment efforts to attract older workers.

The ***Indianapolis District Office*** resolved three charges involving racial harassment at an asbestos abatement construction site. The project had been completed at the time of the investigation and the witnesses were scattered throughout Indiana, Kentucky, and as far away as Texas. The investigator was successful in tracking down a key witness, initially identified only by a nickname, who was working in Texas. Through extensive witness contacts, the investigator was able to establish that the respondent had knowledge of the harassment earlier than it had acknowledged; and that the respondent failed to take immediate and effective action. The three charges were successfully conciliated. Each of the charging parties received $6,500, while three other class members each received $500 in monetary damages.

The ***Nashville Area Office*** settled an ADEA charge filed by a regional sales manager who alleged he had been given unfair performance appraisals and denied bonuses due to his age (44). A particularly innovative settlement was fashioned in response to the desire of both parties to resolve the matter. Under the terms of the settlement agreement, the respondent agreed to set up the charging party in his own business and to provide him with computers, software, tools and supplies valued at approximately $250,000. The charging party also received $50,000 in severance pay and continuing paid health insurance.

The ***Miami District Office*** resolved a charge filed by a 63 year old executive level employee who alleged that he had been discharged because of his age. The parties entered into a settlement agreement whereby the charging party was retained as an independent contractor. The charging party, in addition to receiving $53,000 in back pay, will receive future compensation under a lucrative commission sales pay plan.

The ***Milwaukee District Office*** entered into a consent decree resolving a race discrimination charge filed against an employment agency. Under the decree and resulting injunction, the defendant will not honor employer requests to fill job vacancies based on race. The defendant will not code applications describing the race of job applicants and will not retaliate against any individual associated with the lawsuit. The defendant will maintain a record of all employers making discriminatory requests and will notify EEOC of such requests. The policy changes will impact at least 10,000 temporary placements per year.

The ***New York District Office*** resolved an ADA charge filed by an individual who alleged that he was fired because his employer regarded him as having a disability. The charging party was fired after he returned to work from a vacation trip to his native India. He reported to work with a cold and was told to obtain a doctor's note before returning to work. When he protested, he was told not to come back because he probably had "tuberculosis or some other awful disease that he must have picked up in India." This charge was identified as a priority settlement vehicle. After several negotiating sessions with the respondent, an agreement was reached. The charging party was reinstated with six months back pay totaling $32,500.

The ***Buffalo Local Office*** negotiated the settlement of a charge filed by an individual who, after recovering from a heart attack and stroke, was not allowed to return to work. Five days after the investigator's initial contact with the respondent, the charging party was reinstated to his former position at an annual salary of $33,000. A fact-finding conference was held two days later, during which a formal settlement was reached. In addition to reemployment, the charging party received $2,250 in back pay.

The ***Philadelphia District Office*** settled an ADA charge filed against a police department. The charging party, who had epilepsy, alleged that the respondent diagnosed him as permanently disabled and refused to allow him to return to work and perform his duties as a lieutenant. Under the terms of the settlement agreement, the charging party was reinstated to the position of security agent at an annual salary of $43,498 with no break in seniority or pension accrual. The monetary benefits totaled $55,375.

The ***Phoenix District Office*** resolved a retaliation charge filed against a municipality. The charging party alleged that the respondent retaliated against him because he had been a witness in an incident of sexual harassment. At the time he filed the charge, he was on stress-related medical leave and faced possible termination. However, his doctor would not release him to return to his former work environment. This charge was flagged for priority processing. A settlement was reached five months after the charge filing date. The respondent agreed to reinstate the charging party in a different department, restore paid sick leave he used during his stress-related absences from work, and compensate the charging party for unpaid time off.

The ***El Paso Area Office*** settled a concurrent Title VII/ADEA/ADA charge. The charging party alleged that she was harassed, demoted and subjected to unequal terms and conditions of employment because of her sex, age (51), and back and psychological impairments. This approach facilitated the settlement, which resulted in the payment of $106,000 in monetary benefits to the charging party.

The ***Oakland Local Office*** completed an investigation of an ADA charge within 14 days from the date it was assigned to an investigator. The investigation disclosed that the charging party, a rehabilitated drug user, was discharged because of his history of drug addiction. In addition, on its employment application form, the respondent sought impermissible information about applicants' disabilities and workers compensation claims. As a result of a successful conciliation, the charging party received $8,000 in monetary benefits and the respondent revised its employment application form to eliminate all questions pertaining to an applicant's disability.

The ***Kansas City Area Office*** resolved a concurrent Title VII/EPA charge filed by a female maintenance worker employed by a small rural city. The charging party alleged that she was paid less than two male co-workers for the performance of substantially equal work. The investigator conducted two on-site conferences with the charging party and the respondent's attorney. The charge was resolved within 52 days of assignment. The charging party received a $3.00 per hour wage increase (an annualized increase of $5,137) along with $9,617 in back pay.

The ***Seattle District Office*** resolved a Title VII charge filed against a large metropolitan police department. The charging party alleged that the respondent engaged in a pattern or practice of discrimination against women and minorities by using a pre-employment test which screened them out from hiring opportunities. Because problems with the test were addressed at an early stage of the investigation, discriminatory impact on protected persons was minimized.

The ***Washington Field Office*** found reasonable cause to believe that a municipality refused to hire a charging party because of her race and sex. Under the terms of the conciliation agreement, the respondent agreed to hire the charging party into a senior environmental specialist position at an annual salary of $30,624 along with seniority and other benefits retroactive to the date she should have been hired. The respondent also agreed to remove any reference to the filing of the charge from the charging party's personnel file. The agreement also contained posting and reporting requirements.

Commissioner Charge Field Activity. Significant resolutions of Commissioner charges in FY 1996 included the following examples:

- *The **Atlanta District Office*** negotiated a conciliation agreement in a race discrimination charge which addressed recruiting, hiring, assignment, and record keeping violations. The respondent agreed to pay $101,000 in back pay plus $3,099 in incentive pay to each aggrieved class member hired, and $11,034 to any aggrieved class member who was not hired within one year of the Agreement date.

- *The **Birmingham District Office*** resolved a sex discrimination charge against a food distributor. Under the terms of the conciliation agreement, the respondent agreed to pay $371,105 in back pay to 362 aggrieved class members. Birmingham was successful in locating and distributing virtually all of the checks to the class members during FY 1996.

- *The **Houston District Office*** successfully conciliated a charge involving repeated and deliberate national origin, race, age, and disability-based discrimination. A total of $266,000 in monetary benefits was obtained. Notices to potential claimants were published in minority newspapers in the Houston-Galveston area.

- *The **Memphis District Office*** resolved a charge against a major cooperative food distributor. The conciliation agreement provided for the payment of $266,500 to 214 aggrieved class members who were rejected for official/manager, technician, office/clerical, operative, or laborer jobs. The agreement also provided for posting of a notice, creation of written non-discriminatory hiring guidelines, and reporting for a period of three years.

- *The New Orleans District Office* resolved a sex discrimination charge filed against a drug chain. It was determined that females were denied floor manager positions because of their sex. The New Orleans legal unit settled the charge prior to filing suit. A total of $185,049 was distributed to approximately 400 aggrieved class members.

Federal Sector Activity

Federal Affirmative Employment. Federal agencies are required to maintain affirmative employment programs and to report to EEOC annually on the status of those programs. Nine District Offices have Federal Affirmative Action (FAA) units, which approve and monitor Federal affirmative employment plans, evaluate plan updates and agency accomplishment reports for compliance with EEOC direction, and provide technical assistance to agencies. In FY 1996, four on-site reviews at Federal installations were conducted by FAA units.

Hearings. The Federal EEO complaint regulations, 29 C.F.R. Part 1614, provide a complainant the right to request a hearing before EEOC. The Federal EEO hearings process is conducted by EEOC Administrative Judges (AJs), who are located nationwide in each EEOC District Office and the Washington Field Office. During FY 1996, the Commission's hearings units nationwide received 10,677 requests for hearings. This was a 1.5 percent increase from the 10,515 requests for hearings received in FY 1995.

Significant Hearings Resolutions. Examples of significant hearings resolutions follow.

The Baltimore District Office Hearings Unit decided a case in which a heavy equipment operator employed by a military department was terminated two days prior to the end of his one-year probationary period. The AJ found that the agency discriminated against the complainant by terminating him based upon his perceived disability (back impairment) although the complainant had been meeting the legitimate expectations of his position. The termination action was based upon the supervisor's lay assessment that the complainant's back condition would probably disable him some time in the future. The AJ ordered reinstatement with back pay and attorneys fees. The parties resolved the case for $100,000 prior to the expiration of the appeal period.

The Philadelphia District Office Hearings Unit resolved a sexual harassment and retaliation complaint filed by an employee of a Federal agency. Specifically, the complainant alleged that she was continuously sexually harassed by her male co-workers and supervisor. She was also forced to work in a hostile work environment. When, as directed, she placed a poster dealing with sexual harassment on a bulletin board, her supervisor subsequently told her to remove the poster because he felt that it "made men look bad." Pursuant to AJ discussions with the parties' attorneys, the case was settled with a lump sum payment of $136,000 to the complainant and the restoration of 117 hours of sick leave.

State and Local Fair Employment Practices Agencies (FEPAs)

During FY 1996, FEPAs received 63,838 charges, a decrease of 1.4 percent from the 64,764 charges received in FY 1995. Resolutions increased by 3.3 percent from 56,156 in FY 1995 to 57,984 in FY 1996. Although resolutions increased, receipts exceeded resolutions by 5,844 charges. The FY 1996 pending inventory declined by 3.2 percent, from 83,888 at year-end FY 1995 to 81,190 at the end of FY 1996. Net FEPA transfers (the gain in charges transferred to EEOC for investigation) increased by 13.1 percent during FY 1996, from 5,750 in FY 1995 to 6,505.

Alternative Dispute Resolution

Alternative Dispute Resolution (ADR) offers a voluntary mediation option, facilitated by a neutral third party, to promote early dispute resolution where such agreement is possible. During FY 1996, EEOC staff who had received mediation training conducted mediation sessions when both parties to a charge were amenable. By the close of FY 1996, 98 charges had been resolved through the mediation process and 275 charges were pending mediation. Field office ADR programs which relied upon the use of pro bono mediators could not be implemented during FY 1996. The Administrative Dispute Resolution Act of 1996 (ADRA), which permitted the use of pro bono mediators, was not signed into law until the beginning of FY 1997 (October 19, 1996). During FY 1997, field offices will begin implementation of ADR programs nationwide.

Surveys Activity

In FY 1996, investigative support activity provided to staff assigned to commissioner charges, both in-house and in the various field offices increased, with major statistical work provided in 29 cases. The filing of survey reports on either magnetic tape or on diskettes rather than the paper survey forms, has taken hold during FY 1996. A Windows® version of an interactive diskette was mailed to employers instead of the survey forms. Instructions guided employers through completion of the EEO-1 data. The programs include built-in editing functions. This made extensive editing and follow-up unnecessary. The diskettes include the entire SIC (Standard Industrial Classification) code manual as a look-up table, improving SIC assignments. During FY 1996 almost 10,000 EEO-1 reports were received on diskette, saving that many paper forms and time and cost both to the employers and the government. In FY 1996 the respondent burden to EEO-1 employers alone was reduced by close to $500,000 and 50 percent of the public elementary school districts submitted their data on diskettes.

To take advantage of the Intergovernmental Personnel Act during FY 1996, the Agency reached agreement with several academic institutions who are doing research in equal employment opportunity areas in private industry and state and local government. In exchange for use of EEOC's survey data files these institutions will share their research with the Commission. During the past year, the Agency developed aggregate non-confidential data sets which are available to data users on diskettes which has minimized the number of individual data requests and has provided users the data more quickly and in a more useful form.

The publication, Indicators of Equal Employment Opportunity-Status and Trends, has become widely popular with distribution reaching over 1,000 copies, and the Government Printing Office ordering 1,000 for sale in its stores.

EDUCATION, TECHNICAL ASSISTANCE AND OUTREACH

In FY 1996, the Commission continued its efforts to enhance public awareness of EEOC and its laws prohibiting employment discrimination. The Commission's education and outreach efforts included Technical Assistance Program Seminars (TAPS) and other appearances in which EEOC representatives addressed members of the public.

Technical Assistance Program Seminars. Under the auspices of the Agency's Education, Technical Assistance and Training Revolving Fund, specialized, in-depth training was provided to employers through Technical Assistance Program Seminars (TAPS). EEOC District Office staff conducted 43 TAPS in FY 1996, attended by 6,089 managers, human resource specialists, legal and other officials representing private and public employers, unions and other organizations. This was the highest yearly attendance since TAPS were inaugurated and a significant increase from FY 1995 attendance of 5,772 persons. The average participant level for FY 1996 full-day programs was 152; the average for half-day programs was 80. The seminars provided information regarding rights and obligations under laws enforced by the Commission. Fees paid into the Revolving Fund were used to finance seminar costs.

Outreach Activities. Extensive education, training and technical assistance to the public on rights and obligations under the laws enforced by EEOC continued in FY 1996. Field offices reached a large audience with information about EEOC and the laws it enforces through their outreach activities. Outreach activities are defined as public presentations on EEOC policies and procedures as they relate to the laws enforced by the Commission. In FY 1996, Agency staff provided information to more than 65,000 people who attended over 1,300 presentations made in a variety of settings, including workshops, conferences, and on radio and television. Field office representatives made presentations to professional organizations for attorneys, human resources professionals, business owners and other groups (41.3 percent); advocacy groups (24.1 percent); students (9.9 percent); representatives and employees of other Federal and state agencies (9.4 percent); employers (4.9 percent) and other groups (10.4 percent).

The topic most often addressed was general EEOC information (68.9 percent). Presentations under this topic included those covering more than one statute, the Civil Rights Act of 1991, and other issues of concern to participants. Sexual harassment was the topic addressed next most frequently (15.7 percent), while the ADA was the topic of discussion in 12.2 percent of the presentations. The remainder of the presentations (3.2 percent) concerned specific Title VII and ADEA issues.

EEOC field office staff at all levels participated in these presentations. Of over 1,300 public appearances made, office directors represented EEOC on 379 occasions (27.8 percent); managers and supervisors addressed public gatherings on 498 occasions (36.5 percent); and other staff represented EEOC on 487 occasions (35.7 percent).

Examples of presentations made at the request of outside organizations are provided below:

- A ***Birmingham District Office*** staff member delivered ADR training to 50 members of a local Chamber of Commerce.
- A manager in the ***Chicago District Office*** spoke to 200 human resource specialists on EEOC's Priority Charge Handling Procedures.
- The ***Minneapolis Area Office*** Director delivered a speech on charge processing to 100 Native American members of the Eastern Region of Tribal Employment Rights Organizations (TEROs).
- The ***New York District Office*** Director participated in an ADA workshop attended by 200 labor attorneys.
- A ***Phoenix District Office*** investigator participated in a seminar on the EEOC investigative process attended by 250 human resource specialists and corporate executives.
- The ***San Antonio District Office*** Director delivered a speech on sexual harassment to 230 corporate managers.

Other Presentations/Events. In addition to the 65,000 plus people reached in the outreach presentations discussed above, field offices reached more than 21,000 members of the public at over 200 non-EEOC events or presentations. Some of the topics covered at these events were educational goal setting, internship opportunities, government careers, mentoring, cultural awareness, and legal ethics.

APPENDIX

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DATA TABLES

EEOC/FEPA RECEIPTS

Table 1

Fiscal Year		Total	EEOC	FEPA
1992	Total	131,360	72,302	59,058
	Percent	100.0%	55.0%	45.0%
	Change 1991-92	10.6%	13.2%	7.6%
1993	Total	152,364	87,942	64,422
	Percent	100.0%	57.7%	42.3%
	Change 1992-93	16.0%	21.6%	9.1%
1994	Total	158,582	91,189	67,393
	Percent	100.0%	57.5%	42.5%
	Change 1993-94	4.1%	3.7%	4.6%
1995	Total	154,609	87,529	67,080
	Percent	100.0%	56.6%	43.4%
	Change 1994-95	-2.5%	-4.0%	-0.5%
1996	**Total**	**141,828**	**77,990**	**63,838**
	Percent	**100.0%**	**55.0%**	**45.0%**
	Change 1995-96	**-8.3%**	**-10.9%**	**-4.8%**

EEOC RECEIPTS BY STATUTE

Table 2

Fiscal Year	Statutes	Total	Percent of Total
1992 Total Receipts to Process 72,302	Title VII w/ Concurrents	57,344	79.3%
	Title VII Only	48,621	67.2%
	ADEA w/ Concurrents	19,255	26.6%
	ADEA Only	14,077	19.5%
	EPA w/ Concurrents	1,294	1.8%
	EPA Only	82	0.1%
	ADA w/ Concurrents	999	1.4%
	ADA Only	774	11%
1993 Total Receipts 87,942	Title VII w/ Concurrents	62,662	71.3%
	Title VII Only	53,078	60.4%
	ADEA w/ Concurrents	19,871	22.6%
	ADEA Only	12,536	14.3%
	EPA w/ Concurrents	1,328	1.5%
	EPA Only	80	0.1%
	ADA w/ Concurrents	15,245	17.3%
	ADA Only	11,125	12.7%
1994 Total Receipts 9 1,189	Title VII w/ Concurrents	64,105	70.3%
	Title VII Only	53,988	59.2%
	ADEA w/ Concurrents	19,623	21.5%
	ADEA Only	11,924	13.1%
	EPA w/ Concurrents	1,360	1.5%
	EPA Only	69	0.1%
	ADA w/ Concurrents	18,853	20.7%
	ADA Only	13,351	14.6%

EEOC RECEIPTS BY STATUTE

Table 2 (Continued)

1995 Total Receipts 87,529	Title VII w/ Concurrents	62,212	71.1%
	Title VII Only	51,867	59.3%
	ADEA w/ Concurrents	17,430	19.9%
	ADEA Only	9,511	10.9%
	EPA w/ Concurrents	1,280	1.5%
	EPA Only	53	0.1%
	ADA w/ Concurrents	19,811	22.6%
	ADA Only	13,964	16.0%
1996 Total Receipts 77,990	Title VII w/ Concurrents	55,391	71.0%
	Title VII Only	46,109	59.1%
	ADEA w/ Concurrents	15,697	20.1%
	ADEA Only	8,403	10.8%
	EPA w/ Concurrents	963	1.2%
	EPA Only	26	0.0%
	ADA w/ Concurrents	18,019	23.1%
	ADA Only	12,364	15.9%

Note: Totals reflect assignment of concurrent charges, which allege violation of one or more statutes, to one statute only.

EEOC RESOLUTIONS BY STATUTE
Table 3

Fiscal Year	Statutes	Number	Percent of Total	Change from Prior Year
1992	Title VII w/ Concurrents	53,520	78.3%	17.8%
Total Resolutions	Title VII Only	47,014	68.8%	3.5%
68,366	ADEA w/ Concurrents	20,110	29.4%	14.5%
Change 1991-92	ADEA Only	14,613	21.4%	15.8%
6.3%	EPA w/ Concurrents	1,282	1.9%	-6.3%
	EPA Only	78	0.1%	-22.8%
	ADA w/ Concurrents	28	0.0%	N/A
	ADA Only	32	0.0%	N/A
1993	Title VII w/ Concurrents	53,718	74.9%	0.4%
Total Resolutions	Title VII Only	46,176	64.4%	-1.8%
71,716	ADEA w/ Concurrents	20,493	28.6%	1.9%
Change 1992-93	ADEA Only	14,242	19.9%	-2.5%
4.9%	EPA w/ Concurrents	1,284	1.8%	0.2%
	EPA Only	79	0.1%	1.3%
	ADA w/ Concurrents	4,299	6.0%	152.5 times
	ADA Only	3,287	4.6%	101.7 times
1994	Title VII w/ Concurrents	51,202	71.5%	-4.7%
Total Resolutions	Title VII Only	43,833	61.3%	-5.1%
71,563	ADEA w/ Concurrents	15,681	21.9%	-23.5%
Change 1993-94	ADEA Only	10,003	14.0%	-29.8%
-0.2%	EPA w/ Concurrents	1,302	1.8%	1.4%
	EPA Only	87	0.1%	10.1%
	ADA w/ Concurrents	12,408	17.3%	1.9 times
	ADA Only	9,149	12.8%	1.9 times

EEOC RESOLUTIONS BY STATUTE

Table 3 (Continued)

Fiscal Year	Statutes	Number	Percent of Total	Change From Prior Year
1995 Total Resolutions 91,774 Change 1994-95 26.2%	Title VII w/ Concurrents	64,744	70.5%	26.4%
	Title VII Only	54,464	59.3%	24.3%
	ADEA w/ Concurrents	19,735	21.5%	25.9%
	ADEA Only	11,831	12.9%	18.3%
	EPA w/ Concurrents	1,419	1.5%	9.0%
	EPA Only	83	0.1%	-4.6%
	ADA w/ Concurrents	18,874	20.6%	52.1%
	ADA Only	13,429	14.6%	46.8%
1996 Total Resolutions 103,467 Change 1995-96 12.7%	Title VII w/ Concurrents	73,388	70.9%	13.4%
	Title VII Only	60,944	58.9%	11.9%
	ADEA w/ Concurrents	21,247	20.5%	7.7%
	ADEA Only	11,542	11.2%	-2.4%
	EPA w/ Concurrents	1,483	1.4%	2.4%
	EPA Only	83	0.1%	-24.1%
	ADA w/ Concurrents	23,412	22.6%	24.0%
	ADA Only	16,122	15.6%	20.1%

EEOC RESOLUTIONS BY TYPE

Table 4

Fiscal Year	Resolution Type	Total	Percent of Total	Change from Prior Year
1992	Merit Resolutions	10,627	15.5%	-3.7%
	Settlements	4,348	6.4%	-13.8%
Total Resolutions 68,366	Withdrawals with Benefits	4,673	6.8%	10.0%
	Unsuccessful Conciliations	1,061	1.6%	-10.8%
	Successful Conciliations	545	0.8%	-0.2%
	No Reasonable Cause	41,736	61.0%	8.8%
	Administrative Resolutions	16,003	23.4%	7.1%
1993	Merit Resolutions	11,248	15.7%	5.8%
	Settlements	4,138	5.8%	-4.8%
Total Resolutions 71,716	Withdrawals with Benefits	5,145	7.2%	10.1%
	Unsuccessful Conciliations	1,376	1.9%	29.7%
	Successful Conciliations	589	0.8%	8.1%
	No Reasonable Cause	40,183	56.0%	-3.7%
	Administrative Resolutions	20,285	28.3%	26.8%
1994	Merit Resolutions	11,100	15.5%	-1.3%
	Settlements	3,938	5.5%	-4.8%
Total Resolutions 71,563	Withdrawals with Benefits	5,236	7.3%	1.8%
	Unsuccessful Conciliations	1,319	1.8%	-4.1%
	Successful Conciliations	607	0.8%	3.1%
	No Reasonable Cause	34,451	48.1%	-14.2%
	Administrative Resolutions	26,012	36.3%	28.2%
1995	Merit Resolutions	10,921	11.9%	-1.6%
	Settlements	3,811	4.2%	-3.2%
Total Resolutions 91,774	Withdrawals with Benefits	5,035	5.5%	-3.8%
	Unsuccessful Conciliations	1,575	1.7%	19.4%
	Successful Conciliations	500	0.5%	-17.6%
	No Reasonable Cause	46,700	50.9%	35.6%
	Administrative Resolutions	34,153	37.2%	31.3%

EEOC RESOLUTIONS BY TYPE

Table 4 (Continued)

Fiscal Year	Resolution Type	Total	Percent of Total	Change From Prior Year
1996	Merit Resolutions	9,430	9.1%	-13.7%
	Settlements	3,163	3.1%	-17.0%
	Withdrawals with Benefits	4,009	3.9%	-20.4%
Total Resolutions 103,467	Unsuccessful Conciliations	1,509	1.5%	-4.2%
	Successful Conciliations	749	0.7%	49.8%
	No Reasonable Cause	63,216	61.1%	35.4%
	Administrative Resolutions	30,821	29.8%	-9.8%

EEOC DETERMINATIONS ON THE MERITS

Table 5

Fiscal Year		Number	Percent of Total	Change from Prior Year
1992	Total on the Merits	43,342	63.4%	-8.1%
Total Resolutions 68,366	Reasonable Cause	1,606	2.3%	-7.4%
	No Reasonable Cause	41,736	61.0%	8.7%
1993	Total on the Merits	42,148	58.8%	-2.8%
Total Resolutions 71,716	Reasonable Cause	1,965	2.7%	22.4%
	No Reasonable Cause	40,183	56.0%	-3.7%
1994	Total on the Merits	36,377	50.8%	-13.7%
Total Resolutions 71,563	Reasonable Cause	1,926	2.7%	-2.0%
	No Reasonable Cause	34,451	48.1%	-14.3%
1995	Total on the Merits	48,775	53.1%	34.1%
Total Resolutions 91,774	Reasonable Cause	2,075	2.3%	7.7%
	No Reasonable Cause	46,700	50.9%	35.6%
1996	**Total on the Merits**	**65,474**	**63.3%**	**34.2%**
Total Resolutions 103,467	**Reasonable Cause**	**2,258**	**2.2%**	**8.8%**
	No Reasonable Cause	**63,216**	**61.1%**	**35.4%**

EEOC CHARGE RESOLUTION ACTIVITY LEVEL

Table 6

Fiscal Year	Resolutions Per Staff Available	Change from Prior Year
1992	92.8	4.9%
1993	97.1	4.6%
1994	97.8	0.7%
1995	120.6	23.3%
1996	**139.0**	**15.3%**

EEOC RECEIPTS, RESOLUTIONS, AND PENDING INVENTORY

Table 7

Fiscal Year		Number	Change from Prior Year
1992	Receipts	72,302	13.2%
	Total Resolutions	68,366	6.3%
	Pending Inventory	52,856	15.6%
1993	Receipts	87,942	21.6%
	Total Resolutions	71,716	4.9%
	Pending Inventory	73,124	38.3%
1994	Receipts	91,189	3.7%
	Total Resolutions	71,563	-0.2%
	Pending Inventory	96,945	32.6%
1995	Receipts	87,529	-4.0%
	Total Resolutions	91,774	28.2%
	Pending Inventory	98,269	1.4%
1996	**Receipts**	**77,990**	**-10.9%**
	Total Resolutions	**103,467**	**12.7%**
	Pending Inventory	**79,448**	**-19.2%**

EEOC ADMINISTRATIVE ENFORCEMENT/SYSTEMIC UNITS TOTAL MONETARY BENEFITS

Table 8

	Enforcement Monetary Benefits and People Benefitted			EEOC Total Monetary Benefits	
Fiscal Year		**Number**	**Change**	**Number**	**Change**
1992	Monetary Benefits (In Thousands)	$112,242	26.5%		
	People Receiving Monetary Benefits	7,991	-10.7%		
	Total Monetary Benefits (In Thousands)			$117,708	25.9%
	Enforcement (In Thousands)			$112,242	26.5%
	Systemic In Thousands)			$5,466	14.5%
1993	Monetary Benefits (In Thousands)	$125,501	11.8%		
	People Receiving Monetary Benefits	8,266	3.4%		
	Total Monetary Benefits (In Thousands)			$126,827	7.7%
	Enforcement (In Thousands)			$125,501	11.8%
	Systemic (In Thousands)			$1,326	-75.7%
1994	Monetary Benefits (In Thousands)	$140,869	12.2%		
	People Receiving Monetary Benefits	9,051	9.5%		
	Total Monetary Benefits (In Thousands)			$146,321	15.4%
	Enforcement (In Thousands)			$140,869	12.2%
	Systemic (In Thousands)			$5,452	3.1 times

EEOC ADMINISTRATIVE ENFORCEMENT/SYSTEMIC UNITS TOTAL MONETARY BENEFITS

Table 8 (Continued)

	Enforcement Monetary Benefits and People Benefitted			EEOC Total Monetary Benefits	
Fiscal Year		Number	Change	Number	Change
1995	Monetary Benefits (In Thousands)	$133,923	-4.9%		
	People Receiving Monetary Benefits	8,574	-5.3%		
	Total Monetary Benefits (In Thousands)			$135,955	-7.6%
	Enforcement (In Thousands)			$133,923	-4.9%
	Systemic (In Thousands)			$2,033	-62.7%
1996	**Monetary Benefits (In Thousands)**	**$143,314**	**7.0%**		
	People Receiving Monetary Benefits	**8,144**	**-5.0%**		
	Total Monetary Benefits (In Thousands)			**$145,248**	**6.8%**
	Enforcement (In Thousands)			**$143,314**	**7.0%**
	Systemic (In Thousands)			**$1,934**	**-4.9%**

OVERVIEW OF COMMISSIONER CHARGE(SYSTEMIC) RECEIPTS AND RESOLUTIONS

Table 9

Fiscal Year		Number	Percent of Total
1992	New Charges	50	54.3%
	Resolutions	42	45.7%
Total New Charges and Resolutions 92	Resolutions by Type		
	Settlements	12	28.6%
	Withdrawals	1	2.4%
	Unsuccessful Conciliations	10	23.8%
	Conciliations	16	38.1%
	No Reasonable Cause	3	7.1%
1993	New Charges	28	40.6%
	Resolutions	41	59.4%
Total New Charges and Resolutions 69	Resolutions by Type		
	Settlements	9	22.0%
	Withdrawals	0	0.0%
	Unsuccessful Conciliations	19	46.3%
	Conciliations	8	19.5%
	No Reasonable Cause	5	12.2%
1994	New Charges	*57	55.9%
	Resolutions	45	44.1%
Total New Charges and Resolutions 102	Resolutions by Type		
	Settlements	13	28.9%
	Withdrawals	0	0.0%
	Unsuccessful Conciliations	10	22.2%
	Conciliations	14	31.1%
	No Reasonable Cause	8	17.8%

OVERVIEW OF COMMISSIONER CHARGE (SYSTEMIC)

Table 9 (Continued)

Fiscal Year		Number	Percent of Total
1995	New Charges	44	51.2%
	Resolutions	42	48.8%
	Resolutions by Type		
Total New Charges and Resolutions	Settlements	15	35.7%
	Withdrawals	0	0.0%
	Unsuccessful Conciliations	11	26.2%
	Conciliations	12	28.6%
86	No Reasonable Cause	4	9.5%
1996	New Charges	21	42.9%
	Resolutions	28	57.1%
	Resolutions by Type		
Total New Charges and Resolutions	Settlements	6	21.4%
	Withdrawals with Benefits	1	3.6%
	Unsuccessful Conciliations	2	7.1%
	Conciliations	13	46.4%
49	No Reasonable Cause	2	7.1%
	Other (Admin.)	4	14.3%

Note: FY 1992 resolutions were previously reported as 41; however, one additional resolution has since been added to the database.
* Two of the new charges were reported as being reopened for further processing after being resolved in prior years.

HEARINGS RESOLUTIONS BY TYPE
Table 10

Fiscal Year		Total	Percent of Total
1992	Recommended Decisions	2,125	34.8%
	Settlements	1,939	31.8%
Total Resolutions	Withdrawals	798	13.1%
	Remands	1,138	18.7%
6,100	Class	100	1.6%
1993	Recommended Decisions	3,008	33.8%
	Settlements	3,182	35.7%
	Withdrawals	1,231	13.8%
Total Resolutions	Remands	1,260	14.1%
	Administrative	115	1.3%
8,906	Class	110	1.2%
1994	Recommended Decisions	3,185	33.5%
	Settlements	3,112	32.7%
	Withdrawals	1,399	14.7%
Total Resolutions	Remands	1,573	16.5%
	Administrative	146	1.5%
9,507	Class	92	1.0%
1995	Recommended Decisions	3,001	32.2%
	Settlements	2,952	31.7%
	Withdrawals	1,474	15.8%
Total Resolutions	Remands	1,667	17.9%
	Administrative	153	1.6%
9,324	Class	77	0.8%
1996	**Recommended Decisions**	**2,962**	**33.8%**
	Settlements	**2,725**	**31.1%**
	Withdrawals	**1,345**	**15.4%**
Total Resolutions	**Remands**	**1,562**	**17.8%**
	Administrative	**118**	**1.3%**
8,760	**Class**	**48**	**0.5%**

HEARINGS RECEIPTS, RESOLUTIONS, AND PENDING INVENTORY

Table 11

Fiscal Year		Number	Change from Prior Year
1992	Receipts	6,907	19.6%
	Resolutions	6,100	20.8%
	Inventory	3,977	26.4%
1993	Receipts	8,882	28.6%
	Resolutions	8,906	46.0%
	Inventory	3,991	0.4%
1994	Receipts	10,712	20.6%
	Resolutions	9,507	6.7%
	Inventory	5,177	29.7%
1995	Receipts	10,515	-1.8%
	Resolutions	9,324	-1.9%
	Inventory	6,367	23.0%
1996	**Receipts**	**10,677**	**1.5%**
	Resolutions	**8,760**	**-6.0%**
	Inventory	**8,275**	**30.0%**

HEARINGS RESOLUTION ACTIVITY LEVEL

Table 12

Fiscal Year	Resolutions Per Administrative Judge	Change from Prior Year
1992	113.5	20.0%
1993	126.1	11.1%
1994	124.3	-1.4%
1995	121.5	-2.3%
1996	**116.9**	**-3.8%**

ITEM 19—FEDERAL COMMUNICATIONS COMMISSION

SUMMARY OF 1995–1996 ACTIVITIES OF THE FEDERAL COMMUNICATIONS COMMISSION AFFECTING OLDER AMERICANS

This report summarizes the major 1995–1996 activities of the Federal Communications Commission (hereafter "FCC" or "the Commission") affecting older Americans.

A number of these actions were taken to implement statutory requirements or Commission policies on behalf of the general public, the 49 million Americans with some kind of hearing, vision, speech or other disability, and all consumers of telecommunications, rather than "on behalf of older Americans." However, since many older Americans may be in declining health, e.g., losing hearing or vision, or may be especially vulnerable to anti-consumer scams and schemes, e.g., "slamming", or unauthorized transfer to a new long distance carrier, older Americans clearly were affected by and benefited from the various disability-related and consumer protection activities described below.

Disabilities Issues Task Force

One of the Commission's chief concerns in 1995 was to ensure that the benefits of the information revolution were available to everyone, including the disability community. This community contains a sizeable percentage of older Americans with a hearing, vision, speech or other disability. Thus, many of the activities the FCC undertook in 1995 and 1996 to assist the disability community also affected and benefited older Americans.

The FCC's Disabilities Issues Task Force (DITF) was formed in March 1995 with representatives of each of the FCC's Bureau and Offices. The Task Force serves as the FCC's main point of contact and coordination on all disability access initiatives, and works to ensure that the FCC takes steps to promote access to the Information Superhighway by individuals with disabilities, including many older Americans.

In 1995, the Commission implemented a policy ensuring that all Commission open meetings are closed-captioned for people with hearing disabilities. Members of the DITF and other FCC officials also met in 1995 with cable industry representatives and representatives of the disability community to negotiate a plan to ensure that the Emergency Alert System for emergency local, state and national emergencies is accessible to persons with disabilities.

In 1996, the DITF completed pending projects noted above and began educational outreach within the Commission's various Bu-

reau and Offices, the activities of many of which affecting older Americans are summarized below.

Common Carrier Bureau

Some of the most important policy actions of the FCC affecting older Americans were initiated in 1995–1996 by the Commission's Common Carrier Bureau ("CCB"). This Bureau regulates wire and radio communications common carriers in the telephone and telegraph industries. An excellent example of a relevant CCB issue is hearing aid compatibility and volume control "HAC/VC"). This is of great relevance to older Americans because many people who lose their hearing later in life depend on HAC telephones with VC to be able to use the telephone.

Hearing Aid Compatibility.—The Hearing Aid Compatibility Act of 1998 required the Commission to establish rules that ensure reasonable access to telephone service by persons with hearing disabilities, and to seek to eliminate the disparity between hearing aid users and non-users in obtaining access to the telephone network.

To resolve various compliance issues, and recommend new rules to replace original rules suspended in April 1993, the Commission in the spring of 1995 established a 19-member Hearing Aid Compatibility Negotiated Rulemaking Committee. Its members represented all interested parties, including the Commission, telephone equipment manufacturers, employers, hospitals, nursing homes, hotels and motels, and persons with disabilities, including some older Americans.

On July 3, 1996, the Commission adopted final rules, many of which were recommended to it by the Negotiated Rulemaking Committee in its report to the FCC of August 1995. In general, the FCC's revised and final rules required eventually all wireline telephones in workplaces, in confined settings (e.g., hospitals and nursing homes) and in hotels and motels to be hearing aid compatible according to certain timelines. In addition, telephones that are newly acquired or are replacement telephones eventually will have to have volume control features. Workplaces with fewer than 15 employees were exempted, except for telephones provided directly for employees with hearing disabilities. Finally, the date of November 1, 1998 adopted by the FCC in July 1996 for implementation of the volume control features in all telephones manufactured or imported for use in the United States was later extended on reconsideration to January 1, 2000.

Anti-"Slamming."—"Slamming" is the prohibited practice of the unauthorized conversion of a person's long distance telephone company. Older Americans, especially those with speech and/or hearing disabilities, are especially vulnerable to such anti-consumer activity. In 1995, the Commission amended its rules to ensure that carriers do not use misleading or confusing forms that consumers sign to change their long distance service. The Commission required that certain information be clearly stated on the form and prohibited the inclusion of misleading promotional material. The Commission took this action because some carriers were using forms, such as contest entry forms, that masked the effect of the subscriber's signature.

On June 13, 1995, the Commission adopted a *Report and Order* amending the rules concerning the Letters of Agency used to change the long-distance carrier of a telephone consumer. The new rule requires that the Letters of Agency be separated from inducements such as prizes or contests, and that they clearly state that by signing the Letter of Agency, the consumer is requesting a change in his or her long distance service.

In conjunction with the amendment of the rules concerning the unauthorized conversion of long distance service, the Common Carrier Bureau's Enforcement Division initiated a series of investigations in 1995 into carrier "slamming" practices. Notably, one carrier was fined for converting a widow's telephone service by forging the signature of her husband who had been dead for three years!

Charges for Toll-free Numbers.—In 1996, the Commission amended its rules to place further restrictions on the use of toll-free numbers to provide information services. The Commission took this action because certain companies were encouraging consumers, including many older Americans, to call an 800 number they though would be a free call and then later charging a fee on the telephone where the call originated. The rules now require the consumer's written authorization, or the use of a calling or credit card, for such charges to be valid.

Renting of Telephone Sets.—In 1996, the Commission and the Federal Trade Commission issued information advising consumers that they may be unknowingly renting their phone sets at a cost that far exceeds the purchase of a set. Continuing to rent rather than buy telephone handsets is a very common practice among older Americans. The Commission found that in many cases, the unintended, long-term rental resulted from consumers not buying their handsets from AT&T when, in the early 1980s, the Commission required AT&T to offer the sets for sale rather than charge each month for rental of the handset equipment.

Brochures on Unauthorized Changes and Excessive Charges.—In June 1996, the Commission issued bi-color, consumer-friendly brochures containing information to help consumers, including older Americans, avoid "slamming" or unauthorized changes in their long distance service as well as excessive charges for calls from public telephones.

Telecommunications Relay Services ("TRS").—Older Americans in 1995–1996, especially those with hearing disabilities, also continued to benefit from the Commission's rules implementing Title IV of the Americans with Disabilities Act ("ADA"). Title IV of the ADA governs the operation and funding of both interstate and intrastate telecommunications relay services. The TRS technology allows people with hearing and speech disabilities to use the telephone. TRS facilities are equipped with specialized equipment and staffed by trained communications assistants who relay conversations between people who are using text telephones, sometimes also called a TTY, and people using wireline telephones.

Universal Service.—The Telecommunications Act of 1996 established certain principles for the Commission to follow in revising and expanding the scope and definition of "universal service" in telecommunications services for all Americans, including older Americans. Among the explicit provisions established by this land-

mark legislation, Section 254 (b)(6) mandates access to advanced telecommunications services for "health care providers", including hospitals and health clinics which, of course, serve many older Americans.

Cable Services Bureau

Older Americans with hearing and sight disabilities can now be helped by a number of technologies related to television, especially closed captioning and video description. These two technologies are designed to increase "video accessibility."

Video Accessibility.—In December 1995, the Commission adopted a *Notice of Inquiry* to assess the current availability, cost and uses of closed captioning and video description, and to examine what further Commission action may be appropriate to promote these services. It also asked for comments on the appropriate means of promoting their wider use in programming delivered by television broadcasters, cable operators, and other video programming providers. Closed captioning provides important benefits primarily for individuals with hearing disabilities by displaying the audio portion of a television signal as printed words on the television screen. Video description benefits individuals with visual disabilities by providing audio descriptions of a program's key visual elements that are inserted during the natural pauses in the program's dialogue.

Closed Captioning.—In the 1996 Act, Congress directed the Commission to ensure that closed captioning is available to persons with hearing disabilities and to assess the appropriate method for phasing video description into the marketplace to benefit persons with visual disabilities. As a first step, Congress required the Commission to submit a report addressing these issues. Since the 1996 Act adopted the provisions concerning the availability of video programming with closed captioning and video description which formed the basis of the Commission's inquiry, the Commission decided to use the comments filed in that proceeding and publicly available information for its report to Congress. The Commission submitted its Report to Congress on July 29, 1996.

In its Report, the Commission found that between 50 and 60 million U.S. homes can receive closed captioning; through the efforts of Congress, government agencies and a variety of private parties, captioned video programming has grown over the past 25 years and is now a common feature of many video programming types; and the quality of closed captioning varies greatly and generally reflects the method of adding the captions, the quality of the captions and the entity providing the captions. Estimates of the cost of captioning range from $800 to $2500 per hour of prerecorded programming and from $150 to $1200 per hour of live programming. The Report also found that the Department of Education provided about $7.9 million for closed captioning last year, which represents roughly 40% of the total amount spent on captioning.

Video Description.—With respect to video description, the Commission reported to Congress that there is a lack of experience with developing and assessing the best means for promoting its use since it is a newer service. The Public Broadcasting Service and a few cable networks include video description with some of their

programming. Costs for video description are approximately one and a half the costs associated with closed captioning of similar programming. Video description also receives substantially less government funding, which has been a significant factor in promoting the development of closed captioning. For example, the Commission observed that the Department of Education allocated only $1.5 million for video description in 1995. Additional legal and technical issues exist. For example, video description requires the development of a second script, which raises creativity and copyright issues, must use the second audio programming channel and thus must compete for use with other audio services, particularly bilingual audio service.

Mass Media Bureau

Digital Television.—In 1996, the Mass Media Bureau, which regulates the radio and television industries, drafted and the Commission adopted a *Report and Order* dealing with technical standards for digital television ("DTV"). This proceeding addressed technical standards for DTV which will be the next generation of television. DTV will affect all citizens, including older Americans, by providing more choices in video programming with dramatically better visual and aural resolution. Future proceedings may deal with the potential effects of DTV on society in general, including people with disabilities and older Americans.

Wireless Telecommunications Bureau

In 1995–1996, the Wireless Telecommunications Bureau which regulates all wireless telecommunications services such as cellular, paging and personal communications services undertook a number of activities that affected older Americans. These included the following:

Section 255 (Access to Telecommunications) Notice of Inquiry.—Section 255 of the Communications Act, added by the Telecommunications Act of 1996, provides that telecommunications equipment manufacturers and service providers must make their equipment and services accessible to those with disabilities, to the extent that it is readily achievable to do so. The Commission initiated the implementation of Section 255 by adopting a *Notice of Inquiry* in September 1996.

Wireless Hearing Aid Compatibility.—In January, 1996, the Commission launched a Hearing Aid Compatibility Summit to encourage consumers, hearing aid manufacturers, and wireless telephone equipment manufacturers to address the interference and compatibility problems for hearing aid wearers that are caused by digital phones.

Possible Interference Between Wireless Phones and Pacemakers.—The Commission met in 1996 with researchers, consumers, industry, and the Food and Drug Administration on concerns regarding possible interference between wireless phones and pacemakers and industry efforts to resolve any possible interference.

Spectrum for assistive listening devices.—In July 1996, the Commission established a Low Power Radio Service in the 216–217 Mhz band for, among other things, auditory assistive listening devices ("ALDs") and radio-based health care aids (i.e., remote mon-

itoring of patients' vital signs in hospitals and health care facilities.). ALDs are designed to help hard of hearing people to better understand speech, music, and the sounds during a movie, play, concert, lecture, etc. ALDs are sound-reinforcement equipment which, figuratively, gets the speaker's mouth close to the listener's ear in order to minimize the negative impact and sound distortions of distance, room reverberation, and ambient noise.

Family Radio.—In May 1996, the Commission established a very short distance, unlicensed, two-way voice personal radio service called the Family Radio Service to give families, friends and associates the capability to communicate with one another during group outings where group members may become separated, either planned or inadvertently.

Public Safety.—During 1995–1996, the Commission took a number of steps to improve the Nation's public safety wireless communications system. These improvements will benefit all citizens, including older Americans who may need the services and telecommunications capabilities of police, fire and medical emergency personnel as much as, or even more than, any other segment of the population. For example, the Commission together with NTIA established the Public Safety Wireless Advisory Committee (PSWAC) to provide advice and recommendations on various requirements of public safety agencies through the year 2010. The Commission also initiated a rulemaking proceeding (WT Docket No. 96–86) to address the present deficiencies in public safety wireless communications.

Combatting Telecommunications Fraud.—The Commission in 1995–1996 published with the Federal Trade Commission consumer alerts for Specialized Mobile Radio ("SMR") and paging licensees and gave presentations to the public on "How to Avoid Being Bilked by Telecommunications License Investment Scams."

Finally, in 1995–1996, three of the Commission's support offices also undertook activities affecting and benefiting older Americans. These are summarized as follows;

Office of Engineering and Technology

In 1995–1996, the Office of Engineering and Technology ("OET") began and continued an investigation of potential interference from handheld Personal Communications Services devices to hearing aids. (OET is the FCC's chief technical adviser on engineering and scientific matters, and is responsible for helping the FCC manage the non-Government use of the electromagnetic spectrum.)

Office of Managing Director

In 1995–1996, the Office of Managing Director, Human Resources Management, continued its past practice of expanding the FCC's job recruitment activities to reach more older Americans by, for example, sending vacancy announcements to various older American groups such as "Forty Plus of Greater Washington."

Office of Public Affairs

In 1995–1996, the Commission expanded its outreach to senior citizens, the population most at risk of being victimized by schemes and scams via telephone. The Commission held off-site sessions for

diverse groups of seniors and senior organizations around the Washington Metropolitan area, and produced special fact sheets, brochures and other informational products, both in print versions and electronically for the Commission's Internet Web Site.

In 1995, the FCC participated in a special "Fireside Forum," an off-site program for senior citizens at "Leisure World" in Silver Spring, Maryland. The program provided the audience the opportunity to learn about telephone issues and telephone frauds and scams. FCC subject matter experts offered explanations and guidance about telephone issues as well as about competitive bidding or auctioning of spectrum and other spectrum licensing processes.

In 1996, FCC-sponsored events included fora for seniors on telephone-related topics. The Commission held four off-site workshops. For example, the session in Washington included representatives of the District of Columbia Commission on Aging, the Greater Washington Urban League's Annual Senior Citizens Crime Prevention and Education program, the American Association of Retired Persons, and the FCC.

Another session also on telephone-related topics was presented to a culturally diverse group of older Americans with simultaneous translation in Vietnamese, Chinese, and Spanish. Finally, one of the sessions was covered by a local access community cable TV station and cablecasted to its audience.

Conclusion

This report has summarized the many activities undertaken by the Bureaus and Offices of the Federal Communications Commission in 1995–1996 affecting and benefiting older Americans. Any one who wants more information on any of these activities can contact the Commission via its Office of Public Affairs at 202–418–0500, its National Call Center at 1–888–CALL–FCC (225–5322), or its Web Site on the Internet at www.fee.gov.

ITEM 20—FEDERAL TRADE COMMISSION

1995–1996 REPORT

STAFF SUMMARY OF FEDERAL TRADE COMMISSION ACTIVITIES AFFECTING OLDER AMERICANS

This report discusses the Federal Trade Commission's activities of particular significance for older consumers in calendar years 1995 and 1996. The first section of the report describes Commission initiatives to eliminate telemarketing frauds that target older consumers, who represent the majority of victims in many telemarketing scams. The second section reports Commission activities relating to the health concerns of senior citizens. Older consumers, in general, experience more health problems and therefore may be more vulnerable to injury from misleading health claims made about products or services or from anticompetitive mergers or other forms of anticompetitive conduct in health care markets. The third section discusses Commission law enforcement activities of particular importance to older consumers in other areas. The final section of the report addresses the Commission's consumer education initiatives that may be of particular benefit to older consumers.

TELEMARKETING FRAUD INITIATIVES

On March 6, the Senate Special Committee on Aging conducted a hearing on one of the greatest societal problems affecting older Americans—telemarketing fraud.[1] Fraudulent telemarketers often target older citizens, knowing that many of them may have significant assets from a lifetime of saving, including self-directed retirement accounts. These telemarketers also know that the victim, shamed at suffering such losses, often will not tell friends and family about the scam and will be desperate to make back the losses. The telemarketers then have other con artists "reload" the victim with more offers until the victim has no more to give, monetarily or psychologically. One witness at the Senate hearing, Mary Downs, testified that she lost over $74,000 to fraudulent telemarketers from April 1992 to March 1993.[2] Some fraudulent telemarketers, in perhaps the most pernicious scheme, also operate "recovery rooms" that purport to help fraud victims get back their money for a substantial fee.

It has been estimated that telemarketing fraud may cost all American consumers as much as $40 billion a year in losses. Older

[1] Hearing before the Senate Special Committee on Aging, March 6, 1996: "Telemarketing Fraud and Senior Consumers," March 6, 1996.
[2] Statement of Mary Ann Downs, March 6, 1996.

Americans account for 60% of the fraud victims who call the National Consumers League's National Fraud Information Center.

To combat these and other frauds, the Federal Trade Commission in 1995 and 1996 employed a new array of effective weapons. First, the Commission promulgated a new Telemarketing Sales Rule ("TSR"), as directed by Congress in the Telemarketing Consumer Fraud and Abuse Prevention Act of 1994, 15 U.S.C. § 6101. This Rule, which went into effect on December 31, 1995, defines a number of telemarketing frauds with greater specificity and allows both the FTC and state Attorneys General to bring actions in federal court. Second, the Commission used both the Rule and its FTC Act authority to conduct coordinated law enforcement "sweeps," working with state Attorneys General, state securities officials, the FBI, the U.S. Postal Service, and other agencies. In 1996 alone, the Commission formed alliances that produced over 200 actions against fraudulent telemarketers. The Commission itself, from October 1995 through December 1996, brought nearly 100 federal court actions stopping fraudulent operations that cost consumers $250 million a year and over $700 million over the lives of these schemes.

TELEMARKETING SALES RULE

The Telemarketing Sales Rule, 16 CFR Part 310, imposes general requirements for all telemarketers and addresses specific fraudulent practices. Under the TSR, telemarketers must promptly disclose certain information in telephone calls to consumers, including their identities, the fact that they are making a sales call, and the nature of the goods or services they are offering. The Rule also prohibits telemarketers from misrepresenting the services or products they sell and from debiting a consumer's checking account without the consumer's express authorization. The TSR also outlaws a number of telemarketing practices such as credit card laundering. In addition to addressing the conduct of telemarketers, the TSR also bars third parties from providing substantial assistance to telemarketers—specifically, assistance such as providing consumer lists, marketing materials, or appraisals of investment offerings—when the person "knows or consciously avoids knowing" that the telemarketer is engaged in unlawful conduct. Violations of the TSR may result in civil penalties of as much as $11,000 per violation, and consumers who have lost over $50,000 are able to sue under the TSR to recoup their losses.

In 1995 and 1996, the telemarketing frauds that most affected older Americans included bogus prize promotions, investment frauds, charitable solicitations, recovery rooms, and credit schemes sold over the telephone. This Report discusses each below.

PRIZE PROMOTIONS

Prize promotion is an egregious type of telemarketing fraud in which a high percentage of victims are older Americans. In 1996, more than 40% of the complaints logged into the Telemarketing Complaint System [3] pertained to prize promotion. In a typical

[3] The Telemarketing Complaint System ("TCS") is a nationwide database of consumer complaints on telemarketing fraud. The Commission maintains this database, which is accessible

scheme, telemarketers make unsolicited calls or mail notification cards to consumers stating that they have won a valuable prize, such as a vacation, car, cash or jewelry. Consumers are told that they should purchase some product such as vitamins, cosmetics or magazine subscriptions and they will then receive the prize.[4] The TSR requires that, in any prize promotion, telemarketers must disclose that no purchase or payment is required to win a prize, and must provide information about the odds of winning the prize and how to participate in the promotion at no cost. 16 CFR § 310.3(a)(1)(iv).

Operation Senior Sentinel: The FTC played a significant role in Operation Senior Sentinel, announced in December 1995. This enforcement effort, led by the U.S. Department of Justice, was the largest criminal crackdown ever on telemarketing fraud. It focused on telemarketing scams targeting older Americans such as prize promotions and recovery rooms. Nearly 80% of the victims in the underlying prize promotion and recovery room cases targeted in Operation Senior Sentinel were older persons. The operation was launched with the simultaneous arrest of nearly 400 telemarketers. By the end of 1996, more than 800 individuals had been prosecuted or arrested on charges of federal crimes.

The Commission participated by assisting criminal law enforcement authorities to identify victims and witnesses as well as by filing five civil complaints—four against allegedly fraudulent prize promotions and the fifth against an alleged recovery room. The courts in these actions issued strong preliminary relief, closing down those "boilerrooms"—telephone sales rooms—and freezing defendants' assets.

Chattanooga Project: During 1995 and 1996, the Commission also provided other substantial direct support to the criminal prosecution of fraudulent prize promoters. In 1995, the FTC detailed eight attorneys to the Chattanooga, Tennessee Telemarketing Fraud Task Force. Chattanooga had became a leading center of fraudulent telemarketing activity, particularly prize promotions. The overwhelming majority of the victims of the Chattanooga operations were senior citizens. The FTC attorneys were cross-designated as Special Assistant U.S. Attorneys and brought criminal actions against telemarketers operating in the area. By the end of 1996, the Chattanooga Task Force largely had completed its work, having obtained fifty convictions and combined prison sentences against fraudulent telemarketers totaling over 1,695 months. The defendants were ordered to pay more than $13 million in restitution. In recognition of the FTC's contributions, the U.S. Department of Justice honored the FTC attorneys with its John Marshall Award for interagency cooperation in support of litigation in 1996.

Operation Jackpot: In June and July 1996, the Commission joined with the U.S. Postal Inspection Service and 16 state Attorneys General to bring 56 law enforcement actions against 79 fraud-

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by 100 participating law enforcement organizations who can query the system to locate the victims of telemarketing fraud, target law violators, identify other investigative agencies that have opened investigations, and coordinate law enforcement efforts. In 1995 alone, over 16,000 complaints were entered on the TCS, reflecting dollar losses of more than $21 million.

[4] The Commission has traced expenditures by victims of bogus prize promotion schemes and found that some consumers have actually lost tens of thousands of dollars to prize promotion telemarketers.

ulent prize promoters in 17 states. The Commission itself brought eight cases alleging violations of both the FTC Act and the TSR.[5] The complaints named companies that allegedly lured consumers to buy "Say No to Drugs" paraphernalia or magazine subscriptions to obtain a prize. Another target, Publishers Award Bureau, allegedly promised land in Baja California as awards accompanying magazine sales. In another case, American Exchange Group, Inc., the Commission alleged that the company had promised consumers that they would receive large, valuable awards on the condition that they purchase magazine subscriptions. As with other prize promotion offerings, the prizes were allegedly either non-existent or were worth significantly less than the amount paid. The Commission also filed suit against Ideal Concepts and its principals, charging that the defendants, who operated a nationwide telemarketing operation selling novelty items, e.g., hats, frisbees, etc., imprinted with anti-drug statements, had fraudulently promised that consumers would receive valuable prizes.

INVESTMENT FRAUDS

Fraudulent telemarketers know that many senior citizens have substantial savings and that many may need substantial investment returns to help finance retirement. The stock market boom of the mid-1990's also led many investors to seek and expect high returns. Fraudulent telemarketers were only too happy to respond to these desires, peddling bogus investment opportunities ranging from gold, rare coins, art prints, gemstones, and wine investments to telecommunications licenses issued by the Federal Communications Commission. The telemarketers invariably assured consumers that they would realize a substantial return on their investment, usually in a short period of time and with minimal risk. The amounts of individual losses often were quite high, sometimes $5,000 to $20,000 or more per person. In one case, a woman who had saved over $100,000 over forty years of babysitting lost all of it to a scam touting investments in supposed application services for FCC paging system licenses. Older citizens taken by these scams often are not in a position to recoup their losses.

DIRECTV and IVDS Frauds: In 1995, the Commission brought a coordinated action against three alleged purveyors of investment frauds touting new FCC license technologies. Two cases involved supposed profits to be made in connection with new wireless communication FCC licenses for Interactive Video and Data Service (IVDS). In one case, Digital Interactive Associates, the telemarketers sold over $19 million in partnership interests in such businesses allegedly by such means as understanding their risks and failing to disclose the amount of funds being drained off to telemarketers and insiders. In a second case, Chase McNulty Group, Inc. allegedly misrepresented the nature and value of these

[5] Other 1996 Commission-led sweeps to enforce the Telemarketing Sales Rule or to target other types of fraud included "Operation Payback" (fraudulent credit repair operations), "Operation Loan Shark" (advance fee loan schemes), "Operation CopyCat" (fraudulent telemarketing of office supplies), "Project Career Sweep" (misleading offers of employment services), "Project $cholar$cam" (bogus scholarship search services), Internet/Credit Repair (deceptive Internet advertising of credit repair), "Project BuyLines" (fraudulent marketing of 900-number business opportunities), and "Operation Missed Fortune" (deceptive offers of get-rich-quick and self-employment schemes).

IVDS licenses and made other misrepresentations. Finally, the Commission alleged that Satellite Broadcasting Corp. misrepresented that it had the rights to market a type of satellite television programming called DIRECTV to certain markets and that investors could earn a substantial return from investing in the venture. The courts in all three cases issued injunctive relief that included asset freezes and the appointment of receivers. In the case against Chase McNulty, the court approved a consent decree awarding a judgment of $1 million [6] and requiring individual defendants to pay $160,000 and to post a bond of $350,000 before engaging in future telemarketing. Defendants in the Satellite Broadcasting Corp. case agreed to pay more than $700,000 in consumer redress. The Digital Interactive case is still in litigation.

Operation Roadblock: In January 1996, the Commission, together with the North American Securities Administrators Association, coordinated a federal and state initiative aimed at high-tech scam promoters peddling Federal Communications Commission paging licenses and 900-number companies as investments. The Commission and 21 states filed 85 law enforcement actions against telemarketing companies. These companies had taken in more than $250 million from consumers touting bogus investments on the "Information Superhighway." As a result of Operation Roadblock, FTC–FCC cooperation, and intensive consumer education efforts, telemarketing scams relating to FCC licenses took a sharp drop in 1997.

Miscellaneous Investment Frauds: Counterfeit art works were the subject of a 1995 Commission lawsuit against Renaissance Fine Arts, Ltd. and its owner. In that case, the individual defendant fled the United States but subsequently returned and was arrested by U.S. Postal authorities on charges related to the Commission's complaint allegation. The court-ordered default judgment required the defendants to pay $2.3 million in consumer redress and banned the company's president from further telemarketing of artwork. Permanent injunctions also were entered in settlement of pending lawsuits against Georgetown Galleries (alleged misrepresentations in the telemarketing of antiquarian art prints) and Cambridge Exchange, Ltd. (alleged misrepresentations in the telemarketing of animation cells and other art works coupled with an allegedly deceptive prize promotion).

Finally, the Commission obtained a settlement in an earlier case against Unimet Credit Corp., involving allegations that defendants had assisted other companies that deceptively telemarketed leveraged investments in precious metals and foreign currency. The defendants were required to pay $1.9 million in consumer redress.

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[6] The consumer redress amounts included in McNulty and the following cases have been ordered by the court (whether through litigation or settlement) and may be higher than the amounts collected and returned to consumers. Collection is often difficult because, in many cases, the defendants do not have identifiable assets subject to execution. In December 1995, the Commission entered into a Memorandum of Understanding with the U.S. Treasury, under which Treasury provides assistance in collecting judgments owed to the Commission. The Commission was the first agency to refer its uncollected judgments to Treasury's Financial Management Services Division, which uses its collection expertise to aggressively collect on these judgments.

Where practicable, the Commission seeks to redress injured victims. Where redress is not practicable, any monies paid by defendants typically are disgorged to the U.S. Treasury.

CHARITABLE SOLICITATIONS

Legitimate charities often offer prizes in connection with their fundraising efforts. However, the Commission in 1995 and 1996 also saw substantial numbers of telemarketing operations where salespeople, in the name of a charity, promised consumers extravagant prizes in return for an allegedly tax-deductible donation to a specific charity ("telefunding"). Not surprisingly, the prizes were almost worthless and the amounts of money that ever reached charitable organizations were infinitesimal.

In 1995, the Commission charged NCH, Inc. and its principals for their roles in a fraudulent telefunding scheme. The Commission alleged that the company had misrepresented that consumers would win valuable prizes in exchange for making a donation to a charity called "Operation Life." The court ordered the defendants to pay over $2.6 million in redress to consumers and permanently banned them from engaging in prize promotion activities.

During the 1995–96 period, the Commission also settled a number of lawsuits previously brought against other telefunders. In one matter, the complaint had alleged that corporate defendants, Publishing Clearing House (not the familiar Publishers Clearinghouse), M.A.A., Inc. and certain individual defendants had made unsolicited calls to consumers, telling them that they had been selected to receive a valuable prize—ranging in value from $3,500 to $50,000 in cash. The consumers were then told that all they had to do to receive the prize was to make a tax-deductible donation of a significant specified amount to a designated charity. The Commission alleged that the consumers did not receive the promised prize (or if they did, it was of nominal value) and that the "donation" was not tax-deductible. In settling this case, the Commission required the defendants to post a $1 million performance bond before engaging in any prize promotion or charitable solicitation activity.

The Commission obtained comparable relief through settlement of another case with a Las Vegas telemarketer and telefunder, Marketing Twenty-One dba Genesis Enterprises. As with PCH, the company promised prizes in exchange for a purportedly tax-deductible contribution. The Commission alleged that these claims were false. The settlement requires the individual defendant, Markos Mendoza, to post a $1 million performance bond before engaging in a similar telemarketing venture.

In 1995 and 1996, the Commission also obtained consent decrees with 24 defendants involved with an organization of telefunders for The Gleaners. In these cases, the Commission charged that defendants falsely represented the value and nature of prizes that consumers would receive in return for their donations to teenage alcohol and drug-abuse rehabilitation programs and food banks purportedly run by The Gleaners. The complaint also alleged that defendants misrepresented the charitable activities undertaken by the two charitable organizations. The settlements provide that the individual defendants must post a $1 million bond before engaging in any telephone prize promotion business and must disclose the existence of the bond to customers.

RECOVERY ROOMS

"Recovery rooms" prey on persons who have already been victimized by telemarketers. Telemarketers obtain the names and addresses of these victims by purchasing, or trading for, lists of victims from other fraudulent operations. The recovery room salesperson then falsely promises the victims that, for a fee, the telemarketer can help them obtain the promised prize or money lost in a previous telemarketing scam. Often, telemarketers represent themselves as governmental entities or as agents hired to locate victims and distribute money back to them. After the consumers sends in the requested fee, the company invariably fails to deliver the refund or prize, thereby exacerbating the victim's losses. A review of victim demographics in several of the Commission's recovery room cases has confirmed that older consumers are prominent in the victim universe. In one case, 81% of the consumers were at least 65 years of age and 23% were at least 80 years old. In another case, 82% were at least 65 and 32% were at least 80 years old.

During 1995 and 1996, the Commission brought or settled lawsuits against numerous individuals and companies involved in nearly a dozen recovery room operations. Some of these cases were brought as part of Senior Sentinel or other sweeps. Examples include the Commission's cases against USM and Meridian Capital Management. In USM, the defendants did business as Senior Citizens Against Telemarketing, or "SCAT." SCAT allegedly masqueraded as a consumer protection organization that worked closely with government agencies. According to the Commission's complaint, SCAT represented to consumers that it would recover substantial sums of money that consumers had lost in previous telemarketing scams and would even file lawsuits on consumers' behalf, if necessary. The charge to consumers ranged from $200 to $1,000.

Another of the Commission's 1995 lawsuits targeted Meridian Capital Management, which allegedly made unsolicited telephone calls to consumers who had been victims of various investment frauds, often involving Federal Communications Commission wireless telecommunications licenses. For a fee of 10% of the consumer's previous investment, Meridian claimed it could recover all or a substantial portion of the money invested. In addition, according to the complaint, Meridian also represented that it was on the verge of filing a class action lawsuit and the consumer had to pay immediately in order to participate as a member of the class. Finally, the complaint also challenged Meridian's representation that it could collect on performance bonds supposedly posted by fraudulent telemarketers.[7] In 1996–1997, the Commission obtained default judgments for $1.6 million against Meridian and several individual defendants, and stipulated or court-ordered permanent injunctions were entered against all defendants. With Commission staff acting as Special Assistant U.S. Attorneys, the U.S. Department of Justice in 1998 obtained indictments charging 17 defendants involved in the Meridian scam with the crimes of conspiracy,

[7] The Commission also settled its recovery room case against Regeneration & Renewing dba AWARE, described in the 1994 report, with monetary judgments of more than $4.1 million.

mail fraud, and wire fraud. In addition, seven of the defendants were charged with money laundering.

The Commission's efforts against recovery rooms were enhanced by the implementation of the Telemarketing Sales Rule, which specifically prohibits telemarketers from requesting or receiving payment for recovery room services until after the refund or prize is delivered to the consumer. 16 C.F.R. § 310.4(a)(3). Our law enforcement efforts and the deterrent effect of this TSR provision have borne fruit. The volume of consumer complaints concerning recovery rooms logged into the FTC Telemarketing Complaint System in 1996 plummeted to 153—less than one-fifth the record high volume of 869 complaints recorded in 1995.

CREDIT FRAUD

Three types of credit-related telemarketing scams that have plagued older Americans involved unauthorized check cashing, advance fee loan schemes, and bogus credit repair services. The Telemarketing Sales Rule addresses prevalent practices in these areas.

In attacking unauthorized check cashing or demand draft fraud, the Commission filed complaints against a cluster of telemarketers, including, for example, Windward Marketing, Ltd., charging violations of the demand draft provision of the TSR. These telemarketers allegedly tricked consumers into revealing their checking account numbers and then used that information to debit consumers' checking accounts without the consumers' authorization. This ruse was in conjunction with a magazine subscription offering. The case was settled with monetary judgments of more than $14 million.

In mid-1996, the Commission and 15 state Attorneys General joined in a sweep called Project Loan Shark, bringing 13 lawsuits against 45 firms and individuals that ran advance fee loan schemes, in which telemarketers represent that, for a fee, they will guarantee consumer credit in the form of a loan or credit card. The TSR makes it illegal for telemarketers who guarantee consumers a loan or credit to charge an advance fee. Among the targets of Project Loan Shark was Global E, which marketed credit cards for an advance fee and was charged with violations of the TSR. The Commission also filed a complaint alleging that Patricia Popp charged advance fees in connection with the offer of debt-consolidation services and loans.

Bogus credit repair firms promise that, for a fee, they will remove negative, though accurate, information contained in consumers' credit reports. Since credit reporting bureaus legally may include verifiable, negative information in consumers' reports for a period of seven years, and bankruptcies for ten years, credit repair companies cannot deliver the service they promise. The TSR prohibits credit repair companies from obtaining payment until six months after they have, in fact, fulfilled their promise to clean up credit histories. The Commission charged Universal Credit Corp., with violations of both the FTC Act and the TSR—the company claimed a 90% success rate in removing negative, accurate information from customers' reports and promised a money-back guarantee. The company was also charged with making unauthorized demand drafts on customers' checking accounts. As part of the en-

forcement strategy in this industry, the Commission launched Operation Payback, a joint federal-state law enforcement sweep in 1996 in which the Commission filed four complaints against deceptive credit repair companies.[8]

CROSS-BORDER TELEMARKETING FRAUD

In 1995, the Commission stepped up its response to the globalization of telemarketing fraud. The Commission had detected an increase in Canadian-based telemarketing companies targeting United States citizens, often older consumers. Canadian officials confirmed that the reverse was also true. The Commission is tackling this problem through workshops, task forces, and cooperative law enforcement efforts. In August 1995, representatives of U.S. and Canadian law enforcement agencies agreed to coordinate enforcement of their competition and deceptive marketing practices laws. In 1996, the Commission co-sponsored two conferences on cross-border fraud and established a task force on Cross-Border Deceptive Marketing Practices with Canada's Competition Bureau to facilitate coordinated law enforcement between the two countries.

Also in 1996, the Commission brought its first enforcement actions against Canadian-based telemarketers. The first case was against Ideal Credit Referral Services, which operated from a boiler-room in British Columbia and peddled advance fee loan services. The next cross-border firm to be sued was another Canadian firm, Incentive International, which allegedly fraudulently ran a prize promotion.

The Commission also has pursed defendant's assets across international borders. In an Operation Roadblock case against Online Communications, one of the defendants allegedly transferred assets to the Bahamas. With FTC staff's assistance, the Department of Justice's Office of Foreign Litigation obtained an injunction freezing the assets in the Bahamas; the defendant subsequently agreed to repatriate $300,000 to the U.S. This was the first time the U.S. government obtained an asset freeze from a foreign court and obtained the funds for redress to American telemarketing victims.

INTERNET FRAUD

Finally, the Commission has anticipated the next great competitor to telemarketing fraud—fraud on the Internet. Older Americans are frequent users of the Internet, and the Commission in 1995 and 1996 held hearings on how not only the Internet, but many new technologies, were likely to be of concern in the coming decades.[9] The Commission also extensively trained its staff and brought the first significant actions against Internet fraud artists. In 1996, the Commission joined with criminal authorities to bring actions against Fortune Alliance involving a multi-million dollar, online international pyramid scheme. Other cases included allega-

[8] As part of the 1996 Fair Credit Reporting Act Amendments, the Congress enacted the Credit Repair Organization Act, 15 U.S.C. § 1679 *et seq.*, which specifically addresses credit repair scams. Effective April 1, 1997, the law will be enforced by the Federal Trade Commission and state Attorneys General.

[9] Anticipating the 21st Century: Consumer Protection Policy in the New High-Tech Global Marketplace, a Report of the Federal Trade Commission Staff, May 1996.

tions that defendants used the Internet as a medium for fraudulent messages.

In December 1996, the Commission also initiated the first of many subsequent "surf days," in which Commission staff join with other law enforcement agencies and private groups to detect and warm potentially fraudulent sellers on the Internet. In this project, the Commission coordinated an effort by four federal agencies and 70 state and local law enforcement officials from 24 states to target pyramid schemes. The FTC staff and other law enforcers contacted over 500 Internet web sites, advising them of applicable law and conducting follow-up communications. Since then, the Commission has conducted surf days in numerous areas of concern, including health fraud, business opportunities, scholarship scams, and others.

HEALTH-RELATED ACTIVITIES

While health care is a subject of concern for all of our citizens, it is of disproportionate concern to the aging. A significant portion of the Commission's consumer protection work helps to ensure that consumers are not harmed by deceptive claims about the health benefits of products or services. Similarly, a substantial portion of the Commission's antitrust law enforcement activity is aimed at ensuring that competition among providers of health care goods and services is not unlawfully impaired. This activity contributes both to cost containment and to the maintenance of quality in health care.

CONSUMER PROTECTION IN HEALTH-RELATED MATTERS

Hearing aids and eyeglasses

In 1994, the Commission filed an order-enforcement action against Dahlberg, Inc., one of the largest hearing aid manufacturers in the United States. The Commission's complaint charged that Dahlberg, maker of the "Miracle-Ear" brand of hearing aids, violated a 1976 FTC order by making false and unsubstantiated claims about its Miracle-Ear "Clarifier," purportedly a "noise-suppression" hearing aid. These claims included assertions that the Clarifier focuses its amplification on sounds the user wants to hear, such as speech, and reduces all unwanted background noise. In 1995, the court entered a consent decree requiring Dahlberg to pay a penalty of $2.75 million—at that time the highest penalty obtained for alleged violations of an FTC consumer protection order.

In another case, the Commission charged in federal court that the Telebrands Corporation exaggerated the benefits of its WhisperXL hearing aid, and also violated the Commission's Mail or Telephone Order Merchandise Rule, 16 CFR Part 435, by failing to ship products in a timely fashion. The 1996 consent decree prohibits violations of the Rule, requires the company to pay a $95,000 civil penalty, and prohibits misrepresentations about hearing devices. That year, the Commission also obtained an administrative consent order that banned false claims, including that the WhisperXL hearing aid produces clear amplification of whispered or normal speech and allows the user to hear a whisper from as far as 100 feet away. The consent order further requires that any

claim that is made about the performance or effectiveness of any hearing aid be truthful and supported by competent and reliable evidence.

In the vision care area, the Commission obtained a court-ordered consent decree that required Doctors Eyecare Center, Inc. and its president to pay a $10,000 civil penalty to settle charges that they violated the Commission's Ophthalmic Practice Rules, 16 CFR Part 456, by failing to provide many patients with a copy of their eyeglass prescription after completing an eye examination and by unlawfully including on their prescription forms a waiver of liability as to accuracy. The purpose of this Rule is to remove unwarranted restraints on the ability of consumers to shop for competitive eyeglass prices.

Health claims for food and dietary supplements

Consumers rely on the truthfulness of health claims for food and dietary supplements when making purchasing decisions. Senior citizens, because of special dietary requirements or other health concerns, may be particularly vulnerable to misleading claims for such products. The Commission continues to be active in this area and has engaged in several important law enforcement efforts since 1994.

In 1995, the Commission accepted a consent agreement that prohibits Good News Products, Inc. from claiming that its eggs were lower in saturated fat and total fat than ordinary eggs, and that these eggs contained Omega 3 fatty acids that could positively affect heart attack risk factors. The order against Good News Products prohibits the company from misrepresenting the absolute or comparative amount of total fat, saturated fat, or any other nutrient or ingredient in eggs or food containing egg yolks. It also requires the company to have competent and reliable scientific evidence before making claims about the absolute or comparative effects of such food on heart disease, heart disease risk factors, and serum cholesterol, and claims about the health benefits for such foods.

In 1996, the Commission obtained a civil penalty of $100,000 from Eggland's Best, Inc. to settle allegations that the company violated a 1994 order by making unsubstantiated cholesterol-related claims for its eggs. Specifically, the Commission alleged that Eggland's violated the order by: (1) representing, without substantiation, that eating its eggs will not increase serum cholesterol at all, or that doing so will not increase cholesterol as much as ordinary eggs; and (2) misrepresenting that clinical studies have proven that adding 12 Eggland's Best eggs a week to a low-fat diet does not increase serum cholesterol.

Also in 1996, the Commission obtained a settlement with Mrs. Field's Cookies, Inc. The company claimed that a certain line of cookies was "low fat," when, in fact, the cookies did not meet the FDA requirements for low fat claims. The Mrs. Field's order prohibits the company from misrepresenting the existence or amount of fat, saturated fat, cholesterol, or calories in any bakery food product.

Finally, the Commission in 1996 issued a cease and desist order against The Dannon Company to settle allegations that it made de-

ceptive fat and calorie content claims for its frozen yogurt. The order prohibits Dannon from making false claims regarding the existence or amount of fat, saturated fat, cholesterol, or calories in any frozen food product. It also requires the respondent to pay the Commission $150,000.

In the dietary supplement area, the Commission in 1996 completed administrative litigation against Metagenics, Inc., challenging claims for its over-the-counter calcium supplement. The Administrative Law Judge ruled that Metagenics could not, without adequate substantiation, represent that the product, Bone Builder, restores lost bone, restores bone strength, reduces or eliminates bone pain, and is superior to other forms of calcium. The ALJ found for Metagenics with respect to certain other complaint allegations, and both sides appealed the ALJ's ruling.[10]

In 1995, the Commission issued a cease and desist order against Nature's Bounty, Inc. and two of its subsidiaries to settle allegations that they made deceptive weight-loss, body-building, disease-treatment and/or other health-related claims for 26 nutrient supplements they marketed. The order prohibits the respondents from making various allegedly false claims, as well as requiring them to have substantiation for future health claims. The order also requires the respondents to pay $250,000 to the Commission—to be used for consumer redress, if practical, or to be paid to the U.S. Treasury.

Also in 1995, the Commission gave final approval to a consent agreement with Body Wise International, Inc., settling charges that the company made deceptive weight-loss and cholesterol-reduction claims for its nutritional supplements. The order prohibits the company from making health benefits claims regarding its products—including weight loss or cholesterol reduction claims—unless the claims, including those made through testimonials, are true and supported by adequate scientific evidence.

Finally, the Commission in 1995 obtained a civil penalty of $45,000 from HealthComm, Inc. and Jeffrey S. Bland to settle allegations that they violated a 1992 order by making deceptive weight loss and related health claims. The Commission alleged that the defendants violated the order by: (1) representing that their supplements UltraMaintain and UltraMeal alter the mitochondria in the body's cells so that cells convert more food into energy; and (2) making unsubstantiated weight-loss, disease symptom-reduction, toxin-elimination, and blood cholesterol and blood pressure-reduction claims.

Over-the-counter drugs and medical devices

Senior citizens rely heavily on the truthfulness of advertising claims for over-the-counter ("OTC") drugs and medical devices. While the Commission has primary responsibility for ensuring that advertising for these products is truthful and nondeceptive, the

[10] The Commission in 1997 issued a final consent order in the Metagenics case, among other things, requiring the respondents to have scientific substantiation for any claim that Bone Builder or any food, drug, or dietary supplement containing calcium will treat or prevent any disease, disorder, or condition, or that any food, drug, or dietary supplement is more effective than any other product in doing so.

FDA exercises primary jurisdiction with respect to the labeling of such products and their safety.

In 1996, the Commission announced a settlement with Natural Innovations, Inc., advertiser of "The Stimulator," a purported pain-relief device said to effectively relieve all types of pain and provide immediate, long-term pain relief better than other medications and treatments. In a separate settlement with World Media T.V., Inc., the Commission alleged that World Media directly participated in the creation and dissemination of the "Say No To Pain" infomercial on behalf of Natural Innovations. The Commission charged that the claims were unsubstantiated. The orders require the companies to provide scientific proof to back up any pain-relief or other health or medical benefit claims they make in the future.

In 1995, the Commission issued consent orders against two marketers of "facilitated communications" devices—devices similar to a typewriter, computer or alphabet chart that purportedly enable those with developmental or communication disabilities to communicate through the device. One company, for example, claimed that its device would help consumers who had problems such as speech disorders, cerebral palsy, multiple sclerosis, or Alzheimer's disease. The Commission alleged that the companies' advertisements contained false or unsubstantiated representations concerning the efficacy of their devices. The consent orders ban certain claims and prohibit the companies from making representations about the ability of any communications aid to assist those with other disabilities to communicate through facilitated communications, unless the representation is true and substantiated by competent and reliable scientific evidence.

Other health-related devices and services

As with OTC drugs and devices, older consumers are particularly vulnerable to fraudulent practices and misleading health benefit claims for other devices and services. The Commission in 1995–1996 took numerous law enforcement actions in this area.

One initiative was against telemarketing firms engaged in fraudulent medical billing practices. The Commission brought federal court actions against three medical equipment companies that allegedly marketed relatively inexpensive wheelchairs, scooters, and other devices to disabled persons but then submitted insurance claims for more expensive equipment that was never delivered. In some cases, the Commission charged, insurance claims were filed for items that had never been ordered by consumers. Under the court-approved settlements, Freedom Medical, Inc., Independence Medical, Inc., Motion Medical, Inc., and individual defendants were required to pay a total of $754,850 for consumer redress, and some individual defendants were barred from any aspect of marketing medical products or services for ten years. In addition, some defendants were required to post a performance bond before engaging in the sale or rental of durable medical equipment, and all defendants were prohibited from making various misrepresentations in the future.

In addition, Cancer Treatment Centers of America, Inc. and two affiliated hospitals agreed to settle Commission charges that they made false and unsubstantiated claims promoting their cancer

treatments. The companies also allegedly failed to substantiate a claim that their five-year survivorship rate ranked among the highest recorded for cancer patients. The consent order requires the companies to have competent and reliable scientific evidence to substantiate future claims regarding the success or efficacy of their cancer treatments and to ensure that testimonials they use do not misrepresent the typical experience of their patients.

In another settlement, Genetus Alexandria, Inc. and its owners, who sold impotence treatments, agreed to settle charges that they falsely represented that a physician would examine, diagnose, and treat every patient, that the treatment was unqualifiedly safe, and that the treatment would arrest each patient's impotence. The respondents also allegedly billed insurance companies for medical tests that were not performed. The consent order prohibits the respondents from misrepresenting the nature or extent of a physician's participation in any treatment, the safety or efficacy of any procedure, and the extent to which a treatment is covered by a patient's medical insurance.

The Commission also brought a number of actions that could affect older consumers with respiratory ailments. In a matter involving air pollution claims, Ford Motor Company and its advertising agency, Young & Rubicam, Inc., agreed to settle Commission charges that they made false claims about the extent to which Ford's MicronAir Filtration System could remove air pollution from automobile passenger cabins. The Commission alleged that the system had no effect on gaseous pollutants, such as hydrocarbons, carbon monoxide and nitrogen oxide. The 1996 consent orders prohibit certain claims and require the firms to have competent and reliable scientific evidence for any efficacy claims for car cabin air filters.

In 1995, the Commission in two separate cases also obtained consent agreements with marketers of ozone generator air cleaners. One case involved Living Air Corporation and its sister company, Alpine Industries, Inc. The other involved Quantum Electronics Corporation. In both matters, the Commission alleged that the companies lacked substantiation for claims that the devices eliminate or clear specified chemicals, gasses, mode, mildew, bacteria, or dust from the environment, that the devices do not create harmful by-products, and that the devices prevent or provide relief from allergies, asthma, or other specified conditions. The consent orders require that the manufacturers of the devices have competent and reliable scientific evidence before making such claims and contain other relief to prevent misleading claims about other air cleaning products.

Finally, the Commission settled allegations that David Green, M.D. deceptively advertised as pain-free permanent his varicose vein and spider vein treatments. The consent order requires Dr. Green to have competent and reliable scientific evidence to substantiate any future claims on this subject.

Diet and weight loss products and services

Older consumers continue to invest heavily in the weight-loss industry. The Commission in 1995–1996 has continued to be active in this area, and has taken numerous actions involving diet and weight-loss products, programs, and services. These cases include

the settlements mentioned above with Mrs. Field's Cookies, The Dannon Company, Nature's Bounty, Body Wise International, and HealthComm, all of which included claims relating to weight-loss products. The Commission also obtained a consent order against NordicTrack, Inc., a major manufacturer of indoor exercise equipment. The Commission had charged that the firm had made false and unsubstantiated claims about the weight-loss benefits of its cross-country ski exercise machine, including claims that overstated users' weight-loss success. The consent order requires the company to have competent and reliable evidence to support weight-loss, weight maintenance, or related claims for any weight-loss equipment that it sells.

The Commission also entered a final consent order against Choice Diet Products and its owner, marketers of the FormulaTrim 3000, MegaLoss 1000, and MiracleTrim diet pills, settling charges of false advertising. The order requires the company's owner to post a $300,000 performance bond to be used for consumer redress should he engage in deceptive practices when marketing weight-loss products in the future and contains further relief to prevent misleading claims regarding such products.

In addition to weight-loss products, many older consumers purchase services from diet clinics. The Commission, having obtained twelve consent orders against such firms in 1992–1994, continued this program with further actions in 1995–1996 involving low-calorie and very-low-calorie weight-loss programs. Formu-3 International, Inc., the franchisor of Form-You-3 or Formu-3 weight-loss centers, and two related companies agreed to settle allegations that they made unsubstantiated weight-loss and weight-loss maintenance claims, engaged in deceptive pricing, and made misleading representations about the program's safety, participants' rate of weight loss, and other deceptive claims. The consent order prohibits the company from misrepresenting the performance, efficacy, or safety of any weight-loss program they offer or the competence or training of their personnel. The order also requires them to have scientific data to back up future claims about weight-loss success, rates, or time frames, and weight maintenance.

In a case involving Diet Workshop, Inc., a franchisor of weight-loss plans and products, the Commission's consent order similarly prohibits the firms from misrepresenting the performance of any weight-loss program and requires them to have reliable scientific evidence to substantiate claims about achieving or maintaining weight loss, or the rate at which the loss can be expected to occur. The order also requires disclosure statements in certain advertising and bars the misleading use of consumer testimonials. The Commission's administrative complaints against Weight Watchers International, Inc. and Jenny Craig, Inc., issued in 1993, remained in litigation,[11] and the Commission obtained a consent order against J. Walter Thompson USA, Inc. in connection with advertising it had created for the Jenny Craig Weight Loss Program. That case concerned a study purportedly showing that nine out of ten Jenny Craig clients would recommend the program to a friend.

[11] The Commission in 1998 issued final consent orders in settlement of the charges against Jenny Craig and Weight Watchers.

Finally, the Commission obtained consent orders against three marketers of single-session, group-hypnosis seminars that purportedly helped consumers lose weight. The Commission had charged that the companies and their owners had made false and/or unsubstantiated claims about the success of participants in losing weight. The consent orders prohibit the respondents from making performance or efficacy claims for any weight-loss program they sell in the future without having competent and reliable scientific evidence that substantiates the claims.

ANTITRUST GUIDANCE TO HEALTH CARE PROVIDERS

The rapid evolution of health care markets in response to changes in the way health care services are paid for and delivered has created concerns that the impact of antitrust enforcement in this sector might impede efficient, procompetitive combinations and collaborations. As was described in the Commission's 1994 report, the Commission and the Department of Justice's Antitrust Division jointly issued, in September 1993, their *Antitrust Enforcement Policy Statements in the Health Care Area* in response to these concerns. These statements defined "antitrust safety zones" for health care activity in various areas; these "safety zones" identified conduct that will not be challenged by the agencies, absent extraordinary circumstances. Additionally, for conduct falling outside these "safety zones," the statements explained how the agencies will analyze the conduct to determine its legality. Finally, the statements highlighted the availability of Commission advisory opinions and DOJ business review procedures, and, for the first time, adopted time limits for agency answers to most health industry requests. Subsequently, in September 1994, the Commission and the Antitrust Division issued updated and expanded policy statements, *Analytical Principles Relating to Health Care and Antitrust.*

The agencies recognized that additional guidance might become necessary as the health care market continued to evolve in response to consumer demand and competition in the marketplace. New arrangements and variations on existing arrangements involving joint activity by health care providers continue to emerge to meet the desire of consumers, purchasers and payers for more efficient delivery of high quality health care services. This evolution has led, in particular, to the development of many physician and multiprovider networks.

On August 28, 1996, the agencies announced revisions to the agencies' enforcement policy statements regarding health care provider networks. These changes expanded upon the guidance contained in the agencies' 1993 and 1994 policy statements, in order to ensure that uncertainty about the antitrust laws does not deter the formation of new types of networks that could benefit competition and consumers. Revisions were made affecting two kinds of networks: (1) physician network joint ventures; and (2) multiprovider networks.

The revised statement on physician network joint ventures provides an expanded discussion of the antitrust principles that apply to such ventures. The revised statement explains that where physician integration through the network is likely to produce signifi-

cant efficiencies, any agreements on price reasonably necessary to accomplish the venture's procompetitive benefits will be analyzed under the rule of reason. The revisions focus on networks that fall outside of the safety zones, particularly those networks that do not involve the sharing of substantial financial risk by the physician participants. The statements stress that a physician network that falls outside of the safety zones is not necessarily anticompetitive.

Because multiprovider networks involve a large variety of structures and relationships among many different types of health care providers, the agencies have not set out a safety zone in this area. The 1996 revisions state that multiprovider networks will be evaluated under the rule of reason, and will not be viewed as *per se* illegal if the providers' integration through the network is likely to produce significant efficiencies that benefit consumers, and if any price agreements by the networks are reasonably necessary to realize those efficiencies.

In 1995 and 1996, the Commission staff provided substantial guidance in the form of advisory opinions analyzing proposed ventures on a case-by-case basis.

ANTITRUST LAW ENFORCEMENT IN THE HEALTH CARE SECTOR

Hospital mergers

Pressures for cost-containment have led to an increasing number of hospital mergers. As in other industries, the Commission challenges only those hospital mergers that it has reason to believe are likely to have anticompetitive results, and it seeks a remedy that is carefully tailored to eliminate only the anticompetitive part of the transaction while allowing the remainder to proceed.

In 1995 and 1996, the Commission obtained consent agreements in five cases involving hospital mergers. Three cases involved mergers of large hospital chains and demonstrated the Commission's sharply focused approach to anticompetitive situations. In the first of these cases, the Commission issued a final consent order involving Columbia/HCA Healthcare Corporation's acquisition of Healthtrust Inc., which combined the two largest chains of acute-care hospitals in the country. Although there were a significant number of overlaps throughout the country—where both chains had hospitals in the same area—Commission staff, after thorough investigation, found that the merger would substantially lessen competition for general acute-care hospital services in only six geographic markets: the Salt Lake City-Ogden Metropolitan Statistical Area, Utah; the Denton, Texas area; the Ville Platte-Mamou-Opelousas, Louisiana area; the Pensacola, Florida area; the Okaloosa, Florida area; and the Orlando, Florida area. As part of a settlement agreement, the companies agreed to divest seven hospitals in those areas. The Commission did not challenge other aspects of the merger.

The Commission also issued final consent orders in two other hospital merger cases involving large national chains. One involved the merger of Charter Medical Corporation and National Medical Enterprises, the two largest chains of psychiatric hospitals in the country. Charter agreed to modify its purchase agreement so as not to acquire the NME facilities in four geographic markets—Atlanta,

Memphis, Orlando and Richmond—in which the Commission alleged that the acquisition would substantially lessen competition in the psychiatric care market. Charter's acquisition was allowed to proceed in the other markets. Another case involved the merger of HEALTHSOUTH Rehabilitation Corporation, the nation's leading operator of rehabilitation hospitals and other rehabilitation facilities, with ReLife Inc., which operated a number of rehabilitation facilities. The Commission obtained a consent agreement in which HEALTHSOUTH agreed to divest a hospital in Nashville, Tennessee, and to terminate management contracts to operate rehabilitation units at hospitals in Birmingham and Charleston.

In a fourth hospital merger case, the Commission approved a consent agreement concerning Columbia/HCA's acquisition of John Randolph Medical Center in Hopewell, Virginia. John Randolph provided psychiatric services in that market and Columbia already owned Poplar Springs Hospital, a psychiatric hospital in Petersburg, Virginia. Under the consent agreement, Columbia/HCA was allowed to purchase John Randolph only if it divested Poplar Springs.

Finally, the Commission authorized the staff to seek a preliminary injunction to block the merger of Port Huron Hospital and Mercy Hospital-Port Huron, Inc., the only two general acute care hospitals in Port Huron, Michigan. Prior to trial, the Port Huron hospitals called off the transaction and a consent agreement was signed requiring prior approval before the parties attempt to merge again.

Conduct involving health care providers

During 1995 and 1996, the Commission issued four final consent orders in cases alleging joint conduct by physicians that prevented competition among health care providers.

The Commission issued a consent order against the medical staff of Good Samaritan Regional Medical Center in Phoenix, Arizona. The agreement settled charges that the staff members conspired, or threatened, to boycott the hospital in order to induce it to end its ownership interest in the Samaritan Physicians Center, a multispecialty physicians' clinic that would have competed with the medical staff. Under the agreement, members of the medical staff are prohibited from agreeing, or attempting to agree, to prevent or restrict the services offered by Good Samaritan, the Samaritan Physicians Center, or any other health care provider.

The Commission also issued a consent order against Physicians Group, Inc. and seven physician board members of the organization, settling charges that they conspired to fix the prices, terms, and conditions of cost-containment under which they would deal with third-party payers. The complaint alleged that the group conspired to prevent or delay the entry of third-party payers into Pittsylvania County and Danville, Virginia. The order required the dissolution of Physicians Group, Inc. and prohibits the physician respondents from engaging in similar anticompetitive conduct with respect to third-party payers.

In addition, the Commission issued a consent order against the Medical Association of Puerto Rico, its Physiatry Section, and two of its physiatrist members. The Commission charged that the Asso-

ciation illegally conspired to boycott a government insurance program in order to obtain exclusive referral powers from insurers, and to increase reimbursement rates. The respondents agreed not to boycott or refuse to deal with any third-party payer, or refuse to provide services to patients covered by any third-party payer. The agreement places restrictions on meetings of physiatrists to discuss refusals to deal with any third-party payer, or the provision of services covered by any third-party payer; and prohibits the respondents from soliciting information from physiatrists about their decisions to participate in agreements with insurers and provide service to patients, passing such information along to other doctors, and giving physiatrists advice about making those decisions.

Finally, the Commission issued a consent order against a physician association (MAPI) and a physician-hospital organization (BPHA) in Billings, Montana. The complaint alleged that MAPI blocked the entry of an HMO into Billings, obstructed a PPO that was seeking to enter, recommended physician fee increases, and later acted through BPHA to maintain fee levels. The associations agreed not to boycott or refuse to deal with third-party payers, to determine the terms upon which physicians deal with such payers, or to fix the fees charged for any physician services. MAPI also is prohibited from advising physicians to raise, maintain, or adjust the fees charged for their medical services, or from creating or encouraging adherence to any fee schedule. The order does not prevent these associations from entering into legitimate joint ventures that are non-exclusive and involve the sharing of substantial financial risk.

RESTRAINTS ON ADVERTISING

The Commission issued a complaint charging that the California Dental Association had unreasonably restricted its dentist members' truthful and nondeceptive advertising of the price, quality, and availability of their services, and had imposed what were effectively prohibitions against advertising senior-citizen discounts. In March 1996, the Commission issued an opinion and order affirming an ALJ's decision finding that the California Dental Association's rules violated Section 5 of the FTC Act. The Commission's order requires CDA, among other things, to cease and desist from restricting truthful, nondeceptive advertising (including truthful, nondeceptive superiority claims, quality claims, and offers of discounts); to remove from its Code of Ethics any provisions that include such restrictions; and to contact dentists who have been expelled or denied membership in the last 10 years based on their advertising practices and invite them to re-apply. The order also requires CDA to set up a compliance program to ensure that its constituent societies interpret and apply CDA's rules in a manner that is consistent with the order. The Commission's order was affirmed by the 9th Circuit in 1997.[12]

Competition activities in the pharmaceutical field

Competition and competitive prices in the pharmaceutical industry are particularly important to older Americans. There are at

[12] *California Dental Association v. FTC*, 128 F. 3d 720 (9th Cir. 1997).

least three reasons why this is so. First, merely by virtue of their age, older persons are more likely to have medical problems than the average American and thus are more likely to purchase pharmaceutical products. It has been reported that roughly 13 percent of our population is over the age of 65 but that this group consumes more than a third of all prescription drugs dispensed, and that this percentage is increasing. Second, older persons are less likely to have insurance that helps pay for their drugs and thus must bear the entire cost of their medicines. Almost all elderly consumers rely on Medicare, which does not have a prescription drug benefit. Reimbursement is available only to Medicare recipients who can afford Medi-gap coverage, are poor enough to qualify for Medicaid, or are in a managed care plan that offers a prescription drug benefit. Third, because many of the nation's senior citizens have limited financial resources, as a group they are disproportionately affected by pharmaceutical prices.

Mergers in manufacture and distribution of pharmaceuticals

The Commission was quite active during 1995 and 1996 in the role of protecting competition in this area, focusing on oversight of merger activity in both the manufacturing and distribution of pharmaceuticals.

In the manufacturing sector, in 1995 the Commission issued a consent order requiring American Home Products to divest its tetanus and diphtheria vaccines and to license its rotavirus vaccine research as a condition for acquiring American Cyanamid Company. Also made final in 1995 was a consent order prohibiting IVAX Corporation from acquiring any rights to market a generic version of verapamil—a drug used to treat patients with chronic cardiac conditions—from Zenith Laboratories. IVAX and Zenith were the only two suppliers of generic verapamil. This settlement ensured that two generic suppliers of this drug remained in the market.

In 1995, the Commission also accepted a consent agreement with Glaxo plc, settling charges that its acquisition of Wellcome plc lessened competition in the research and development of drugs to treat migraine headaches. The consent order required Glaxo to divest one of the competing research and development projects to a Commission-approved buyer.

The Commission also obtained relief in four pharmaceutical markets when it challenged the proposed acquisition of Marion Merrell Dow by Hoechst AG. The consent agreement with Hoechst required the company to divest assets and take other actions to restore competition in the following markets: (1) once-a-day diltiazem, a medication used to treat hypertension and angina; (2) mesalamine, a medication used to treat gastrointestinal diseases; (3) rifampin, a drug for tuberculosis; and (4) drugs used to treat intermittent claudication, a circulatory disease. These four product markets have annual sales of over $1.25 billion. The consent order against Hoechst was issued in 1996.

Another consent order that was issued in 1996 involved the merger of Upjohn Company and Pharmacia Aktiebolag. In that case, the companies agreed to divest one of their research and development projects to develop a drug to treat colorectal cancer, in order to maintain competition in the development of such drugs.

Finally, two consent agreements were accepted for public comment in December of 1996. In one, Baxter International, Inc. agreed to divest blood plasma products in order to proceed with its acquisition of Immuno International AG. In the other consent agreement, the Commission required Ciba Geigy, Ltd. and Sandoz, Ltd. to license their patents and intellectual property in the broad area of gene therapy research to an independent competitor as a condition for allowing their merger to proceed.

The Commission also challenged two acquisitions in the retail sale of prescription drugs in order to protect competition for the millions of Americans that obtain prescription drugs through pharmacy benefit plans. In December of 1996, J.C. Penney/Thrift agreed to divest over 100 drugstores in North and South Carolina before it purchased the Eckerd drugstore chain and certain drugstores from Rite Aid. In the other case, the Commission voted on April 17, 1996, to seek a preliminary injunction in federal district court to block Rite Aid's proposed acquisition of Revco. As a result of this vote, Rite Aid abandoned its planned acquisition.

Pharmacy services

Older consumers also are vulnerable to non-merger-related anticompetitive conduct in the pharmacy industry. The Commission has therefore acted to eliminate agreements among pharmacies that raise the price of medications.

In June 1996, the Commission issued a consent order barring RxCare of Tennessee, Inc., a pharmacy network, and the Tennessee Pharmacists Association, its owner, from using "Most Favored Nation" clauses in RxCare's contracts with pharmacies. The Commission alleged that RxCare enforced these clauses against pharmacies that accepted reimbursement rates from other third-party payers that were lower than the RxCare rate, and thus discouraged pharmacies from participating in rival, lower-priced networks. The clause forced third-party payers to pay higher rates in Tennessee than in other states.

Finally, Commission staff in 1996 opened an investigation of a pharmacy network and its members, who are large institutional pharmacies in one state that serve nursing homes and similar institutions. The investigation concerned joint negotiation of prescription drug reimbursement rates for the state's Medicaid program.

HEALTH CARE REGULATION

The staff of the Commission continued in 1995–1996 to monitor restraints imposed by existing or proposed regulations and actions that could raise costs to consumers by reducing competition in the health care industry, without providing countervailing benefits to consumers. As part of the Commission's competition advocacy programs, Commission staff[13] in 1995–1996 submitted comments to the Kansas legislature on a bill to amend Kansas's laws governing optometry. The bill proposed clarifying the restrictions on commercial forms of practice and would have facilitated optometrists locating in space leased from optical goods stores. The staff concluded

[13] Staff advocacy comments and testimony are authorized by the Commission but are not substantively approved by the Commission and do not necessarily reflect the views of the Commission or any individual Commissioner.

that relaxing constraints on commercial practices is consistent with the direction the Commission took in its Eyeglasses II rulemaking, and clarifying conditions under which optometrists may lease space from optical goods stores could benefit consumers through greater competition and efficiencies in operation.

Regarding consumer protection issues, the staff filed two sets of comments with the Food and Drug Administration in response to a notice of proposed rulemaking. The first concerned its regulation of direct-to-consumer advertising for prescription drugs. The staff suggested that the FDA consider adopting an approach similar to the FTC's Deception Policy Statement and Statement on Advertising Substantiation to assist in evaluating the accuracy of prescription drug advertisements. The staff recommended that limiting current disclosure requirements and adjusting disclosure requirements according to advertising venues could increase the net benefits of direct-to-consumer advertisements. The staff also recommended that the FDA consider alternative means for ensuring consumer access to important information to replace the highly technical and lengthy "brief summary" currently appearing in consumer-directed prescription drug advertising. The second comment concerned how structural changes in the health care industry affect its responsibilities to regulate drug marketing and promotion. The staff suggested that the FDA consider a more flexible substantiation standard—one that requires competent and reliable evidence whose level could depend on the claim being made, rather than on an *a priori* requirement. The staff also suggested that the FDA may wish to consider a disclosure approach for any deception concerning "switch" programs, because clear and conspicuous disclosures of material connections between pharmacy benefit plans and drug producers could cure deception while preserving the potential economic benefits of the programs.

COMMISSION ACTION IN OTHER FIELDS

FUNERAL SERVICES

Consumer protection

The Commission is responsible for enforcing the FTC's Funeral Industry Practices Rule, 16 CFR Part 453, a Rule of considerable importance to older Americans and their families. The Rule is designed to ensure that consumers receive accurate information about prices, options, and legal requirements for funeral services, so that they can make informed purchasing decisions. Funeral services, which often cost $10,000 or more, come at emotionally difficult times and may be among the most expensive of consumer purchases. In many cases, these also are first-time purchases, making it particularly important for consumers to receive immediate and accurate information.

From 1984 through 1994, the Commission brought 43 enforcement actions against funeral homes for failing to comply with the Rule. Despite the Commission's enforcement efforts, compliance with the Rule remained as low as 36 percent. Thus, it became apparent that a new strategy was needed. In 1995 and 1996, Commission staff, with the assistance of the Tennessee, Mississippi, and Delaware Attorneys General, conducted four sweeps in which

investigators posing as consumers "test shopped" funeral homes in those states for Rule compliance. The FTC also conducted a pilot sweep in Florida. Those sweeps of 89 funeral homes resulted in 20 FTC enforcement actions,[14] nearly half as many as were brought in the previous decade since the Rule went into effect.

The funeral industry took note of the Commission's new enforcement efforts, and in September 1995, the National Funeral Directors Association ("NFDA") submitted a proposal to the Commission for an industry self-certification and training program to increase Rule compliance. The Commission agreed to this proposal in January 1996.

The first component of this new NFDA initiative is the Funeral Rule Offenders Program ("FROP"), which offers a non-litigation alternative for correcting apparent "core" violations of the Rule—*i.e.,* failing to provide itemized price lists of available goods and services to consumers seeking to arrange a funeral. Under FROP, if a funeral home is identified by investigators as having failed to provide the required price lists, the home may, at the Commission's discretion, be offered the choice of a conventional investigation and potential law enforcement action resulting in a federal court order and civil penalties as high as $11,000 per violation, or participation in FROP. Violators choosing to enroll in FROP make voluntary payments to the U.S. Treasury or state Attorney General, but those payments generally are less than the amount the Commission would seek as a civil penalty. NFDA attorneys then review the home's practices, revise them so they are in compliance with the Funeral Rule, and then conduct on-site training and testing.

The Commission, in cooperation with state Attorneys General, has continued to conduct Funeral Rule sweeps since the adoption of FROP. Those sweeps, conducted in Massachusetts, Oklahoma, Ohio, Colorado, and Illinois, indicate that compliance among funeral homes has improved significantly since 1994. Nearly 90 percent of funeral homes subjected to test shopping in 1996 complied with the key general price list requirements.[15]

Competition activities

The Commission is active on the antitrust side of its jurisdiction in ensuring that competition is maintained in funeral services and cemetery services. Where mergers take place between two chains providing such services, we examine them for overlaps in particular local markets, in order to ensure that every local market retains enough providers to give consumers a competitive range of alternatives. As part of this program, the Commission during 1995 obtained a consent order against Service Corporation International ("SCI"), the largest owner and operator of funeral homes and cemeteries in North America, for its acquisition of Uniservice Corporation. That acquisition was likely to result in a substantial lessening

[14] The State of Tennessee also brought four additional actions in connection with the sweep conducted in that state. Also in 1995, in settling a case filed against Restland Funeral Homes, Inc. of Dallas and four subsidiaries, the Commission obtained a civil penalty of $121,600, the highest ever paid in a Funeral Rule case. In other non-sweep 1995 cases, the Commission filed actions against two Northern California funeral homes: Chapel of the Chimes agreed to pay a $70,000 civil penalty to settle charges that it violated the Funeral Rule; and Lewis & Ribbs Mortuary, Inc. agreed to pay $20,000 as a civil penalty.

[15] In one survey conducted before the Commission adopted FROP, only 36 percent of the homes tested were in compliance.

of competition for funeral services and perpetual care cemetery services in and around Medford, Oregon. The consent agreement required the divestiture by SCI of two funeral homes, a cemetery, and a crematory there. The Commission also obtained a number of other, similar consent agreements involving funeral-chain acquisitions during 1995–96. These orders protected local markets in Amarillo, Brownsville, Harlingen, and San Benito, Texas; Brevard and Lee Counties, Florida; and Castlewood, Virginia.

MAIL OR TELEPHONE ORDER MERCHANDISE

The Commission's Mail or Telephone Order Merchandise Rule, 16 CFR Part 435, requires sellers to make timely shipment of orders; give options to consumers to cancel an order and receive a prompt refund, or to consent to any delay in delivery; have a reasonable basis for any promised shipping dates (the Rule presumes a 30-day shipping date when no date is promised in an advertisement); and make prompt refunds. In issuing the original Mail Order Rule in 1975, the Commission noted that consumers with mobility problems, including older consumers, frequently order by mail. On March 1, 1994, the Commission amended the Rule to include telephone sales, one consideration being evidence submitted by the AARP indicating that a significant percentage of persons age 65 and older order products and services by telephone.

The Commission staff works closely with industry members and trade associations to obtain compliance with the Rule, and it initiates law enforcement actions where appropriate. During 1995 and 1996, courts entered three consent decrees resolving alleged Rule violations, resulting in judgments for civil penalties totaling $245,000.

USED CAR SALES

The Used Car Rule, 16 CFR Part 455, requires that used care dealers display "Buyers Guides" on the windows of their cars to tell consumers whether the vehicle comes with a warranty or is sold "as is." These warranty disclosure requirements can be of particular benefit to older consumers, who may be on fixed incomes and therefore more likely to purchase less expensive used cars. They also may be less able to meet sudden, unexpected repair expenses. In 1995, a U.S. District Court judge upheld Commission charges against an Illinois used car dealer for Rule violations. The defendant paid a civil penalty of $4,500 and is prohibited from any future violations of the Rule. The Commission solicited public comment on the Rule in 1994 as part of its systematic review of all current Commission regulations and guides, and, in December 1995, announced that it would retain the Rule with minor changes.

DOOR-TO-DOOR SALES

The Cooling-Off Rule, 16 CFR Part 429, requires that consumers be given a three-day right to cancel certain sales occurring away from the seller's place of business (often known as "door-to-door sales"). In addition, the Commission, in some administrative cease and desist orders against companies engaged in door-to-door sales, has required companies to allow consumers the right to cancel pur-

chases not covered under the Rule. The Rule and these orders can particularly benefit older Americans who are retired and at home, and who may be exposed more frequently to high pressure sales tactics by door-to-door or other sellers.

As part of its systematic review of all current Commission regulations and guides, the Commission requested public comments in 1994 on, among other things, the economic impact of, and the continuing need for, the Cooling-Off Rule; possible conflict between the Rule and state, local or other federal laws; and the effect on the Rule of any technological, economic, or other industry changes. Comments from both buyers' and sellers' representatives were submitted. All of the comments stated that the Rule provides important protections for consumers and favored retaining the Rule. The AARP commented that the Rule is especially needed to protect older consumers who are most vulunerable to unscrupulous door-to-door sellers. In 1995, the Commission decided to retain the Rule with minor changes.

ENERGY COSTS

The cost of heating and cooling one's home can be especially burdensome to older consumers. Retired individuals, who tend to spend more time at home than working individuals, may have less opportunity to lower their home heating or cooling requirements during the day. In addition, senior citizens, being more susceptible to hypothermia, are often counseled to maintain a higher temperature in their homes than younger persons might comfortably tolerate. Those on fixed incomes also may face greater relative economic burdens in meeting energy costs.

Properly insulated homes can maintain more constant temperatures and can save consumers substantial amounts on heating and cooling costs. The Commission's Rule Concerning the Labeling and Advertising of Home Insulation ("R-value Rule"), 16 CFR Part 460, assists consumers by requiring that sellers of insulation accurately disclose the "R-value," or insulating effectiveness, of such products. The Rule also requires installers and new home sellers to give consumers a written disclosure of the type and R-value of the insulation installed; requires retailers to make specific information available at the point-of-sale to consumers who purchase insulation for do-to-yourself installation; and requires advertisers to include important disclosures in advertisements that contain claims. The Commission solicited public comments in 1995 on the current need for, benefits of, and burdens imposed by, the Rule. Based on the comments submitted, the Commission in 1996 found that the Rule had significant benefits for both consumers and insulation sellers, imposed minimal, if any, costs or other burdens on consumers or sellers, and that there was a continuing need for the Rule.

The Commission also has investigated the accuracy of claims of the insulating effectiveness, known as "U-value" of windows and doors used in homes. Insulating effectiveness of such products is often determined by independent laboratories following government-approved test methods. State and local governments then use the U-value test results to determine if windows and doors comply with state and local building codes.

In 1996, the Commission filed a consent decree in the U.S. District Court for the Western District of Washington settling charges that Insulate Industries modified test samples to improve the U-Value of its windows and used the deceptive results to sell windows that did not perform as the test results indicated that they would. The decree prohibited the alleged conduct and required the manufacturer to provide new windows for distribution to customers by the states of Washington and Oregon, which maintain certification programs for that industry.

APPLIANCE LABELING RULE

Utility costs are some of the least discretionary items in the household budget, and are of particular concern to those on fixed incomes. The Commission's Appliance Labeling Rule, 16 CFR Part 305, helps consumers control costs in several ways. First, the Rule enables consumers to reduce energy costs by requiring manufacturers to disclose the energy usage of major household appliances and the water usage of showerheads, faucets, toilets, and urinals. For appliances, the Rule requires disclosure of specific energy consumption, efficiency, or cost consumption for covered products in catalogs. It also requires information at the point of sale in the form of an "Energy Guide" label or fact sheet, or in an industry directory. Because energy efficient appliances cost less to run over the life of the product, the Rule enables those older consumers who may be on limited incomes to keep down monthly expenses for running major home appliances, such as refrigerators and heating and cooling equipment.

Second, the Rule requires certain disclosures relating to three categories of light bulbs or tubes: general service incandescent bulbs (including spot lights and flood lights); general service fluorescence tubes; and medium screw-base compact fluorescent tubes. For the bulbs most commonly used in the home, incandescent light bulbs and screw-base compact fluorescent tubes, the Rule requires that package labels disclose: light output, in lumens; energy used, in watts; voltage, average life, in hours; the number of bulbs or tubes in the package; and a statement explaining how to select the most energy efficient bulb.

Compliance with the Rules is generally high. The appliance industry is largely self-policing through certification programs maintained by the several large trade associations that represent most manufacturers.

FUEL RATING RULE

The Commission's Fuel Rating Rule, 16 CFR Part 306, established national, standardized procedures for determining, certifying, and posting (on pumps) octane rating for gasoline and other ratings for certain liquid alternative fuels like ethanol and methanol. Accurate certification and posting of fuel ratings deter distributors and retailers from deceptively selling lower-rated fuel as being higher-rated. The Rule may be particularly beneficial to many older Americans who increase vacation travel during retirement, and, with more time and reduced income, do so by automobile or recreation vehicles.

To help ensure accurate ratings, the Commission in 1995 completed a nationwide survey of gasoline distributors to determine whether they are accurately certifying gasoline octane ratings and keeping required records. The survey, which began in 1991, focused on gasoline distributors in states that have no octane-testing program, and in states that had expressed concern about possible octane mislabeling problems. While indicating generally high overall compliance with the Commission's Fuel Rating Rule, the investigation did lead to three law enforcement actions, and the FTC obtained a total of $82,500 in civil penalties in those cases.

CREDIT PRACTICES

Credit fraud

The Credit Practices Program enforces several federal credit statutes that affect more than 113 million consumers holding credit cards and many millions more who apply for credit and loans. Credit fraud continues to affect consumers of all ages and income levels. The impact of such abuses can be particularly devastating to seniors who rely on credit to augment their income and therefore may be more receptive to credit offers that are "to good to be true."

Each year, the Commission receives thousands of consumer complaints regarding harassing and abusive behavior by debt collectors. Often, these letters come from senior citizens. The Commission brought a number of lawsuits in 1995 and 1996 against debt collectors for violations of the Fair Debt Collection Practices Act ("FDCPA"), 15 U.S.C. § 1692 *et seq.*

In March 1995, Payco American Corporation ("Payco"), one of the nation's largest debt collection agencies, agreed to pay a $500,000 civil penalty to settle allegations that it violated the FDCPA. The Commission's lawsuit, filed in August 1993 through the Department of Justice, charged, among other things, that Payco illegally revealed consumer debts to third parties; used obscene or profane language; telephoned debtors at times and places known to be inconvenient to the consumers being contacted; and made several misrepresentations to consumers. In addition to the $500,000 civil penalty, the settlement prohibits Payco from violating the FDCPA in the future, and requires the company to give notice to all employees who are responsible for debt collection that they may be held liable individually if they are found to be violating the FDCPA.

The Commission brought several other FDCPA actions in 1995. The Commission settled allegations that Great Lakes Collection Bureau, Inc. violated the FDCPA by, among other things, communicating or threatening to communicate with the third parties and to disclose the debt, harassing and abusing the consumer, and falsely representing or implying that an attorney had been involved in the collection effort and that non-payment would result in attachment, garnishment, or legal action. The company paid $150,000 in civil penalties, and agreed to injunctive relief. The Commission also sued Trans Continental Affiliates ("TCA") and TCA principal charging a number of egregious violations of the FDCPA, including using obscene language, calling repeatedly or calling at all hours, and misrepresenting that failing to pay debts

would result in arrest or imprisonment. Settlements with two of the individual defendants were filed with the compliant.

During 1996, the Commission, through the Department of Justice, concluded its litigation against National Financial Services ("NFS"), its owner, and an attorney who helped devise and mail the collector's dunning notices for serious, persistent violations of the FDCPA involving false threat of legal action. In July 1995, the district court ordered NFS and its owner to pay a $50,000 civil penalty, and its attorney to pay a $500,000 civil penalty. That order was upheld on appeal by the Fourth Circuit in 1996. Finally, the Commission in 1996 resolved a variety of similar allegations in settlements with United Creditor's Alliance Corp. ($146,000 civil penalty), Allied Bond and Collection Agency ($140,000 civil penalty), and G & L Financial Services, Inc. ($10,000 civil penalty). The federal court consent decrees in these cases also include injunctive relief to prohibit future violations.

Equal Credit Opportunity Act

Among other things, the Equal Credit Opportunity Act ("ECOA"), 15 U.S.C. § 1691 *et seq.,* prohibits discrimination based on age in determining whether or not to extend credit. To help detect discrimination based on age or other prohibited factors (such as sex or race), the ECOA requires written notice to consumers of the reasons for a denial of consumer credit. In 1996, the Commission filed a settlement with J.C. Penny to resolve allegations that the company had violated consumers' rights under the ECOA to receive such written notice. The settlement provided for an innovative consumer notification program costing the company an estimated $1 million, in addition to $225,000 in civil penalties.

CONSUMER PROTECTION REGULATION

In 1995 and 1996, the Commission continued to monitor regulatory proposals and actions by federal, state and other entities that could have actual or potential economic impact on consumers. Commission staff testified before the Michigan State House of Representatives on proposed legislation that would have amended the Michigan statutes regulating the licensing and operation of funeral establishments and cemeteries in Michigan. The staff supported the legislation, concluding that joint ownership or operation of a funeral establishment and a cemetery could make possible new business formats and improvements in efficiency and could encourage entry of new competitors, which could, in turn, lead to lower prices and improved service to consumers.

Also during the period, Commission staff filed comments with the Federal Communications Commission supporting the FCC's efforts to keep unscrupulous pay-per-call service providers from evading federal regulations governing the 900-number industry. In particular, the staff supported the FCC's efforts to prevent pay-per-call transactions from being disguised as long-distance calls, by requiring that whenever a provider of information or entertainment programs receives any remuneration for calls to such a program, the call must fall within the 900-number dialing code. The staff said that consumers would likely benefit from this proposal, because it would allow them to recognize telephone numbers for calls that en-

tail charges above regular long distance charges, would subject the calls to cost-disclosure and billing-dispute requirements, and would enable consumers to prevent charges for unauthorized calls by blocking 900 numbers.

CONSUMER EDUCATION ACTIVITIES AFFECTING OLDER CONSUMERS

The Commission, through its Office of Consumer and Business Education ("OCBE"), is involved in preparing and distributing a variety of consumer publications and broadcast materials. Many of the subjects are of significant interest to older consumers. In addition, Commission staff in 1995–1996 engaged in substantial, additional consumer education efforts at the local and regional levels, including regional "town hall" meetings with consumers and Consumer Education Fairs.

1995–1996 CONSUMER EDUCATION ACTIVITIES

During calendar years 1995–1996, the OCBE produced or revised more than 100 publications covering a broad range of consumer protection topics. Eighteen of these publications are of special interest to older Americans. Most FTC consumer publications are not age-specific. However, publications on certain topics, such as telemarketing scams, health care, funeral services, or credit issues highlight many of the needs and concerns of older citizens.

TELEMARKETING SCAMS

Some telemarketers have admitted that older consumers are attractive targets for unscrupulous promotions. The FTC produced or revised five publications during this period that focus on a variety of telemarketing scams and offer solid tips on how to recognize and avoid these scams. One especially offensive scheme that preys on former victims of telemarketing fraud is covered in the publication *Telemarketing Recovery Scams.* The Commission issued this brochure in 1996. The four related brochures issued during the period include *Straight Talk About Telemarketing, Prize Offers, International Telephone Number Scams,* and *Are You A Target of Telephone Scams?* The last brochure mentioned also was published in a large-print edition for older consumers.

At the local level, the elderly in many cultures and communities seek advice on business transactions from their religious leaders, particularly where they may not have adult children, lawyers, or accountants to consult. In 1995, Commission staff co-sponsored the Commission's first Consumer Workshop for religious leaders. In partnership with the Harlem Consumer Education Council, the U.S. Office for Consumer Affairs, and the Harlem Branch Office of the New York State Attorney General, workshops were conducted at a Harlem church for ministers, priests, and rabbis on a wide range of consumer issues, including the continued victimization of older Americans via telemarketing fraud and door-to-door sales. The workshop was aired on two local Cable TV channels over a period of three-months.

In Denver, Colorado, Commission staff teamed with the Colorado Attorney General, the Denver District Attorney, the Better Business Bureau, and the American Association of Retired Persons to

sponsor a conference to educate seniors about all types of fraud, including telemarketing fraud, under the group name Seniors Against Fraud and Exploitation ("SAFE"). Also, Commission staff trained student and senior volunteers to give presentations on telemarketing fraud to senior centers in the Seattle area. Seven volunteers made presentations at 14 senior centers during the summer of 1996. In Columbia, South Carolina, the staff participated in a video-teleconference that included presentations by the White House Special Assistant for Consumer Affairs and the AARP, as well as representatives from several other consumer protection agencies. The teleconference was aired on South Carolina Education Television, channel C, reaching about 150,000 to 200,000 consumers. The telecast included statements from consumers who had been victimized and actual footage of scam artists making various misrepresentations to consumers. The topics discussed included telemarketing travel fraud, sweepstakes and prize promotions, recovery scams, investment scams, charitable solicitations and tips on how to avoid being scammed.

Finally, Commission staff participated in two "reverse boilerrooms" coordinated by the AARP and the Illinois Attorney Generals's Office. The reverse boilerroom is a means of providing consumer education to persons whose names appear on lead, or "mooch," lists and therefore are particularly likely to be contacted by fraudulent telemarketers. The volunteers in a reverse boilerroom call consumers on the lists, talk with them about the risks of telemarketing fraud, and inform them that their names and telephone numbers are circulating among real boilerroom scam artists.

HEALTH

Two Commission publications produced in 1996 address health issues that affect older consumers. The first, *Fraudulent Health Claims: Don't Be Fooled,* produced in cooperation with the U.S. Food and Drug Administration, focuses on the worthless, and sometimes life-threatening, bogus health care products and treatments upon which American consumers spend billions of dollars each year. The brochure also addressed cross-border health care fraud by providing information on government contacts in Mexico and its states. The second brochure, *Who Cares?—Sources of Information About Health Care Products and Services,* is a joint effort with the National Association of Attorneys General and provides a listing of federal, state and private organizations that provide assistance and information to consumers about such things as prescription drugs, hearing aids, nursing facilities, alternative medicine, cataract surgery, purported arthritis cures, direct-mail schemes, and abusive care-givers.

FUNERALS

Choosing and buying funeral services and caskets and understanding consumer rights protected by the FTC's Funeral Rule were topics of two publications revised during this period—*Caskets and Burial Vaults Funerals: A Consumer Guide.* In a third brochure, *Viatical Settlements: A Guide for People with Terminal Illnesses,* the Commission describes this method of allowing living

persons to receive the benefits of their life insurance policies, which benefits could be used to pre-pay funeral expenses.

CREDIT AND FINANCIAL MATTERS

Credit and money issues that have a direct impact on older consumers were among the topics of several publications distributed by the FTC in 1995–96. *Credit and Older Americans, Equal Credit Opportunity,* and *Mortgage Discrimination* emphasize and explain consumer rights under the law. The pros-and-cons of taking advantage of home equity is discussed in *Reverse Mortgages,* a brochure designed for older consumers and their families. Likewise, *High-Rate, High-Fee Loans (Section 32 Mortgages)* explains consumer rights under the Home Ownership Equity Protection Act of 1994, 15 U.S.C. § 1639. According to reports from federal and state law enforcement agencies and the AARP, older consumers are frequently the targeted victims of unscrupulous high-rate lenders.

ACCESS TO FTC PUBLICATIONS

In early 1995, the FTC began to offer its publication online through the Internet. By December 1996, *FTC Consumerline,* a component of the FTC world wide web site, was offering the full-text of all consumer publications produced by the agency.

CONCLUSION

This report reviews Commission programs in 1995 and 1996 that may be of particular concern to older consumers and their families. Through the combination of law enforcement and consumer education described above, the Commission strives to ensure a vigorous, fair, and competitive marketplace for all consumers.

ITEM 21—GENERAL ACCOUNTING OFFICE

AGING ISSUES: RELATED GAO REPORTS AND ACTIVITIES IN CALENDAR YEARS 1995 AND 1996

The elderly represent one of the fastest growing segments of the country's population, and the Congress faces many complex issues as a result of this growth. In the United States, the number of people aged 65 and older has grown from about 9 million in 1940 to about 34 million in 1995. Moreover, the number is expected to reach 80 million by 2050, according to Bureau of the Census projections. In 1940, people aged 65 and older made up 7 percent of the total population, and this proportion is expected to grow to 20 percent by as early as 2030. Although the aging of the baby-boom generation will contribute greatly to these trends, increased life expectancies and falling fertility rates are also important factors. Together, these demographic changes pose serious challenges for our Social Security system, Medicare, Medicaid, the federal budget, and our economy as a whole.

This report responds to your request for a compilation of our products from calendar years 1995 and 1996 that pertain to programs and issues affecting older Americans and their families.

In summary, our work on these programs and issues reflects the broad range and importance of federal programs for older Americans. Some federal programs, such as Social Security and Medicare, are directed primarily at older Americans. Other federal programs, such as Medicaid or federal housing programs, target older Americans as one of several groups served. Our work during calendar years 1995 and 1996 covered issues concerning education and employment, health care, housing and community development, income security, and veterans. In the enclosures, we describe three types of GAO products that relate to older Americans:

166 reports and correspondence (see encl. I) and
69 congressional testimonies (see encl. II).

The summaries in these enclosures were prepared shortly after the products were issued and have not been updated to reflect subsequent developments.

Table 1 gives a breakdown of those products by category. The table shows that health, income security, and veterans' issues were the areas most frequently addressed among our products that focused on older Americans.

TABLE 1: GAO PRODUCTS RELATING TO THE ELDERLY IN CALENDAR YEARS 1995 AND 1996

Elderly issues	Reports and correspondence	Testimonies
Education and employment	4	2
Health	75	35
Housing and community development	8	3

TABLE 1: GAO PRODUCTS RELATING TO THE ELDERLY IN CALENDAR YEARS 1995 AND 1996—Continued

Elderly issues	Reports and correspondence	Testimonies
Income security	45	20
Veterans and defense	34	9
Total	166	69

[Enslosure I]

CALENDAR YEARS 1995 AND 1996 REPORTS AND CORRESPONDENCE ON ISSUES AFFECTING OLDER AMERICANS

During calendar years 1995 and 1996, GAO issued 166 reports on issues affecting older Americans. Of these, 4 were on education and employment, 75 on health, 8 on housing and community development, 45 on income security, and 34 on the Department of Defense (DOD) and veterans.

EDUCATION AND EMPLOYMENT ISSUES

Adult Education: Measuring Program Results Has Been Challenging (GAO/HEHS–95–153, Sept. 8, 1995)

According to a recent national survey, nearly 90 million adults in the United States have difficulty writing a letter explaining an error on a credit card bill, using a bus schedule, or calculating the difference between the regular and sale price of an item. To address these deficient literary skills, the Congress passed the Adult Education Act, which funds state programs to help adults acquire the basic skills needed for literate functioning, benefit from job training, and continue their education at least through the high school level. The most common types of instruction funded under the act's largest program—the State Grant Program—are basic education (for adults functioning below the eighth grade level), secondary education, and English as a second language. Because many clients of federal employment training programs need instruction provided by the State Grant Program, coordination among these programs is essential. Although the State Grant Program funds programs that address the educational needs of millions of adults, it has had difficulty ensuring accountability for results because of a lack of clearly defined program objectives, questionable validity of adult student assessments, and poor student data.

Adult Education Review (GAO/HEHS–95–65R, Feb. 16, 1995)

GAO provided information on the Adult Education Act (AEA) that focused on the (1) funding history of AEA; (2) changes that have taken place in the amount of services that the State-Administered Basic Grant Program provides; and (3) goals, targeted populations, and service recipients of the State-Administered Basic Grant Program. GAO noted that (1) AEA funding under this program increased from $100 million in fiscal year 1984, to $255 million in fiscal year 1995, (2) enrollment in the State-Administered Basic Grant Program rose from approximately 377,000 participants

in 1966 to almost 4 million participants in 1994, and (3) the purpose of the program is to provide educational opportunities for adults who lack the necessary literacy skills to become a citizen and to be productive in their employment.

Department of Labor: Senior Community Service Employment: Program Delivery Could Be Improved Through Legislative and Administrative Actions (GAO/HEHS–96–4, Nov. 2, 1995)

The Department of Labor's Senior Community Service Employment Program finances part-time minimum-wage community service jobs for about 100,000 poor elderly Americans. GAO found that Labor distributes program funds through noncompetitive grants to 10 national organizations, called national sponsors, and to state agencies. These national sponsors and state agencies, in turn, use the grant funds to finance local employment projects run by community service host agencies, such as libraries, nutrition centers, and parks, that directly employ older Americans. GAO found that the relative distribution of funds to the national sponsors and state agencies along with Labor's method of implementing the hold-harmless provisions have resulted in the distribution of funds among and within states that bears little relationship to actual need. GAO also found that, under Labor's regulations, expenditures that GAO believes to be administrative in nature may be charged to another cost category, allowing grantees to exceed the statutory 15-percent limit on administrative costs. GAO summarized this report in testimony before the Congress; see *Senior Community Service Employment: Program Delivery Could Be Improved Through Legislative and Administrative Actions,* (GAO/T–HEHS–96–57, Nov. 2, 1995), statement by Cornelia M. Blanchette, Associate Director for Education and Employment Issues, before the Subcommittee on Early Childhood, Youth and Families, House Committee on Economic and Educational Opportunities.

People With Disabilities: Federal Programs Could Work Together More Efficiently to Promote Employment (GAO/HEHS–96–126, Sept. 3, 1996)

How efficient are federal efforts to help people with disabilities? In 1994, the government provided a range of services to people with disabilities through 130 different programs, 19 federal agencies, and a host of public and private agencies at the state and local levels. Although research groups and independent panels have stressed the need to simplify and streamline programs serving the disabled, creating a new service delivery system may prove difficult. GAO urged caution in 1992 when the Congress was considering proposals that would have made fundamental changes in human service delivery systems at the federal, state, and local levels. GAO also urges caution with regard to programs serving people with disabilities. Although the potential benefits of creating a new system to deliver services more comprehensively to people with disabilities may be great, so are the barriers and the risks of failure. Obstacles preventing officials from reorganizing service agencies, creating new funding and service agreements, and divesting authority from their own agencies are hard to overcome. Mandates alone are unlikely to secure the major time and resource commit-

ments needed from officials—whether they are charged with directing reforms or have responsibility for administering services. In the current fiscal environment, a renewed focus by federal agencies on improving coordination would be a useful step toward improving services and enhancing the customer orientation of their programs.

HEALTH ISSUES

AARP Medigap Premium Increases, 1996 (GAO/HEHS–96–119R, Apr. 19, 1996).

Pursuant to a congressional request, GAO examined why Medigap premiums offered through the American Association of Retired Persons (AARP) were increasing. GAO noted that (1) in January 1996 premiums for more than 3 million AARP Medigap policyholders increased an average of 26 percent; (2) the 1996 increases varied by state and ranged from 0 to 40 percent for both standardized and prestandardized policies; (3) in 1994 and 1995, premiums increased in 8 and 10 states, respectively; (4) because benefit payments were less than expected, AARP standardized policyholders received an average credit of $75 and prestandardized policyholders received an average credit of $79 in 1994 and 1995; (5) in 1992, policyholders in 45 states received refunds averaging $47 because of lower-than-expected benefit payments; (6) AARP believes that the 1996 Medigap rate increases are justified because the number of services received and costs incurred by policyholders substantially increased; (7) although the average Medigap loss ratio decreased to 81 percent between 1991 and 1993, in 1994, the average loss ratio increased to 93 percent; (8) in 1994, the average loss ratio for prestandardized policies was 98 percent and 82 percent for standardized policies; and (9) the average loss ratio for 1995 policies was 100 percent and could increase to 112 percent without a rate increase.

Analysis of "Florida's Fair Share" (GAO/HEHS–96–168R, June 10, 1996)

Pursuant to a congressional request, GAO commented on the appropriateness of the Medicaid funding formula contained in H.R. 3507. GAO noted that (1) over time, the proposed formula would cause Medicaid funding distribution to more closely reflect states' poor and elderly populations; (2) there are more generous matching rates for low-income states that spend more on Medicaid services for eligible recipients; (3) because Florida spends less on benefits for eligible recipients than the other states reviewed, it receives less matching federal funds; (4) the new funding formula would establish targets for federal funding in proportion to the poor population in each state; (5) each state's federal allocation would increase depending on the differences between the current level of federal funding and the target amount; and (6) by giving states like Florida higher growth rates, the new formula would enable states to receive federal funding in proportion to their poor population.

Arizona Medicaid: Competition Among Managed Care Plans Lowers Program Costs (GAO/HEHS–96–2, Oct. 4, 1995)

Many states are converting their traditional fee-for-service Medicaid programs to managed care delivery systems. Arizona's Medicaid program offers valuable insights—especially in fostering competition and monitoring plan performance. Since 1982, Arizona has operated a statewide Medicaid program that mandates enrollment in managed care and pays health plans a capitated fee for each beneficiary served. Although the program had problems in its early years, such as the dismissal of the program administrator and the state's takeover of the administration, it has successfully contained health care costs while maintaining beneficiaries' access to mainstream medical care. Arizona's recent cost-containment record is noteworthy. According to one estimate, Arizona's Medicaid program saved the federal government $37 million and the state $15 million in acute care costs during fiscal year 1991 alone. Arizona succeeded in containing costs by developing a competitive Medicaid health care market. Health plans that submit capitation rates higher than their competitors' bids risk not winning Medicaid contracts. Other states considering managed care programs can benefit from Arizona's experience. GAO concludes that the key conditions for holding down Medicaid costs without compromising beneficiaries' access to appropriate medical care include freedom from some federal managed care regulations, development and use of market forces, controls to protect beneficiaries from inadequate care, and investment in data collection and analysis capabilities.

Blue Cross FEHBP Pharmacy Benefits (GAO/HEHS–96–182R, July 19, 1996).

Pursuant to a congressional request, GAO provided information on the Blue Cross and Blue Shield Association's two pharmacy benefit managers and the services they provide to the Federal Employees Health Benefits Program (FEHBP). GAO noted that (1) to control drug costs, the Association is requiring Medicare part B participants to pay the standard copayment for drugs bought at participating retail pharmacies, but it is waiving copayments on drugs bought through its mail-order program for those participants; (2) the Association expects this change to achieve significant savings and prevent a premium increase in standard option coverage; (3) the Association's mail-order subcontractor has had significant difficulty meeting its customer-service performance measures because the increase in mail orders has been much larger and quicker than expected; (4) the subcontractor has increased its processing capacity to meet the unexpected demand; (5) retail pharmacies have experienced a 36-percent decrease in drug sales to part B participants and a 7-percent decrease in drug sales to all enrollees; and (6) the Association believes its pharmacy benefits managers provide valuable services to FEHBP, meet most of their contractual performance measures, and produce significant savings.

Cholesterol Treatment: A Review of the Clinical Trials Evidence (GAO/PEMD–96–7, May 14, 1996).

Clinical trials showed men who took cholesterol-lowering treatments had fewer non-fatal heart attacks compared to those not

treated. Reductions in coronary deaths in the same trials were restricted to high risk men, that is, those with a history of heart disease and high cholesterol. Surprisingly, the men that took the cholesterol lowering treatments suffered higher death rates from all non-coronary causes that canceled out the modest reduction in coronary deaths. The mixed benefit picture here may result from the generally modest cholesterol reductions achieved by the group of trials in our review. One of two recent trials that lowered cholesterol more found a significant reduction in total fatalities.

Trials are limited by the selected populations recruited and by limited duration. Since trials focused on middle-aged white men with higher than average cholesterol readings and a history of heart disease, useful trial data are lacking on benefits or risks for women, minorities, the elderly or people with the most common cholesterol readings. Trials proposed or underway may provide information on these groups. Trials usually follow people for 5 years or less, while drug treatment would be longer.

Community Health Centers: Challenges in Transitioning to Prepaid Managed Care (GAO/HEHS–95–138, May 4, 1995).

As states move to prepaid managed care to control costs and improve access for their Medicaid clients, the number of participating community health centers continues to grow. Medicaid prepaid managed care is not incompatible with health centers' mission of delivering health care to medically underserved populations. However, health centers face substantial risks and challenges as they move into these arrangements. Such challenges require new knowledge, skills, and information systems. Centers lacking expertise and systems face an uncertain future, and those in a vulnerable financial position are at even greater risk. Today's debate over possible changes in federal and state health programs heightens the concern over the financial vulnerability of centers participating in prepaid managed care. If this funding source continues to grow as a percentage of total health center revenues, centers must face building larger cash reserves while not compromising services to vulnerable populations. GAO summarized this report in testimony before the Congress; see *Community Health Centers: Challenges in Transitioning to Prepaid Managed Care,* (GAO/T–HEHS–95–143, May 4, 1995), statement by Mark V. Nadel, Associate Director for Health Financing and Policy Issues, before the Senate Committee on Labor and Human Resources.

Consumer Health Information: Emerging Issues (GAO/AIMD–96–86, July 26, 1996)

Technology has increased the amount of health information available to the public, allowing consumers to become better educated and more involved in their own health care. Government and private health care organizations rely on a variety of technologies to disseminate health information on preventive care, illness and injury management, treatment options, post-treatment care, and other topics. This report discusses consumer health informatics—the use of computers and telecommunications to help consumers obtain information, analyze their health care needs, and make decisions about their own health. GAO provides information on (1) the

demand for health information and the expanding capabilities of technology; (2) users' and developers' views on potential systems advantages and issues surrounding systems development and use; (3) government involvement—federal, state, and local—in developing these technologies; and (4) the status of related efforts by the Department of Health and Human Services (HHS). As part of this review, GAO surveyed consumer health informatics experts and presents their views on issues that need to be addressed when developing consumer health information systems. GAO summarized this report in testimony before the Congress; see *Consumer Health Informatics: Emerging Issues* (GAO/T–AIMD–96–134, July 26, 1996), statement by Patricia T. Taylor, Director of Information Resources Management Issues, before the Subcommittee on Human Services and Intergovernmental Relations, House Committee on Government Reform and Oversight.

District of Columbia: Information on Health Care Costs (GAO/AIMD–96–42, Apr. 22, 1996).

Recent studies on the District of Columbia's health care system have concluded that the city's health care problems are aggravated by such social factors as high rates of poverty, crime, substance abuse, and unemployment. These factors account for the sizable numbers of persons who do not seek preventive health care and cannot pay for medical treatment, the inappropriate use of D.C. General Hospital for primary care, and the many trauma care patients at area hospitals. To help the Congress evaluate various restructuring proposals being considered for the District, this report discusses the District's health care budget and the composition of the District's health care system, including the number of Medicaid recipients and uninsured and the distribution of hospitals and clinics.

Durable Medical Equipment: Regional Carriers' Coverage Criteria Are Consistent With Medicare Law (GAO/HEHS–95–185, Sept. 19, 1995).

In November 1993, the Health Care Financing Administration (HCFA) began consolidating the work of processing and paying claims for durable medical equipment, prostheses, orthoses, and supplies at four regional carriers. Claims for such items had previously been processed and paid by local Medicare carriers. As part of the transition to regional processing, the four regional carriers developed coverage criteria for the items. GAO found that the final criteria adopted by the regional carriers are consistent with Medicare's national coverage policies and the law. GAO does not believe that the criteria have impeded disabled beneficiaries' access to needed durable medical equipment and other items. Also, in 1994 the regional carriers approved a similar percentage of service for durable medical equipment and other items for the disabled and aged Medicare beneficiaries, so there was no significant difference in access to durable medical equipment and other items between the two groups of beneficiaries.

Employer-Based Health Plans: Issues, Trends, and Challenges Posed by ERISA (GAO/HEHS–95–167, July 25, 1995).

As the movement for comprehensive federal health care reform has lost steam, the focus of reform has shifted to the states and the private market. States remain concerned about the growing number of people lacking health coverage and about financing health plans for poor people. Employers have become increasingly aggressive in managing their health plans and have adopted various managed care plans and innovative funding arrangements. However, the Employee Retirement Income Security Act of 1974 (ERISA) effectively blocks states from directly regulating most employer-based health plans, although it allows states to regulate health insurers. GAO found that nearly 40 percent of enrollees in employer-based health plans—44 million people—are in self-funded plans. The divided federal and state framework for regulating health plans produces a complex set of trade-offs for regulating health plans. Self-funded plans, which are exempt from state regulation under ERISA, provide employers greater flexibility to design a health benefits package that may have been less feasible to provide under state regulation. At the same time, however, states are unable to extend regulations, such as solvency standards, preexisting condition clause limits, and guaranteed issue and renewal requirements, even indirectly, to enrollees in these self-funded plans. GAO summarized this report in testimony before the Congress; see *Employer-Based Health Plans: Issues, Trends, and Challenges Posed by ERISA* (GAO/T–HEHS–95–223, July 25, 1995), statement by Mark V. Nadel, Associate Director for National and Public Health Issues, before the Senate Committee on Labor and Human Resources.

Food Assistance Programs (GAO/RCED–95–115R, Feb. 28, 1995)

GAO reviewed the Department of Agriculture's (USDA) domestic food and nutrition assistance programs, focusing on those programs that target benefits to women, children, infants, the elderly, and the needy. GAO noted that (1) USDA food assistance programs constitute about 60 percent of the USDA budget, and the Food Stamp Program accounts for more than one-half of those benefits; (2) 6 of the 14 USDA food programs target the groups reviewed; (3) participants' characteristics and the nature and level of benefits vary widely across the programs; (4) most of the programs have income eligibility criteria and some programs have additional criteria that individuals must meet to receive benefits; (5) benefit overlap is built into most of the programs, but it is not known how many persons participate in more than one program; (6) state and local governments and nonprofit organizations play a large role in distributing program benefits; (7) some USDA programs are similar to other agencies' assistance programs; (8) ineffective targeting of low-income people, burdensome administration, subsidizing providers rather than families, rising costs, duplication of services, inequitable funding allocations, and unfunded mandates affect the distribution of food benefits; and (9) alternatives to reduce costs and streamline program operations include improving low-income targeting, consolidating multiple programs, reducing some programs' funding levels, and eliminating some ineffective programs.

Fraud and Abuse: Providers Target Medicare Patients in Nursing Facilities (GAO/HEHS–96–18, Jan. 24, 1996)

Nursing home patients are an attractive target for fraudulent and abusive health care providers that bill Medicare for undelivered or unnecessary services. A wide variety of providers, ranging from durable medical equipment suppliers to laboratories to optometrists and doctors, have been involved in fraudulent and abusive Medicare billing schemes. Several features make nursing home patients attractive targets. First, because a nursing facility houses many Medicare beneficiaries under one roof, unscrupulous billers of services can operate their schemes in volume. Second, nursing homes sometimes make patient records available to outsiders, contrary to federal regulations. Third, providers are permitted to bill Medicare directly, without certification from the nursing home or the attending physician that the items are necessary or have been provided as claimed. In addition, Medicare's automated systems do not collect data to flag improbably high charges or levels of services. Finally, even when Medicare spots abusive billings and seeks recovery of unwarranted payments, it often collects little money from wrongdoers, who either go out of business or deplete their resources so that they cannot repay the funds.

HCFA: Medicare Program—Changes to the Hospital Inpatient Prospective Payment Systems and Fiscal Year 1997 Rates (GAO/OGC–96–41, Sept. 13, 1996)

Pursuant to a legislative requirement, GAO reviewed the Health Care Financing Administration's (HCFA) new rule on changes to the Medicare program's hospital inpatient prospective payment systems and fiscal year 1997 rates. GAO found that (1) the rule would adjust the classifications and weighting factors for diagnosis related groups, update the wage index associated with hospital operating costs, and make certain clarifications regarding the calculation of hospital payments excluded from the prospective payment systems; and (2) HCFA complied with applicable requirements in promulgating the rule.

HCFA's Approach to Evaluating Medicare Technology (GAO/AIMD–95–234R, Sept. 29, 1995)

GAO reviewed HCFA's approach to analyzing the benefits of commercial technology in the Medicare program. GAO noted that HCFA (1) is limiting its analysis of the benefits of commercial technology to determining whether Medicare contractors complied with existing payment controls and is using a flawed sampling methodology to select claims for review; (2) is attempting to verify the savings achievable through commercial systems without understanding how the systems operate; (3) believes that it cannot examine commercial systems without actually procuring a system; and (4) is failing to identify real monetary benefits of commercial detection systems in its analysis.

Health Care Fraud: Information-Sharing Proposals to Improve Enforcement Efforts (GAO/GGD–96–101, May 1, 1996)

Estimates of health care fraud range from 3 to 10 percent of all health care expenditures—as much as $100 billion based on esti-

mated 1995 expenditures. In late 1993, the Attorney General designated health care fraud as an enforcement priority second only to violent crime initiatives. This report discusses (1) the extent of federal and state immunity laws protecting persons who report information on health care fraud and (2) the advantages and disadvantages of establishing a centralized health care fraud database to strengthen information-sharing and support enforcement efforts.

Health Care Shortage Areas: Designations Not a Useful Tool for Directing Resources to the Underserved (GAO/HEHS–95–200, Sept. 8, 1995)

Many Americans live in places where barriers exist to obtaining basic health care. These areas range from isolated rural locations to inner-city neighborhoods. In fiscal year 1994, the federal government spent about $1 billion on programs to overcome access problems in such locations. To be effective, these programs need a sound method of identifying the type of access problems that exist and focusing services on the people who need them. The Department of Health and Human Services (HHS) uses two main systems to identify such locales. One designates Health Professional Shortage Areas, the other Medically Underserved Areas. More than half of all U.S. counties fall into these two categories. GAO reviewed the two systems to determine (1) how well they identify areas with primary care shortages, (2) how well they help target federal funding to benefit those who are underserved, and (3) whether they are likely to be improved under proposals to combine them.

Health Insurance: Coverage of Autologous Bone Marrow Transplantation for Breast Cancer (GAO/HEHS–96–83, Apr. 24, 1996)

Although many insurers now cover the cost of autologous bone marrow transplantation, a new and expensive treatment for breast cancer, issues surrounding the procedure have put several goals of the U.S. health care system in conflict: access to the best, most advanced care; cost containment; and research adequate to assess the value of new treatments. Proponents of insurance coverage argue that autologous bone marrow transplantation provides breast cancer patients with a promising, potentially life-saving treatment. Critics say that the proliferation of such unproven treatments is costly and harmful, potentially hindering clinical research to determine whether the treatment is effective. This report discusses (1) the factors that have influenced insurers' decisions on whether to cover the treatment, (2) the status of research on autologous bone marrow transplantation for breast cancer and the consensus on what is known about its effectiveness, and (3) the consequences of increased use and insurance coverage of the treatment while it is still being evaluated in clinical trials.

Health Insurance Portability: Reform Could Ensure Continued Coverage for up to 25 Million Americans (GAO/HEHS–95–257, Sept. 19, 1995)

Although federal and state laws have improved the portability of health insurance, an individual's health care coverage could still be reduced when changing jobs. Between 1990 and 1994, 40 states enacted small group insurance regulations that include portability

standards, but ERISA prevents states from applying these standards to the health plans of employers who self-fund. As a result, some in the Congress have proposed broader national portability standards. GAO estimates that as many as 21 million Americans each year would benefit from federal legislation to ensure that workers who change jobs would not be subject to new health insurance plans that impose waiting periods or preexisting condition exclusions. In addition, as many as 4 million Americans who at some point have been unwilling to leave their jobs because they feared losing their health care coverage would benefit from national portability standards. Such a change, however, could possibly boost premiums, according to insurers.

Health Insurance Regulation: Varying State Requirements Affect Cost of Insurance (GAO/HEHS–96–161, Aug. 19, 1996)

As concern about the affordability of health coverage has grown, the costs attributed to state regulation of health insurance have come under increasing scrutiny. State health insurance regulation is intended to protect consumers through oversight of health plans' financial solvency, monitoring of insurers' market conduct to prevent abuses, and mandated coverage for particular services. Although these measures do benefit consumers, they result in costs to insurers that are ultimately passed on to consumers in their premiums. These costs may influence an employer to self-fund its health plan—a move that avoids state insurance regulation. This report examines the costs associated with (1) premium taxes and other assessments, (2) mandated health benefits, (3) financial solvency standards, and (4) state health insurance reforms affecting small employers. GAO discusses the impact of these requirements on the costs of insured health plans compared with the cost of self-funded health plans.

HMO Enrollment Data (GAO/HEHS–95–159R, May 25, 1995)

GAO provided information on health maintenance organization (HMO) enrollment, focusing on the number of Medicare beneficiaries enrolled in risk-based HMOs. GAO noted that (1) between December 1993 and 1994, the percentage of Medicare beneficiaries enrolled in risk-based HMOs increased from 5.1 to 6.3 percent for a total of about 2.3 million beneficiaries; (2) although older beneficiaries had lower enrollment rates than the general Medicare population, they also increasingly joined risk-based HMOs; (3) between 1993 and 1994, the percentage of Medicare beneficiaries aged 75 and older enrolled in risk-based HMOs increased from 4.8 to 6.1 percent; and (4) the percentage of beneficiaries aged 85 and older enrolled in risk-based HMOs increased from 3.9 to 4.7 percent between 1993 and 1994.

Hospital-Based Home Health Agencies (GAO/HEHS–95–209R, July 19, 1995)

GAO reviewed whether increased hospital ownership of home health agencies (HHA) has contributed to the growth in Medicare home health costs. GAO found that hospital-based HHAs (1) generally care for beneficiaries with less chronic conditions and provide fewer visits to patients than all other types of HHAs, except

those run by the government, and (2) apparently are not driving up Medicare costs any more than other types of HHAs.

Indian Health Service: Improvements Needed in Credentialing Temporary Physicians (GAO/HEHS–95–46, Apr. 21, 1995)

Indian Health Service (IHS) facilities, which provide medical care to more than 1 million American Indians and Alaskan Natives, supplement their staffs with temporary physicians. But weak policies have led IHS to unknowingly hire doctors who have been disciplined for such offenses as gross and repeated malpractice and unprofessional conduct. IHS does not explicitly require verifying all active and inactive state medical licenses that a temporary physician may have. Further, most IHS facilities that have contracts with companies that supply temporary physicians do not require the companies to inform IHS of the status of all medical licenses a physician may hold. In addition, IHS facilities do not have a formal system for sharing information on temporary physicians who have worked within the IHS medical system. This report also discusses what happens when requested medical services are delayed.

Long-Term Care: Current Issues and Future Directions (GAO/HEHS–95–109, Apr. 13, 1995)

Today, an increasing number of Americans need long-term care. Unprecedented growth in the elderly population is projected for the twenty-first century, and the population aged 85 and older—those most in need of long-term care—is expected to outpace the rate of growth for the entire elderly population. In addition to the dramatic rise in the elderly population, a large portion of the long-term care population consists of younger people with disabilities. The importance of long-term care was underscored by the 1994 congressional debate over health care reform and, more recently, by the "Contract with America," which proposed assistance such as tax deductions for long-term care insurance and tax credits for family caregiving. This report (1) defines what is meant by long-term care and discusses the conditions that give rise to long-term care need, how such need is measured, and which groups—young and old—require long-term care; (2) examines the long-term care costs that are borne by federal and state governments as well as by families; (3) addresses strategies that states and foreign countries are pursuing to contain public long-term care costs; and (4) discusses predictions by experts on the future demand for long-term care.

Long-Term Care: Some States Apply Criminal Background Checks to Home Care Workers (GAO/PEMD–96–5, Sept. 27, 1996)

Pursuant to a congressional request, GAO examined federal and state requirements for criminal background checks of home health care workers. GAO found that (1) there are few formal safeguards to protect elderly persons from unscrupulous home care workers; (2) the federal government indirectly regulates home care workers by requiring home care organizations or the individual provider to meet certain requirements for participation in Medicaid or Medicare; (3) states may be directed to disqualify home care providers convicted of fraudulent health care delivery; obstruction of justice; or the illegal manufacture, distribution, prescription, or dispensing

of controlled substances; (4) state and local governments, as well as professional boards, impose certain restrictions on home care organizations and individual providers; (5) some states require all home care organizations to meet state imposed licensure or Medicare certification requirements; (6) some states incorporate home care workers into their state nursing home aide registry; (7) few states require criminal background checks of home care workers; and (8) most states do not use the Federal Bureau of Investigation's national criminal database system to check home care workers' backgrounds due to cost concerns.

Mammography Services: Initial Impact of New Federal Law Has Been Positive (GAO/HEHS–96–17, Oct. 27, 1995)

The Mammography Quality Standards Act of 1992 imposed uniform standards for mammography in all states, requiring certification and annual inspection of mammography facilities. GAO found that the act has had a positive impact, resulting in higher quality equipment, personnel, and practices. Mammography quality standards are now in place in all states, and these standards do not appear to have hampered access to services. To avoid large-scale closure of facilities, however, the Food and Drug Administration (FDA) settled on an approach that allowed some delay in meeting the certification requirements. For this and other reasons, such as the availability of outcome data, more time will be needed before the act's full impact can be determined. GAO is required to assess the effects of the act again in 2 years and to issue a report in 1997.

Medicaid Funding Formula Changes (GAO/HEHS–96–164R, June 10, 1996)

Pursuant to a congressional request, GAO provided information on the proposed changes to Medicaid funding formulas under H.R. 3507. GAO noted that (1) states with large numbers of poor and disabled persons receive less federal assistance than states with larger numbers of poor and weaker tax bases; (2) states that offer extensive services and provide high provider reimbursement rates receive more federal funding; (3) the revised Medicaid formula would link the amount of federal aid a state receives to the number of poor people in need of Medicaid services; (4) over 90 percent of the federal formula grant programs target funding on the basis of need; (5) H.R. 3507 would realign federal Medicaid funding over a number of years, so that funding is related more to state need than to state spending patterns; (6) H.R. 3507 would place greater weight on the number of elderly and disabled people that require expensive services; and (7) the proposed formula change would enable states with low funding to acquire more federal funds.

Medicaid Long-Term Care: State Use of Assessment Instruments in Care Planning (GAO/PEMD–96–4, Apr. 2, 1996)

GAO examined how publicly funded programs assess the need for home and community-based long-term care for the elderly with disabilities. This care is provided to persons living at home who, because of a chronic condition or illness, cannot care for themselves. Services range from skilled nursing to assistance with day-to-day activities, such as bathing and housekeeping. Under the Medicaid

program, 49 states have obtained waivers to provide home and community-based services to low-income elderly persons who would otherwise need institutional care paid for by Medicaid. These states are responsible for developing a care plan tailored to a client's specific needs. A well-designed assessment instrument helps identify all appropriate needs—increasing the likelihood that important aspects of the client's situation will not be overlooked in care planning. Standardized administration of the assessment instrument increases the likelihood that the needs of all clients will be determined in the same way. This report provides information on the (1) comprehensiveness of assessment instruments, (2) uniformity of their administration, and (3) training for staff who do the assessments.

Medicaid Managed Care: More Competition and Oversight Would Improve California's Expansion Plan (GAO/HEHS–95–87, Apr. 28, 1995)

The Medicaid program was established to make health care more accessible to the poor. In many communities, however, beneficiaries' access to quality care is far from guaranteed. Too few doctors and other health care providers choose to participate in Medicaid because of low payment rates and administrative burdens. To address the access problem, as well as rising costs and enrollment in its $15 billion Medi-Cal program (which serves about 5.4 million beneficiaries), California intends to increase its reliance on managed care delivery systems. This report (1) describes California's current Medicaid managed care program, (2) reviews the state's oversight of managed care contractors with a focus on financial incentive arrangements and the provision of preventive care for children, (3) describes the state's plans for expansion, and (4) identifies key issues the state will face as it implements the expanded program.

Medicaid: Restructuring Approaches Leave Many Questions (GAO/HEHS–95–103, Apr. 4, 1995)

Over the years, various proposals have been made to restructure the Medicaid program. One approach calls for providing federal block grants to the states and giving them increased responsibility for running the program. Under another proposal, Medicaid would be entirely funded and administered by the federal government. Yet another would split Medicaid into two programs, one encompassing acute and primary care and the other long-term care. This report compares the different restructuring approaches and discusses their implications for federal-state financing and administration of the program. GAO also provides information on the need to establish a federal "rainy day" fund if restrictions, such as block grants, are placed on federal revenues paid to states. GAO also provides the most recent data on the amount of federal Medicaid funds provided to each state.

Medicaid Managed Care: Serving the Disabled Challenges State Programs (GAO/HEHS–96–136, July 31, 1996)

With its emphasis on primary care, restricted access to specialists, and control of services, managed care is seen as a way to con-

trol spiraling Medicaid costs, which totaled $159 billion in fiscal year 1995. So far, states have extended prepaid care largely to low-income families—about 30 million persons—but to few of the additional 6 million Medicaid beneficiaries who are mentally or physically disabled. Managed care's emphasis on primary care and control of services is seemingly at odds with the care requirements of disabled beneficiaries, many of whom need extensive services and access to highly specialized providers. However, because more than one-third of all Medicaid payments go for the care of the disabled, policymakers have been exploring the possibility of enrolling disabled persons in managed care plans. These efforts affect three key groups: disabled beneficiaries, who include a small number of very vulnerable persons who may be less able to effectively advocate on their own behalf for access to needed services; prepaid care plans, which are concerned about the degree of financial risk in treating persons with extensive medical needs; and the state and federal governments, which run Medicaid. This report examines the (1) extent to which states are implementing Medicaid prepaid managed care programs for disabled beneficiaries and (2) steps that have been taken to safeguard the interests of all three groups. GAO's review of safeguards focuses on two areas: efforts to ensure quality of care and strategies for setting rates and sharing financial risk.

Medicaid: Oversight of Institutions for the Mentally Retarded Should Be Strengthened (GAO/HEHS–96–131, Sept. 6, 1996)

Medicaid provides more than $5 billion each year to support state institutions that house and care for the mentally retarded. Despite federal standards, serious quality-of-care problems exist at some institutions. Insufficient staffing, lack of treatments to enhance patients' independence and functional ability, and deficient medical and psychiatric care are some of the shortcomings that have been cited most frequently. In a few cases, these practices have led to injuries, illness, physical degeneration, and even death for some residents. States, which play a key role in ensuring that these institutions meet federal standards, do not always identify serious deficiencies and sometimes do not take adequate enforcement measures to prevent the recurrence of poor care. Although the Health Care Financing Administration has tried to improve the process for spotting serious deficiencies in these institutions and has sought to make more efficient use of limited federal and state resources, oversight weaknesses persist. Moreover, state surveys may lack independence because states are responsible for surveying their own institutions. This potential conflict of interest raises concern, given the decline in direct federal oversight of both care in these facilities and the performance of state surveying agencies.

Medicaid: Spending Pressures Drive States Toward Program Reinvention (GAO/HEHS–95–122, Apr. 4, 1995)

The $131 billion Medicaid program is at a crossroads. Between 1985 and 1993, Medicaid costs tripled and the number of beneficiaries rose by more than 50 percent. Medicaid costs are projected to rise to $260 billion, according to the Congressional Budget Office. Despite federal and state budgetary constraints, several states are exerting pressure to expand the program and enroll hundreds

of thousands of new beneficiaries. The cost of expanded coverage, they believe, will be offset by the reallocation of Medicaid funds and the wholesale movement of beneficiaries into some type of managed care arrangement. This report examines (1) federal and state Medicaid spending, (2) some states' efforts to contain Medicaid costs and expand coverage through waiver of federal requirements, and (3) the potential impact of these waivers on federal spending and on Medicaid's program structure overall. The Comptroller General summarized this report in testimony before the Congress; see *Medicaid: Spending Pressures Drive States Toward Program Reinvention (GAO/T–HEHS–95–129, Apr. 4, 1995), by Charles A. Bowsher, Comptroller General of the United States, before the House Committee on the Budget.*

Medicaid: Tennessee's Program Broadens Coverage But Faces Uncertain Future (GAO/HEHS–95–186, Sept. 1, 1995)

In early 1993, Tennessee predicted that increases in state Medicaid expenditures and the loss of tax revenues used to finance Medicaid would produce a financial crisis. To avert a financial crisis, control its Medicaid expenditures, and extend health insurance coverage to most state residents, Tennessee converted its Medicaid program into a managed care health program—TennCare—to serve both Medicaid recipients and uninsured persons. GAO found that although TennCare met its objectives of providing health coverage to many uninsured persons while controlling costs, concerns remain with respect to access to quality care and managed care performance. Specifically, questions have been raised about TennCare's rapid approval and implementation, lack of provider buy-in to the program, and delays in monitoring TennCare's access and quality of care. In addition, the soundness of the methodology for determining and the resulting adequacy of the program's capitation rates have been questioned. This report discusses (1) TennCare's basic design and objectives, (2) the degree to which the program is meeting these objectives, and (3) the experiences of TennCare's insurers and medical providers and their implications for TennCare's future.

Medicare: Allegations Against ABC Home Health Care (GAO/OSI–95–17, July 19, 1995)

In response to a congressional request, GAO investigated allegations against ABC Home Health Care, a home health agency (HHA), and its participation in Medicare's home health care program. In the Medicare program, providers may receive reimbursement for only those expenses that are reasonable in amount and related to patient care for eligible patients. Current and former employees told GAO that local ABC office managers directed them to alter records to make it appear that patients continued to need home health visits. Additionally, managers directed employees to continue visiting patients who, in the employees' opinions, did not qualify for home health care because they no longer met Medicare rules defining homebound status. ABC also reportedly charged Medicare for the cost of acquiring other HHAs by paying owners a small sum up front and the balance in the form of salary under employment agreements, a practice that is inconsistent with Medicare regulations for reimbursement. Finally, according to former

employees, some managers directed employees to market ABC and its services with the intent of charging Medicare for costs that were not reimbursable. GAO has shared information concerning possible illegal activities with appropriate law enforcement authorities. GAO summarized this report in testimony before the Congress; see *Medicare: Allegations Against ABC Home Health Care* (GAO/T–OSI–95–18, July 19, 1995), by Richard C. Stiener, Director, Office of Special Investigations, before the Subcommittee on Health and Environment and the Subcommittee on Oversight and Investigations, House Commerce Committee.

Medicaid Section 1115 Waivers: Flexible Approach to Approving Demonstrations Could Increase Federal Costs (GAO/HEHS–96–44, Nov. 8, 1995)

Several states have been given waivers allowing them to use savings from managed care Medicaid programs to cover additional beneficiaries. GAO found that contrary to assertions that such waivers would be "budget neutral," most of them could increase federal Medicaid expenditures. Specifically, approved spending limits for demonstration waivers in Oregon, Hawaii, and Florida could boost federal Medicaid outlays. Only Tennessee's 1115 waiver agreement should cost no more than the continuation of its smaller, prewaiver program and, in fact, should yield savings. Federal Medicaid spending could rise significantly if the administration continues to show a similar flexibility in reviewing state 1115 financing strategies. Five waivers have been approved since Florida's in late 1994, and the large backlog of pending waivers includes three states with large Medicaid programs—New York, Illinois, and Texas. Additional federal dollars are available along with other funding sources identified in state waiver applications. GAO believes that the potential for additional federal funding serves as a hedge against the many uncertainties states face in implementing these ambitious demonstrations—including changing economic conditions, the accuracy of cost-containment assumptions, the availability of anticipated funding cited in waiver applications, and the lack of reliable cost data on the uninsured.

Medicaid: States' Efforts to Educate and Enroll Beneficiaries in Managed Care (GAO/HEHS–96–184, Sept. 17, 1996)

With managed care now being increasingly offered as an option for Medicaid recipients, reports of marketing abuses by managed care organizations have grown, prompting several states to restrict direct marketing efforts by managed care organizations. GAO found that some managed care organizations and their agents have engaged in unscrupulous practices to maximize beneficiary enrollment—and thereby boost plan revenues and commissions. These practices include bribing public officials to obtain confidential information on beneficiaries, paying beneficiaries cash and providing other incentives to sign up, deliberately misinforming beneficiaries about access to care, and enrolling ineligible beneficiaries—as many as 4,800 in one state. To avoid these problems, many states have banned or restricted direct-marketing activities by managed care organizations and have retained responsibility for enrolling or disenrolling Medicaid beneficiaries. This report provides detailed

information on four states—Minnesota, Missouri, Ohio, and Washington—with innovative education and enrollment programs.

Medicaid: Waiver Program for Developmentally Disabled Is Promising But Poses Some Risks (GAO/HEHS–96–120, July 22, 1996)

More than 300,000 adults with developmental disabilities—typically mental retardation—receive long-term care paid for by Medicaid or, to a lesser extent, state and local programs. Such long-term care often involves supervision and assistance with everyday activities, such as dressing or managing money. Persons with developmental disabilities receive more than $13 billion annually in public funding for long-term care, second only to the elderly. Recently, states have begun to significantly expand the use of the Medicaid waiver program, which seeks to provide alternatives to institutional care for persons with developmental disabilities. The waiver program has two advantages. First, it helps states to control costs by allowing them to limit the number of recipients being served. Without the waiver, states must serve all eligible persons in the regular Medicaid program. Second, it permits states to meet the needs of many persons with developmental disabilities by offering them a broader range of services in less restrictive settings, such as group or family homes, rather than in an institutional setting. This report examines (1) expanded state use of the waiver program, (2) the growth in long-term care costs for individuals with developmental disabilities, (3) how costs are controlled, and (4) strengths and limitations in states' approaches to ensuring quality in community settings.

Medical ADP Systems: Defense Achieves Worldwide Deployment of Composite Health Care System (GAO/AIMD–96–39, Apr. 5, 1996)

As the backbone of the military's medical operations, the Composite Health Care System—an automated medical system developed by the Department of Defense (DOD) at a cost of $2.8 billion—will provide doctors and nurses with almost instant access to patient information, from medical history to current treatment and vital statistics. DOD should be able to significantly improve operations at its medical facilities while reducing costs. Improved appointment scheduling will increase patients' access to health care, while better access to patient information will save medical personnel time. If DOD is to realize the system's full potential, however, physicians and other health care providers must be able to access the system at all times. Although DOD's backup and recovery plan provides for recovery from disruptions in computer service because of power outages, it does not effectively address major disruptions requiring the repair or the replacement of equipment damaged by a natural disaster. Health care providers have become dependent on the patient data in the system, so any major disruption could result in injury or even death. DOD could greatly reduce this risk by developing a more effective backup and recovery plan for its equipment.

Medicare: Antifraud Technology Offers Significant Opportunity to Reduce Health Care Fraud (GAO/AIMD–95–77, Aug. 11, 1995)

Medicare continues to suffer large losses each year due to fraud. Existing risks are sharply increased by the continual growth in Medicare claims—both in number and in percentage processed electronically. Existing Medicare payment safeguards can be bypassed and apparently do not deter fraudulent activities. HCFA should be able to benefit by taking full advantage of emerging antifraud technology to better identify and prevent Medicare fraud. The number and types of Medicare fraud schemes perpetrated in south Florida may make that area the best place to test antifraud systems before nationwide use.

Medicare Claims: Commercial Technology Could Save Billions Lost to Billing Abuse (GAO/AIMD–95–135, May 5, 1995)

With an investment of only $20 million in off-the-shelf commercial software, Medicare could save nearly $4 billion over 5 years by detecting fraudulent claims by physicians—primarily manipulation of billing codes. On the basis of a test in which 4 commercial firms reprocessed samples of more than 20,000 paid Medicare claims, GAO estimates that the software could have saved $603 million in 1993 and $640 million in 1994. GAO estimates that because beneficiaries are responsible for about 22 percent of the payment amounts—mainly in the form of deductibles and copayments—Medicare could have saved them $134 million in 1993 and $142 million in 1994. The test results indicate that only a small portion of providers are responsible for most of the abuses: fewer than 10 percent of providers in the sample had miscoded claims. GAO summarized this report in testimony before the Congress; see *Medicare Claims Billing Abuse: Commercial Software Could Save Hundreds of Millions Annually* (GAO/T–AIMD–95–133, May 5, 1995), by Frank W. Reilly, Director of Information Resources Management in the Health, Education, and Human Services Area, before the Subcommittee on Labor, Health and Human Services, Education, and Related Agencies, Senate Committee on Appropriations.

Medicare Claims (High Risk Series) (GAO/HR–95–8, Feb. 1995)

In 1990, GAO began a special effort to identify federal programs at high risk of waste, fraud, abuse, and mismanagement. GAO issued a series of reports in December 1992 on the fundamental causes of the problems in the high-risk areas. This report on Medicare claims is part of the second series that updates the status of this high-risk area. Readers have the following three options in ordering the high-risk series: (1) request any of the individual reports in the series, including the Overview (HR–95–1), the Guide (HR–95–2), or any of the 10 issue area reports; (2) request the Overview and the Guide as a package (HR–95–21SET); or (3) request the entire series as a package (HR–95–20SET).

Medicare Drug and Nutrient Prices (GAO/HEHS–97–22R, Oct. 11, 1996)

Medicare part B covers (1) drugs that are incident to physician services and are not self-administered and (2) tube-fed liquid nutrients for patients who cannot ingest food orally or whose digestive

systems are impaired. Reports by the Department of Health and Human Services Office of Inspector General have indicated that the prices paid by Medicare for some medications and nutrients are higher than necessary and recommended reduced reimbursement for these items. Also, a home infusion and nutritional service provider GAO contacted had collected data indicating that Medicare payment levels for some drugs were much higher than the provider's cost to acquire them.

Medicare: Early Resolution of Overcharges for Therapy in Nursing Homes Is Unlikely (GAO/HEHS–96–145, Aug. 16, 1996)

Nursing homes and therapy companies continue to bill Medicare at very high rates for occupational and speech therapy. Moreover, the bills do not specify the amount of time spent with patients or the treatments provided. The weaknesses that GAO reported more than a year ago—the lack of salary guidelines setting limits on Medicare reimbursements for occupational and speech therapist's services and unclear billing for these services—persist. Although HCFA recognized as early as 1990 that inappropriate charges for occupational speech therapy were a problem, it is still trying to establish salary equivalency guidelines for these services. HCFA proposed guidelines based on a Bureau of Labor Statistics survey of average salaries for hospital therapists, but the industry was not satisfied and did its own survey. HCFA is now analyzing those survey results. The prospect for a quick resolution to the billing problem with therapy services is unlikely. Historically, it has taken HCFA years to reduce high payment rates for supplies or services. Given the typical time involved in meeting federal notification and publication requirements for changing Medicare prices, salary equivalency guidelines may not be implemented until the summer of 1997 at the earliest. GAO urges the Congress to consider granting HCFA legislative relief from these requirements.

Medicare: Enrollment Growth and Payment Practices for Kidney Dialysis Services (GAO/HEHS–96–33, Nov. 22, 1995)

Medicare is the predominant health care payer for people with end-stage renal disease—the permanent and irreversible loss of kidney function. Medicare's cost for this program has increased, mainly because of the substantial increase in new program enrollees. The annual rate of increase averaged 11.6 percent between 1978 and 1991. In addition to the rise in enrollment, the mortality rate for new patients decreased. For example, deaths among beneficiaries during the first year in the program fell from 28 percent to 24 percent between 1982 and 1991. Because the program began in 1973, technological advances and greater availability of kidney dialysis machines have meant that persons who were not considered good candidates for kidney dialysis in 1973—those 65 years old or older and those whose kidney failure was caused by diabetes and hypertension—are now routinely placed on dialysis. GAO's review of medical services and supplies provided to all Medicare end-stage renal disease patients in 1991 shows that no separately billable service or supply was provided often enough to make it a good candidate to be considered part of the standard dialysis treatment and thus included in a future composite rate.

Medicare: Excessive Payments for Medical Supplies Continue Despite Improvements (GAO/HEHS–95–171, Aug. 8, 1995)

In fiscal year 1994 alone, Medicare was billed more than $6.8 billion for medical supplies. Congressional hearings and government studies have shown that Medicare has been extremely vulnerable to fraud and abuse in its payments for medical supplies, especially surgical dressings. In one case discussed in congressional testimony in 1994, Medicare paid more than $15,000 in claims for a month's supply of surgical dressings for a single patient, apparently without reviewing the reasonableness of the claims before payments. Until recently, medical suppliers had considerable freedom in choosing the Medicare contractors that would process and pay their claims. Some exploited this freedom by "shopping" for contractors with the weakest controls and highest payment rates. This report discusses the (1) circumstances allowing payment for unusually high surgical dressing claims and (2) adequacy of Medicare's internal controls to prevent paying such claims.

Medicare: Federal Efforts to Enhance Patient Quality of Care (GAO/HEHS–96–20, Apr. 10, 1996)

In the past decade, Medicare costs have risen on average more than 10 percent per year. Expanding managed care options for Medicare patients has been proposed as a way to contain costs. Concerns have been raised, however, that such changes may undermine the quality of care provided to Medicare beneficiaries. Currently, Medicare reimburses only for care provided in health maintenance organizations (HMO) and by the fee-for-service sector. This report (1) discusses the present and future strategies of HCFA, which administers the Medicare program, to ensure that Medicare providers furnish quality health care in both fee-for-service and HMO arrangements and (2) provides the views of experts on attributes a quality assurance program should have if more managed care options are made available to Medicare beneficiaries.

Medicare: HCFA Should Release Data to Aid Consumers, Prompt Better HMO Performance (GAO/HEHS–97–23, Oct. 22, 1996)

Until recent years, nearly all Medicare beneficiaries received care through a fee-for-service arrangement, with benefits and cost-sharing provisions standardized nationwide. Today, however, nearly 4 million beneficiaries have opted for health maintenance organizations (HMO), Medicare's leading managed care alternative. Although HMOs must cover the benefits available under traditional fee-for-service Medicare, they differ from one another in the provision of additional benefits, required premiums, provider networks, and ability to satisfy members. As a result, beneficiaries need reliable information to pick the plan that is right for them. Some beneficiaries do not understand even the basic difference between traditional Medicare and HMOs and may confuse HMOs with supplemental "Medigap" insurance. Moreover, some HMO sales agents have misled or used other questionable marketing practices to enroll poorly informed beneficiaries. This report reviews (1) the performance of HCFA, which administers Medicare, in providing beneficiaries with enough information on Medicare HMOs and (2) the

usefulness of readily available HCFA data to caution beneficiaries about poorly performing HMOs.

Medicare Hospital Payments (GAO/HEHS–95–158R, May 25, 1995)

GAO provided information on the growth in Medicare hospital payments, focusing on the annual payment growth rates for various types of hospitals. GAO noted that (1) while general inflation grew about 3.5 percent annually from 1984 through 1992, hospital payments per discharge grew at an annual rate of 5.4 percent; (2) major teaching hospitals averaged a 5.7 percent annual payment growth rate and nonteaching hospitals averaged a 5.3 percent annual payment growth rate; (3) hospitals receiving disproportionate share payments had a higher per discharge payment growth rate than hospitals not receiving such payments; (4) larger hospitals in both urban and rural settings had higher payment growth rates; (5) government-owned hospitals had higher payment growth rates than voluntary or proprietary hospitals; (6) increased payments did not necessarily translate to increased profits, since expenses were not accounted for; and (7) case complexity grew more rapidly among large urban and rural hospitals, which partially explains their higher payment growth rate.

Medicare: Increased HMO Oversight Could Improve Quality and Access to Care (GAO/HEHS–95–155, Aug. 3, 1995)

This report discusses problems that HCFA has had monitoring HMOs it contracts with to provide services to Medicare beneficiaries and ensuring that they comply with Medicare's performance standards. GAO found weaknesses in HCFA's quality assurance monitoring, enforcement measures, and appeal processes. Although HCFA routinely reviews HMO operations for quality, these reviews are generally perfunctory and do not consider the financial risks that HMOs transfer to providers. Moreover, HCFA collects virtually no data on services received through HMOs to enable it to identify providers who may be underserving beneficiaries. In addition, HCFA's HMO oversight has two other major limitations: enforcement actions are weak and the beneficiary appeal process is slow. HCFA's current regulatory approach to ensuring good HMO performance appears to lag behind the private sector. GAO summarized this report in testimony before the Congress; see *Medicare: Increased Federal Oversight of HMOs Could Improve Quality of and Access to Care* (GAO/T–HEHS–95–229, Aug. 3, 1995), by Sarah F. Jaggar, Director of Health Financing and Public Health Issues, before the Senate Special Committee on Aging.

Medicare HMOs: Rapid Enrollment Growth Concentrated in Selected States (GAO/HEHS–96–63, Jan. 18, 1996)

Private-sector insurers cite extensive use of HMOs and other managed care approaches as a key factor in slowing the growth of their insurance premiums. As a result, part of the current interest in controlling Medicare costs has centered on ways to increase HMO use among Medicare beneficiaries. This report provides information on trends in the number of (1) Medicare beneficiaries enrolling in HMOs and (2) HMOs enrolling beneficiaries. GAO analyzed these data for factors that might be influencing decisions by

HMOs to enroll Medicare beneficiaries and decisions by beneficiaries to enroll in HMOs. GAO found that about 2.8 million Medicare beneficiaries—about 7 percent of the total—were enrolled in risk-contract HMOs as of August 1995. This was double the percentage enrolled in 1987. The growth has been particularly rapid during the past 4 years and has centered on certain states. California and Florida, for example, have more than half of all enrollees.

Medicare: Home Health Utilization Expands While Program Controls Deteriorate (GAO/HEHS–96–16, Mar. 27, 1996)

Use of the Medicare home health benefit has increased dramatically, with spending rising from $2.7 billion in 1989 to $12.7 billion in 1994. Costs are projected to reach $21 billion by the year 2000. In earlier reports (GAO/HRD–81–155 and GAO/HRD–87–9), GAO cited lax controls over the use of the home health benefit and recommended measures to improve Medicare's ability to detect claims that were not medically necessary or did not meet the coverage criteria. Medicare's escalating home health outlays continue to raise concerns about the extent of benefit abuse. This report examines the factors underlying the growth in the use of the home health benefit. GAO discusses (1) changes in the composition of the home health industry, (2) changes in the composition of Medicare home health users, (3) differences in utilization patterns across geographic areas, (4) incentives to overuse services, and (5) the effectiveness of payment controls in preventing payments for services not covered by Medicare.

Medicare Insured Groups (GAO/HEHS–6–93R, May 1, 1996)

Pursuant to a legislative requirement, GAO examined Medicare insured groups, focusing on (1) the status of the demonstration program and individual projects and (2) efforts to establish a reliable payment system. GAO found that (1) with the passage of the Omnibus Reconciliation Act of 1987, five groups had entered into agreements with HCFA to operate Medicare insured groups; (2) HCFA expenditures for the agreements totalled $1.1 million over the last 8 years; (3) all the agreements have been terminated due to concerns over the projects' financial viability; (4) HCFA terminated one of the projects after experiencing prolonged delays and problems with contract negotiations; (5) another company encountered delays in obtaining employer commitments and data needed for rate-setting analysis; (6) the most recent group to terminate had developed an operating plan and proposed a payment rate-setting method before experiencing lengthy delays and problems with payment update methodology; (7) the proposed payment methodology would have established a base rate using 1986 to 1990 claims data and updated the rate on the basis of revised per capita costs; and (8) in using more recent claims data, groups would have faced financial risk, as well as additional time and expense.

Medicare Managed Care: Growing Enrollment Adds Urgency to Fixing HMO Payment Problem (GAO/HEHS–96–21, Nov. 8, 1995)

Enrollment of Medicare beneficiaries in HMOs has soared in recent years, concentrated in some states and locales. This rapid growth in enrollment highlights the urgency of correcting Medi-

care's excessive payment rates to HMOs—particularly in certain areas. Likewise, enrollment stagnation elsewhere underscores the need to examine the causes of payment rate disparities among states and counties. Medicare's HMO payment method is plagued by three flaws. First, the rigidity of the formula-based fixed payment rate does not allow Medicare to capitalize on the competition among HMOs that, in the private market, leads to lower rates. Second, rate adjustments for differences in beneficiaries' health status are so imprecise that Medicare overpays HMOs that enroll beneficiaries who are in good health. Third, the reliance on a county's fee-for-service health care costs to establish a payment rate produces rates that vary considerably within market areas. GAO concludes that a sensible approach would be to pursue three promising strategies concurrently—foster price competition among HMOs, improve risk adjusters' accuracy, and allow for adjustments in the current formula to reflect market competition and HMO's local health care costs. HCFA plans demonstration projects using competitive bidding and improved risk adjustment but results of a full-scale evaluation of these projects are years away. In the interim, HCFA should promptly gather and use valuable design and implementation data as they become available. HCFA's legislative authority to carry out these projects does not address managed care options explicitly, which raises questions about HCFA's authority to mandate HMO participation in the projects.

Medicare Managed Care Growth (GAO/HEHS–96–47R, Oct. 18, 1995)

Pursuant to a congressional request, GAO reviewed the growth of Medicare beneficiaries in managed health care plans. GAO noted that (1) although more than 50 percent of employees covered by employer-provided insurance are enrolled in managed health care plans, fewer Medicare beneficiaries are enrolled in such plans; (2) the only managed care option Medicare offers is HMOs and they are not uniformly available; (3) the percentage of Medicare beneficiaries enrolled in an HMO has increased from about 3 percent in 1987 to about 7 percent in 1995; (4) although Medicare beneficiaries are increasingly choosing HMOs, about 87 percent of these beneficiaries live in 10 states, while about 55 percent live in just 2 states; and (5) only 3 states have Medicare HMO enrollment of 20 percent or more, while 7 states have non-Medicare HMO enrollments of 30 percent or more.

Medicare: Millions Can Be Saved by Screening Claims for Overused Services (GAO/HEHS–96–49, Jan. 30, 1996)

Medicare contractors routinely pay hundreds of millions of dollars in Medicare claims without first determining if the services provided are necessary. GAO reviewed payments to doctors for six groups of high-volume medical procedures—ranging from eye examinations to chest X rays—that accounted for nearly $3 billion in Medicare payments in 1994. GAO also surveyed 17 contractors to determine if they had used medical-necessity criteria in their claims processing to screen for these six groups of procedures. For each of the six groups, more than half of the 17 contractors failed to use automated screens to flag claims for unnecessary, inappro-

priate, or overused treatments. These prepayment screens could have saved millions of taxpayer dollars now wasted on questionable services. Problems with controlling payments for widely overused procedures continue because HCFA lacks a national strategy to control these payments. HCFA now relies on contractors to focus on procedures where local use exceeds the national average. Although this approach helps reduce local overuse of some procedures, it is not designed to control overuse of a procedure nationwide. GAO summarized this report in testimony before the Congress; see *Medicare: Millions Can Be Saved by Screening Claims for Overused Services* (GAO/T–HEHS–96–86, Feb. 8, 1996), by Sarah F. Jaggar, Director of Health Financing and Public Health Issues, before the Subcommittee on Human Resources and Intergovernmental Relations, House Committee on Government Reform and Oversight.

Medicare Providers' Legal Expenses (GAO/HEHS–95–214R, July 18, 1995)

GAO provided information on Medicare reimbursement of providers' legal expenses, focusing on (1) the conditions that Medicare imposes on provider legal expense reimbursements and whether these conditions differ from those applied in other government contexts, (2) the amount Medicare spends on providers' legal expenses, and (3) whether Medicare providers have abused current provisions covering legal expense reimbursement. GAO noted that (1) HCFA has not specified the conditions under which legal fees are reimbursable; (2) Medicare decides whether providers' legal fees are reimbursable on a case-by-case basis; (3) the provisions for reimbursing Medicare providers' legal fees are more generous than those in other government contexts in that providers can be reimbursed by Medicare regardless of outcome and providers' legal expenses are not capped; (4) in 1994, 46 HHAs had a combined total of $6.5 million in legal expenses; and (5) HHAs are more likely to submit claims for Medicare reimbursement and to appeal denied cost adjustments, despite limited chances of success.

Medicare Secondary Payer Program (GAO/HEHS–95–101R, Mar. 6, 1995)

GAO provided information on and suggested language for proposed legislation regarding the recovery of health care costs from private insurers where Medicare is the secondary payer. GAO noted that (1) the proposed legislation would give a clearer statutory basis for existing Medicare regulations on cost recovery from private insurers, which were recently invalidated by a court ruling; (2) HHS is also preparing a legislative proposal to address this and other Medicare issues; (3) the government may have to refund millions of dollars in past recoveries and forego future recoveries because of the court ruling; and (4) the court ruling barred recoveries from third-party administrators and claims filed past the insurers' filing deadlines and before 1989.

Medicare Spending: Modern Management Strategies Needed to Curb Billions in Unnecessary Payments (GAO/HEHS–95–210, Sept. 19, 1995)

Medicare's vulnerability to billions in unnecessary payments stems from a combination of factors. First, Medicare pays higher than market rates for some services and supplies. For example, Medicare pays more than the lowest suggested retail price for more than 40 types of surgical dressings. Second, Medicare's anti-fraud-and-abuse controls do not prevent the unquestioned payment of claims for improbably high charges or manipulated billing codes. Third, Medicare's checks on the legitimacy of providers are too superficial to detect the potential for scams. Various health care management strategies help private payers avoid these problems, but Medicare generally does not use these strategies. The program's pricing methods and controls over utilization, consistent with health care financing and delivery 30 years ago, have not kept pace with major financing and delivery changes. GAO believes that a viable strategy for remedying the program's weaknesses would involve adapting the health care management approach of private payers to Medicare's public payer role. This strategy would include (1) more competitively developed payment rates, (2) enhanced fraud and abuse detection efforts through modernized information systems, and (3) more rigorous criteria for granting authorization to bill the program.

Medicare: Tighter Rules Needed to Curtail Overcharges for Therapy in Nursing Homes (GAO/HEHS–95–23, Mar. 30, 1995)

Nursing homes and rehabilitation centers are taking advantage of ambiguous payment rules and the lack of guidelines to bill Medicare at inflated rates for therapy services. State averages for physical, occupational, and speech therapists' salaries range from about $12 to $25 per hour, but Medicare has been charged upwards of $600 per hour. The extent of overcharging and its precise impact on Medicare outlays are unclear; however, billing schemes uncovered in recent years suggest that the problem is nationwide and growing in magnitude. Extraordinary markups on therapy can result from providers exploiting regulatory ambiguity and weaknesses in Medicare's payment rules. Payment rules and procedures developed when the therapy industry was much smaller and less sophisticated have proved no match for increasingly complex business practices designed to generate increased Medicare revenue and skirt program controls. Although the overbilling problem has been known since 1990, no action has been taken to close loopholes that allow payment for these overcharges.

Medigap Insurance: Alternatives for Medicare Beneficiaries to Avoid Medical Underwriting (GAO/HEHS–96–180, Sept. 10, 1996)

Although the Medicare program covers a substantial share of its beneficiaries' health expenses, it does require deductibles and coinsurance that can amount to thousands of dollars a year. Most beneficiaries obtain private insurance to supplement Medicare when they become eligible for the program at age 65. On occasion, beneficiaries decide to change Medigap policies and may then become subject to medical underwriting; that is, the insurer can take into

account a person's health status or medical history in deciding whether to sell a policy. GAO found that few beneficiaries decide later to change their policies and those that do have at least one alternative for changing without being subject to medical underwriting. These alternatives, however, are not guaranteed by federal law, and it is possible that circumstances could change in the future. Federal Medigap law could be amended to furnish such a guarantee to beneficiaries who have been continuously covered by Medigap. Such a change should not have any major effect because it would not alter beneficiary incentives for Medigap coverage.

Medigap Insurance: Insurers' Compliance With Federal Minimum Loss Ratio Standards, 1988–93 (GAO/HEHS–95–151, Aug. 23, 1995)

The Medigap market grew steadily from 1988 to 1993, from $7.3 billion to $12.1 billion. Medigap insurers' aggregate loss ratios were relatively stable during the first 4 years of that period. During the next 2 years, however, these ratios fell about 10 percent, to an aggregate 75 percent for individual policies and 85 percent for group policies. In 1991, 19 percent of Medigap policies failed to meet loss ratio standards; this rose to 38 percent by 1993. The premium dollars spent on such policies increased from $320 million in 1991 to $1.2 billion in 1993. If insurers had been required to give refunds or credits on substandard policies, as they will in the future, policyholders would have been due about $124 million during 1992 and 1993.

MediGrant: Florida (GAO/HEHS–96–11R, Oct. 2, 1995)

Pursuant to a congressional request, GAO provided information on how the proposed MediGrant Program will affect Florida's federal Medicaid funding between fiscal years 1996 and 2002. GAO noted that (1) Florida state officials estimated that Florida would receive $7.6 billion less under the proposed MediGrant program than it does under current law; (2) between 1996 and 2002 Florida is expected to match $30.6 billion under the current Medicaid spending law and $15.8 billion under the MediGrant proposal; (3) the MediGrant program would phase in a new formula by guaranteeing minimum growth rates for some states and placing limits on the maximum growth a state could receive each year; and (4) the MediGrant program would increase Florida's share of federal Medicaid funding from 3.67 percent in fiscal year 1994 to 4.13 percent in fiscal year 2002.

Michigan Financing Arrangements (GAO/HEHS–95–146R, May 5, 1995)

GAO provided information on Michigan's 1995 Medicaid funding arrangements. GAO noted that (1) Michigan has been among the most successful states in obtaining additional federal Medicaid funds; (2) since fiscal year 1991, Michigan has reduced its Medicaid costs by $1.8 billion due to a variety of financing partnerships with medical providers; (3) most federal matching funds paid to providers have been returned to the state, thus reducing state appropriations; (4) although federal legislation has curtailed certain financing practices, Michigan has found new ways to obtain federal

matching funds, such as using provider donations to maximize federal funds and reduce state costs; (5) Michigan's use of intergovernmental transfers could reduce Medicaid costs by an additional $428 million in fiscal year 1995; (6) Michigan expects to obtain over $414 million in federal matching funds in fiscal year 1996; (7) Michigan should realize a net benefit of $196.5 million in fiscal year 1995 by adjusting nursing home and mental health Medicaid services payments; and (8) Michigan determined that it could make additional hospital outpatient payments of $40 million without exceeding established cost limits for such services.

Montana's Medical Assistance Facilities (GAO/HEHS–96–12R, Oct. 2, 1995)

Pursuant to a congressional request, GAO provided information on Montana's medical assistance facilities (MAF), focusing on the (1) cases treated and services performed at MAFs; (2) costs to Medicare for inpatient services provided at MAFs compared to the costs at acute-care hospitals; and (3) number of hospitals that might qualify as MAFs if the program was expanded nationwide. GAO noted that (1) MAFs mainly serve patients with uncomplicated conditions or stabilize patients with more severe conditions before transferring them to full-service hospitals; (2) MAFs serve as primary care providers for Medicare beneficiaries living in rural areas; (3) Medicare costs are generally less at MAFs than if the same patients had been treated at non-MAFs; (4) patients who are transferred from MAFs to acute-care hospitals increase Medicare costs, because the two facilities receive payments for the same patient; and (5) if the MAF or a similar program for rural hospitals in seven other states were expanded nationwide academic researchers estimated that although over 500 hospitals meet the qualifying criteria for MAFs, no more than 150 hospitals would convert to such limited service centers.

Nonphysician Specialists (GAO/HEHS–96–135R, May 29, 1996)

Pursuant to a congressional request, GAO provided information on the policies and procedures governing the participation of certain nonphysician health specialists in several federal health care programs. GAO noted that (1) although nonphysician specialists are authorized to participate and provide services in federal health care programs, participation requirements and allowable services vary among and within the programs; (2) participation requirements vary as to training, supervision, and specialty autonomy; and (3) some agencies that administer federal health programs are more involved in setting requirements and establishing service parameters for nonphysician specialists than other agencies.

Patient Self-Determination Act: Providers Offer Information on Advance Directives But Effectiveness Uncertain (GAO/HEHS–95–135, Aug. 28, 1995)

The Congress passed the Patient Self-Determination Act in 1990 to reinforce individuals' constitutional right to decide their final health care. The act requires health care providers to increase public awareness about the use of "advance directives"—a living will or health care power of attorney. An advance directive spells out

how life-support decisions should be carried out should the patient become terminally ill and unable to communicate his or her wishes. This report provides information on the act's implementation and on the effectiveness of advance directives in ensuring patient self-determination. GAO looked at the extent to which (1) institutional health care providers and the federal government are complying with the act's provision, (2) the public uses advance directives to express their end-of-life treatment wishes, and (3) an advance directive affects a patient's desired care.

Practice Guidelines: Managed Care Plans Customize Guidelines to Meet Local Interests (GAO/HEHS–96–95, May 30, 1996)

The inappropriate use of medical services can be costly and raises quality-of-care concerns. For example, a 1988 study found that 14 percent of bypass surgeries were performed inappropriately. To narrow the gap between current and optimal practice, some federal agencies and other groups develop clinical practice guidelines on the best practices for effective and appropriate care. Managed care plans, which employ various techniques intended to reduce inappropriate care, are likely sites of guideline use. This report discusses (1) the purposes clinical practice guidelines serve and (2) how health plans make use of already published guidelines developed by federal agencies and other groups.

Prescription Drugs and the Elderly: Many Still Receive Potentially Harmful Drugs Despite Recent Improvements (GAO/HEHS–95–152, July 24, 1995)

The inappropriate use of prescription drugs is particularly hazardous for the elderly. Not only do they use more prescription drugs than any other age group, the elderly are more likely to take several drugs at once, increasing the likelihood of harmful drug reactions. Furthermore, the elderly do not eliminate drugs from their systems as efficiently as younger patients because of decreased liver and kidney function. GAO found that 17.5 percent of nearly 30 million noninstitutionalized Medicare recipients aged 65 or older used at least one drug identified as generally unsuitable for elderly patients since safer alternative drugs exist. Inappropriate prescription drug use can result from doctors using outdated prescribing practices, pharmacists not doing drug utilization reviews, and patients not telling their doctors and pharmacists about all the drugs they are taking. Recent initiatives are seeking to address this problem. Federal and state efforts have encouraged the development and dissemination of detailed information on the effect of prescription drugs on the elderly, and the medical community is urging doctors to increase their knowledge of geriatrics and elderly clinical pharmacology. At the same time, drug utilization review systems now allow prescriptions to be screened before they are filled to identify potential problems, such as adverse drug interactions or inappropriate dosage levels. Changes in the health care delivery system may also help reduce inappropriate use of prescription drugs. For example, managed care plans, through the use of controls such as a "gatekeeper," could potentially improve the coordination of drug therapies for newly enrolled elderly patients.

Prescription Drugs and Medicaid: Automated Review Systems Can Help Promote Safety, Save Money (GAO/AIMD–96–72, June 11, 1996)

Inappropriate use of prescription drugs can lead to drug-induced illness, hospitalization, and even death. Inappropriate drug use can also prove expensive for the Medicaid program. As a result, the Congress mandated that states establish utilization review programs—called prospective reviews—to review Medicaid prescriptions before drugs are dispensed. Automated prospective drug utilization review systems are proving a low-cost way for states to help both doctors and pharmacies safeguard Medicaid recipients from potentially harmful medical reactions. Although the main emphasis of these systems—appropriately—has been safety, both safety benefits and dollar savings accrue from their use. Because results vary on the basis of how such systems are administered, it is important that states share their experiences. Absent any analysis of data from the Iowa demonstration project or any concerted effort by HCFA to collect and share other states' experiences, states have had only limited access to both safety and cost data—information that is critical to informed decisionmaking and to maximizing the effectiveness and efficiency of automated prospective drug utilization review systems.

Preventing Abusive Medicare Billing (GAO/HEHS–95–260R, Sept. 5, 1995)

GAO discussed its recommendations for preventing abusive billing practices for therapy services furnished to nursing home residents who are covered by Medicare and whether the recommendations can be implemented legislatively. GAO noted that (1) Medicare law could be amended to require HHS to establish the requirements recommended as well as a higher limit on the amount that Medicare will recognize as reasonable for therapy services; (2) expense claim limits could be set at the amount established under Medicare's part B fee schedules for therapy services; (3) establishing an upper limit would partially define billable units of service, since the procedure codes for occupational and speech therapy do not define the amount of time the codes cover; and (5) proposals have been made to require nursing homes to bill for the services provided to their residents, whether payment is sought from part A or part B fee schedules.

Private Health Insurance: Millions Relying on Individual Market Face Cost and Coverage Trade-Offs (GAO/HEHS–97–8, Nov. 25, 1996)

Most Americans obtain health insurance coverage through their jobs or through government programs like Medicare and Medicaid. About 10.5 million Americans, however, purchased private health insurance for themselves or their families in 1994. The family farmer, the recent college graduate, the early retiree, and the employee of a company that does not offer health insurance coverage are all examples of persons who are often not covered in a voluntary, employment-based insurance market. Integrating the individual market into health insurance reform proposals has been a thorny issue at both the federal and state level, in part because of

the paucity of information on the nature of this market and the characteristics of its participants. This report discusses the (1) size of the individual market, recent trends in it, and the demographic characteristics of its participants; (2) market structure, including how persons access the market, the prices and other characteristics of health plans offered, and the number of individual carriers offering plans; and (3) insurance reforms and other measures states have taken to improve individuals' access to health insurance.

Psychiatric Hospital Oversight (GAO/HEHS–96–132R, May 24, 1996)

Pursuant to a congressional request, GAO reviewed federal and state oversight of state-operated and private psychiatric hospitals. GAO noted that (1) as of August 1995, 702 psychiatric hospitals were certified to participate in Medicare and Medicaid; (2) to become certified for participation in Medicare and Medicaid, psychiatric hospitals must satisfy general hospital requirements for health and safety, and special psychiatric hospital requirements for active treatment; (3) hospital medical records must reflect the degree of active treatment and hospitals must have qualified staff to evaluate and treat patients; (4) HCFA requires states to conduct surveys of psychiatric hospitals to determine whether they satisfy certification requirements; (5) surveys of psychiatric hospitals include examinations of hospital and patient records, direct observations of patients, and interviews with staffs and patients; (6) as of August 1995, most certified psychiatric hospitals satisfied HCFA requirements for medical records and staffing; and (7) the failure to evaluate a patient's strengths when developing a treatment plan, specify each patient's treatment goals, and indicate the methods of treatment were the most common deficiencies cited in surveys of psychiatric hospitals that failed to satisfy HCFA certification requirements.

Public Health: A Health Status Indicator for Targeting Federal Aid to States (GAO/HEHS–97–13, Nov. 13, 1996)

Premature mortality is the best single proxy for reflecting differences in the health status of states' populations as measured by both the Healthy People 2000 indicators and the ReliaStar index. GAO's analysis showed that using premature mortality to distribute federal funding for core public health functions would systematically target federal assistance to states on the basis of their populations' rates of mortality, disease incidence, and risk for mortality and morbidity. Several other variables, including the proportion of states' populations that are poor or minorities, were also found to be correlated with health status differences as measured by the Healthy People 2000 indicators and the ReliaStar index. However, including these variables along with premature mortality did not significantly enhance GAO's ability to differentiate the health status of state populations. Moreover, improving the targeting of funds beyond that obtained by using premature mortality alone would require using several additional variables, which would add to the complexity of the allocation formula.

Skilled Nursing Facilities: Approval Process for Certain Services May Result in Higher Medicare Costs (GAO/HEHS–97–18, Dec. 20, 1996)

Skilled nursing facilities provide posthospital care for people who need more care than is available in the home. Medicare payments to these facilities have grown rapidly, from $456 million in 1983 to nearly $11 billion in 1996. The number of facilities that have sought and been granted payments higher than those normally allowed by Medicare has also grown, from a total of 80 during fiscal years 1979–92 to 552 in fiscal year 1995. The skilled nursing facility industry contends that the higher payments are justified because these facilities care for more complex and costly patients than they did in the past. However, GAO did not find that skilled nursing facilities that collected the higher fees had a larger proportion of patients requiring complex care than did other facilities. Moreover, in the area of therapy, which could be indicative of complex care needs, GAO found no major differences in the amount and types of therapy provided. Although the number of skilled nursing facilities granted exceptions to routine cost limits under Medicare soared from 62 in fiscal year 1992 to 552 in 1995, the Health Care Financing Administration's review process for exception requests does not ensure that facilities actually provide atypical services to their Medicare patients. In addition, the patient-specific data obtained from requesting skilled nursing facilities generally are not used to assess whether the Medicare beneficiaries need or receive atypical services.

State Medicaid Financing Practices (GAO/HEHS–96–76R, Jan. 23, 1996)

Pursuant to a congressional request, GAO provided information on state Medicaid financing arrangements in Michigan, Tennessee, and Texas. GAO noted that (1) until HCFA ruled in 1985 that states could use Medicaid provider donations to reduce their share of Medicaid expenditures, states could only use provider donations for the cost of training administrative personnel; (2) Michigan raised $684 million for its Medicaid program through hospital donations and federal matching funds in fiscal years 1991 through 1993, allowing it to fund $566 million in additional Medicaid payments; (3) in 1993, Tennessee required certain medical providers to pay a $2,600 tax on their nursing home beds and a 6.75-percent tax on services, but it discontinued the hospital services tax in 1994 when it implemented the TennCare program; (4) Tennessee earned $458 million from nursing home and hospital taxes in fiscal year 1993 and received $954 million in federal matching funds, which accounted for over half of its 1993 Medicaid spending; (5) the Congress enacted legislation in 1993 that restricted state financing arrangements by limiting disproportionate share hospital (DSH) program payments, causing states to modify their DSH programs and overall DSH payments to decline; and (6) despite the 1993 legislation, states were able to use intergovernmental transfers and other creative funding arrangements to reduce their share of Medicaid costs.

Community Development: Status of Urban Empowerment Zones (GAO/RCED–97–21, Dec. 20, 1996)

The Empowerment Zone and Enterprise Community Program targets federal grants to distressed urban and rural communities for social services and community redevelopment and provides tax and regulatory relief to attract or retain businesses in distressed communities. This report focuses on six urban empowerment zones that receive most of the program's funds—Atlanta, Baltimore, Chicago, Detroit, New York, and Philadelphia/Camden. GAO discusses the (1) status of the program's implementation in the urban empowerment zones, including the extent to which public housing officials and residents have been involved; (2) factors that participants believe have either helped or hindered efforts to carry out the program; and (3) plans for evaluating the program.

Housing Counseling Demonstration Program (GAO/RCED–96–238R, Sept. 16, 1996)

The National Affordable Housing Act of 1990 required GAO to report on the effectiveness of a U.S. Department of Housing and Urban Development prepurchase and foreclosure-prevention counseling demonstration program. This counseling was intended to (1) reduce defaults and foreclosures on single-family mortgages insured by the Federal Housing Administration (FHA), (2) encourage responsible and prudent use of such mortgages, (3) help homeowners with FHA mortgages keep their homes, and (4) encourage the availability and expansion of home ownership through the FHA mortgage insurance program. The act required that the demonstration program, which was funded from September 30, 1992, to September 30, 1994, include a comparison of three locations where the counseling was provided (target areas) and three similar locations where counseling was not provided (control areas).

Several implementation problems precluded GAO from assessing the impact of the program. Specifically, target and control areas were not comparable, the counseling intervention was not always implemented properly, and the program was geographically more limited than originally planned. Consequently, valid data does not exist upon which to base a study for determining whether a permanent program of mandatory counseling would be effective in reducing defaults and foreclosures.

HUD-Assisted Renters (GAO/RCED–95–167R, May 18, 1995)

GAO provided information on the Department of Housing and Urban Development's (HUD) rental assistance programs, focusing on the potential for assisted households to move toward or achieve economic self-sufficiency. GAO noted that based on samples of 1989 data (1) HUD-assisted renters' median age was 50 years, with 29 percent 34 years or younger, 36 percent between the ages of 35 and 64, and 35 percent 65 years or older; (2) the elderly and the disabled, who constituted about 49 percent of HUD-assisted households, had limited potential for achieving self-sufficiency; (3) 45 percent of assisted households had children, with 12 percent having three or more children; (4) about 55 percent of the households were

headed by single parents; (5) single parents needed child care and other services to participate in training or employment programs; (6) about 36 percent of the heads of assisted households had graduated from high school, another 18 percent had 1 or more years of college, and 21 percent had fewer than 8 years of schooling; (7) at least 45 percent of HUD-assisted renters needed additional education or training to become self-sufficient; (8) the renters' median income was $7,320; (9) about 7 percent of the renters had incomes of $20,000 or more; (10) only 40 percent of the households reported income from wages or salaries; and (11) a 3-member family renting a 2-bedroom apartment would need an annual income ranging from $18,396 to $36,264 to become economically independent of the housing program.

HUD Management: Greater Oversight Needed of FHA's Nursing Home Insurance Program (GAO/RCED–95–214, Aug. 25, 1995)

HUD has insured private lenders against financial losses arising from defaults on mortgages for nursing homes and retirement service centers. Although HUD officials believe that the program has enabled the agency to assist populations or areas that are not well served by the private sector, GAO found that the nursing home program has not been targeted to specific populations or communities and that HUD does not collect or analyze information on whom the program is servicing. The Federal Housing Administration (FHA) has not completely assessed the financial performance of the nursing home and retirement service center programs. Available data indicate that the nursing home program has incurred losses of $187 million, adjusted for inflation, during its 35-year history. Additionally, FHA's fiscal year 1994 loan loss reserves anticipate future losses equivalent to about 19 percent of the $3.7 billion balance of nursing home loans in the portfolio as of September 1994. HUD data show that about 46 percent of the retirement service center's total portfolio of about $1.4 billion had defaulted and resulted in FHA insurance claims as of September 1994. GAO doubts whether HUD will be able to effectively manage the nursing home and retirement service center programs in the near future.

Information Technology: Streamlining FHA's Single Family Housing Operations (GAO/AIMD–97–4, Oct. 17, 1996)

The Secretary of Housing and Urban Development has proposed a major overhaul of the agency's programs and operations during the next several years. One proposal is to cut staff at FHA by more than 50 percent by the year 2000. Information technology figures prominently in FHA's plans to streamline its single family operations, boost efficiency, and meet mandated staff reductions. Thus far, the planned actions are consistent with, but are not as extensive as, efficiency improvements taken by leading mortgage industry organizations. FHA's streamlining efforts, however, are in the early stages and, as other efforts continue, FHA will be deciding on specific operational changes, information technology applications, and management controls that will determine the efficiency and effectiveness of its operations and the achievement of staff reductions. In doing so, it can use the recently enacted Information Tech-

nology Management Reform Act of 1996 to establish an effective framework for making these information technology decisions.

Multifamily Housing: Effects of HUD's Portfolio Reengineering Proposal (GAO/RCED–97–7, Nov. 1, 1996)

About 8,600 privately owned multifamily properties with federally insured mortgages totaling nearly $18 billion receive federal rental subsidies for all or some of their apartments under the Department of Housing and Urban Development's (HUD) Section 8 program. For subsidized apartments, HUD pays the difference between the rent and 30 percent of the household's income. The rents at many properties exceed market levels, resulting in high subsidies. To reduce costs and address other problems, HUD has proposed adjusting the rents to market levels and writing down mortgages as needed to allow the properties to operate at market rents. In essence, HUD's proposal recognizes a reality that has persisted for some time—namely, that many of the properties in the insured Section 8 portfolio are worth far less than their mortgages suggest. This report examines the (1) problems affecting the properties in HUD's insured Section 8 portfolio and HUD's plans for addressing them, (2) results and reasonableness of a study done by Ernst & Young assessing the effects of HUD's proposal on the properties in the portfolio, and (3) key issues facing the Congress as it assesses HUD's proposal.

Public Housing: Partnership Can Result in Cost Savings and Other Benefits (GAO/RCED–97–11, Oct. 17, 1996)

The Congress is considering giving the nation's 3,300 public housing authorities greater flexibility in managing their properties and in operating public and assisted housing for more than 4 million households. This greater discretion is expected to strengthen the long-term viability of public and assisted housing and allow the public housing authorities to better meet the needs of local communities. Public housing authorities have begun establishing partnerships with public and private sector groups to help stretch limited financial resources. Some partnerships have generated quantifiable cost savings, while others have produced nonmonetary benefits, such as improved social services, that would not have been possible without the partnership. This report describes four types of arrangements that public housing authorities have established and provides the views of public housing authority officials on the advantages of these arrangements.

Rural Housing Programs: Opportunities Exist for Cost Savings and Management Improvement (GAO/RCED–96–11, Nov. 16, 1995)

The Agriculture Department's Rural Housing and Community Development Service provides about $2.85 billion each year for rural housing loans. As of June 1995, the Service had an outstanding single-family and multifamily housing loan portfolio of about $30 billion, which represented a significant federal investment in affordable housing for the rural poor. The largest portion of the loan portfolio is for single-family direct and guaranteed mortgage loans that are made to families or individuals who are without adequate housing and who are unable to obtain loans from private

lenders at reasonable costs. Rural multifamily rental housing loans, made to finance apartment-style housing or to buy and rehabilitate existing rental units, make up the rest of the portfolio. This report provides information on the Service's single- and multifamily housing loan programs and discusses suggestions made by GAO and others that could yield cost savings or improve management in these programs.

INCOME SECURITY ISSUES

Buyout Recipients' Compliance with Reemployment Provisions (GAO/GGD–97–7R, Oct. 3, 1996)

In *Reemployment of Buyout Recipients* (GAO/GGD–96–102R), GAO identified 68 persons who took a buyout to leave government, were reemployed as civil servants, and also were required to take certain steps to satisfy reemployment requirements. On the basis of information from Office of Personnel Management (OPM) data and interviews with personnel officials at the affected agencies, GAO concluded in this report that 11 of the 68 individuals were in apparent violation of the reemployment requirements, while 45 were not. GAO could not determine whether the remaining 12 were in violation because of inconsistencies between OPM and agency data. GAO will refer information about the 11 individuals in apparent violation of reemployment requirements and has already referred the 12 whose compliance was uncertain to the appropriate Office of Inspector General (OIG). GAO will report on the status of the OIG's investigations of the 23 cases and whether agencies had adequate internal controls to ensure compliance with buyout repayment requirements. [This was subsequently reported in GAO/GGD–98–12, Jan. 26, 1998.]

Combined Fund Update (GAO/HEHS–95–166R, May 25, 1995)

GAO reviewed the United Mine Workers of America (UMWA) Combined Benefit Fund, focusing on the fund's (1) beneficiaries, expenses, and revenues; and (2) Medicare reimbursement arrangements. GAO noted that (1) as of October 1, 1994, the fund had 96,700 beneficiaries, about three-quarters of whom were coal industry operators; (2) 29 firms terminated their contributions to the fund between October 1994 and March 1995, which necessitated the reassignment of 3,114 beneficiaries; (3) the fund had billed all operators about $162 million for fiscal year 1995 premiums; (4) the fund's Medicare per capita reimbursement rate was renegotiated and reduced for the year beginning July 1994, which makes it unlikely that future annual surpluses will occur; and (5) overall annual operating deficits are expected to begin in 1995, which would eliminate the current surplus by 2003.

Combined Fund Analysis (GAO/HEHS–95–230R, Aug. 4, 1995)

GAO reviewed two studies of the UMWA Combined Benefit Fund. GAO noted that (1) the consultants' models projected widely differing financial results for the UMWA Combined Benefit Fund; (2) the models' expense estimates for 1995 differed by about $16 million; (3) one of the models underestimated the UMWA fund's 1995 net expenses by approximately $3 million; (4) one consultant

based its medical cost inflation assumptions on the fund's past and current efforts to contain cost growth in prescription drugs; (6) the other consultant relied on the Medicare trust fund's projections of medical inflation and adjusted these estimates to reflect the fund's past experiences; and (7) the later assumptions may be more reasonable and may be more accurate in predicting the fund's status beyond 1995.

Congressional Retirement Costs (GAO/GGD–96–24R, Oct. 12, 1995)

Pursuant to a congressional request, GAO provided information on the proposal to change the congressional retirement system, focusing on (1) the cost of congressional retirement benefits; (2) the potential savings from the proposal; (3) how private sector retirement systems compare with the congressional retirement system; and (4) the extent to which private sector employers are replacing defined benefit pension plans with defined contribution plans. GAO noted that (1) the estimated cost of providing future retirement benefits to 1994 congressional members would total $14,327,224; (2) over a 5-year period, the cost of providing retirement benefits would total $71.5 million; (3) if the proposal were enacted, it would significantly reduce the cost of member retirement programs; (4) the cost of providing retirement benefits to 1994 congressional staff members would total $116.5 million; (5) although federal employees receive greater benefit amounts under the Civil Service Retirement System (CSRS) than nonfederal employees before age 62, they receive smaller amounts after age 62 when social security benefits are available to nonfederal employees; and (6) the private sector does not appear to be moving toward replacing defined benefit plans with defined contribution plans.

CSRS Funding (GAO/GGD–95–200R, Apr. 3, 1995)

GAO reviewed information on the funding status of the Civil Service Retirement System. GAO noted that (1) the system's unfunded liability is not a problem that needs to be fixed to avoid a steep increase in outlays from the Treasury or increases in the deficit and (2) there should be sufficient assets in the retirement fund to cover benefit payments to all current and future retirees.

D.C. Disability Retirement Rate (GAO/GGD–95–133, Mar. 31, 1995)

The federal government makes annual payments to the District of Columbia retirement fund for police officers and firefighters. To encourage the District government to control disability retirement costs, these payments must be reduced when the disability retirement rates exceed a certain limit. GAO concludes that no reduction is required in the fiscal year 1996 payment to the fund.

District's Workforce: Annual Report Required by District of Columbia Retirement Act (GAO/GGD–96–95, Mar. 29, 1996)

The federal government makes annual payments to the District of Columbia retirement fund for police officers and firefighters. To encourage the District government to control disability retirement costs, these payments must be reduced when disability retirement

rates exceed a certain limit. GAO concludes that no reduction is required in the fiscal year 1997 payment to the fund.

Federal Employees' Compensation Act: Issues Associated With Changing Benefits for Older Beneficiaries (GAO/GGD–96–138BR, Aug. 14, 1996)

The Federal Employees' Compensation Act (FECA) now allows beneficiaries who are at or beyond retirement age to receive worker's compensation benefits. Possible changes to the legislation would reduce these benefits. This briefing report provides (1) a profile of beneficiaries on the long-term FECA rolls, (2) views of proponents and opponents of changing FECA benefits for older beneficiaries, and (3) questions and issues that the Congress might consider if crafting benefit changes.

Federal Grants: Design Improvements Could Help Federal Resources Go Further (GAO/AIMD–97–7, Dec. 18, 1996)

Grants-in-aid are payments from the federal government to state and local governments to help them finance various activities, such as public assistance, highway construction, and education. In addition, lesser-known grant programs help finance public libraries, efforts to restore sport fish, programs to promote boating safety, and other activities. In fiscal year 1995, the federal government earmarked $225 billion for more than 600 grant programs—about 15 percent of all federal spending. This report focuses on the extent to which the grant system meets two goals frequently cited by public finance experts: (1) encouraging the states to use federal dollars to supplement rather than replace their own spending on nationally important activities and (2) targeting grant funding to states with relatively greater programmatic needs and fewer fiscal resources.

Federal Pensions: Thrift Savings Plan Has Key Role in Retirement Benefits (GAO/HEHS–96–1, Oct. 19, 1995)

As of September 1994, about 940,000 federal workers covered by the Federal Employees Retirement System (FERS) were voluntarily contributing an average of 5.7 percent of their salaries to the Thrift Savings Plan (TSP). Most of the remaining 300,000 FERS-covered workers who were not contributing were in the lower pay ranges. Lower-paid workers who were contributing were doing so at lower rates than higher-paid workers—an average of 4.4 percent of their salaries. However, lower-paid workers may achieve satisfactory retirement income levels even with low contribution rates because Social Security benefits are proportionately greater for them than for higher-paid workers. Higher-paid workers need to defer at least 5 percent of their salaries throughout their careers—if not more—to achieve retirement income of 60 to 80 percent of their preretirement salaries. Educating FERS workers can play a key role in their making wise preretirement investment choices. Although TSP materials discuss the plan's financial aspects, they do not explicitly discuss how TSP can help workers covered by FERS achieve their retirement income goals. The TSP Board is seeking legislation that would enable employees to invest in a domestic small capitalization fund and an international stock fund. GAO found that these two

additions would make TSP's investment options more closely resemble those in similar private sector plans.

Federal Retirement: Benefits for Members of Congress, Congressional Staff, and Other Employees (GAO/GGD–95–78, May 15, 1995)

The retirement benefits provided by the Civil Service Retirement System for Members of Congress are generally more generous than those provided for other federal employees. The major differences are found in the eligibility requirements for retirement and the formulas used to calculate benefits. The Member benefit formula applies to congressional staff, but they are covered by the general employee retirement eligibility requirements. Law enforcement officers and firefighters may retire earlier than general employees and are covered by a more generous benefit formula than are general employees. Under the Civil Service Retirement System, the provisions for air traffic controllers fall between those for law enforcement officers and firefighters and those for general employees. Many of the advantages afforded to Members of Congress and congressional staff under the Civil Service Retirement System were continued under the Federal Employees Retirement System, which covers workers hired in 1984 and thereafter. But under the Federal Employee Retirement System, provisions for law enforcement officers, firefighters, and air traffic controllers are very similar to provisions for Members. GAO summarized this report in testimony before the Congress; see *Congressional Retirement Issues* (GAO/T–GGD–95–165, May 15, 1995), by Johnny C. Finch, Assistant Comptroller General for General Government Programs, before the Subcommittee on Post Office and Civil Service, Senate Committee on Governmental Affairs.

Food Stamp Program: Achieving Cost Neutrality in Minnesota's Family Investment Program (GAO/RCED–96–54, Feb. 12, 1996)

In 1994, Minnesota began a 5-year federally authorized welfare reform project known as the Minnesota Family Investment Program. Aimed at simplifying the welfare system, the project consolidates the food assistance and the cash benefits provided by three programs—Aid to Families With Dependent Children, the Food Stamp Program, and Minnesota's Family General Assistance Program—into a single monthly payment. The Food Stamp Act of 1977 requires that the federal government spend no more for this project's food assistance component in any fiscal year than it would have spent for the Food Stamp Program. That is, the project must be cost neutral. To ensure cost neutrality, the act requires the Agriculture Department and the state of Minnesota to agree upon methodologies for estimating what the costs of the Food Stamp Program for both benefits and administration would have been had there been no project. This report (1) describes the methodologies that Minnesota agreed to use for estimating Food Stamp Program costs that would have been incurred if the project had not been implemented; (2) determines if Minnesota implemented these methodologies; (3) assesses the reasonableness of these methodologies, as implemented, for estimating the cost of the Food Stamp Pro-

gram for fiscal year 1994; and (4) compares the payments that would have been paid to Minnesota using the agreed-upon methodologies with the actual payments in fiscal year 1994.

Means-Tested Programs (GAO/HEHS–95–94R, Feb. 24, 1995)

GAO provided information on welfare reform proposals to simplify means-tested public assistance programs. GAO noted that (1) welfare services should be easily accessible to all who seek assistance; (2) there is no integrated strategy to unify these programs to address the interrelated needs of individuals and families; (3) despite efforts to better coordinate federal programs, conflicting requirements make it difficult for program staff to coordinate activities and share resources; and (4) program integration could be facilitated by reducing or eliminating federal program barriers and reengineering the welfare delivery process.

Military Retirement: Possible Changes Merit Further Evaluation (GAO/NSIAD–97–17, Nov. 15, 1996)

Payments to military retirees and their survivors totaled $29 billion in fiscal year 1996. Various factors, including the end of the Cold War, defense downsizing, changes in civilian retirement systems, and increasing federal budgetary constraints, have raised questions about whether the military retirement system today best meets the needs of the Pentagon and members of the armed forces. A number of analysts, including several who participated in a roundtable discussion convened by GAO, believe that fundamental changes to the military retirement system could increase its effectiveness or reduce costs by yielding a force of different composition and size than exists today. The suggestions of the GAO panel, which included Defense Department experts and compensation analysts, ranged from earlier vesting of retirement benefits to more sweeping reforms, such as placing military personnel under a system similar to the Federal Employees Retirement System.

Older American Act Funding Formula (GAO/HEHS–96–137R, Apr. 24, 1996)

Pursuant to a congressional request, GAO provided information on how proposed changes to the funding formula for title III of the Older Americans Act would affect equity in state funding and per-person-in-need income. GAO found that (1) the proposed formula changes would improve funding equity and target more aid to the elderly in the oldest age groups and low-income states; (2) the formula changes would not affect small states that are guaranteed at least 0.5 percent of the funds made available for state distribution; (3) the changes would reduce cross-state disparities, increase funding for states whose funding is below the national average, and decrease funding for those states whose funding is above the average; and (4) funding disparities could be further reduced if minority status and poverty were included in the formula changes.

PASS Program: SSA Work Incentive for Disabled Beneficiaries Poorly Managed (GAO/HEHS–96–51, Feb. 28, 1996)

The Social Security Administration (SSA) is poorly managing a small but growing program to encourage disability beneficiaries to

seek employment. The plan for achieving self-support (PASS) program, established in 1972, is currently small—only about 10,300 persons participated in December 1994—but the number of participants has swelled more than 5-fold during the past 5 years as awareness of the program has increased and millions more disabled beneficiaries have become eligible to participate. The PASS program is vulnerable to abuse because of vague guidelines, and its impact on employment is unknown because SSA does not collect basic data on participants and their employment. In addition, SSA top management has not adequately considered the potential problems posed by professional PASS preparers, whose fees—as much as $800—are often included as PASS expenses. SSA is trying to address some of these internal control weaknesses, but it cannot guarantee today that taxpayer dollars are being well spent.

PBGC (GAO/AIMD–95–225R, Aug. 24, 1995)

GAO reviewed the Pension Benefit Guaranty Corporation's (PBGC) accounting procedures and internal controls that warranted management's attention as of September 30, 1994. GAO noted that PBGC (1) used evidence about significant transactions that occurred after year-end in assessing its year-end contingent liabilities; (2) misclassified several pension plans based on their prior year classifications; (3) placed greater emphasis on bond ratings and debt-equity ratios in classifying pension plans; (4) had financial statements that did not disclose factors that represented high contingent liability risks; (5) did not adequately disclose the monetary effects that actuarial assumptions had on the amounts disclosed; (6) did not provide all available information about its efforts to recover amounts from sponsors of terminated plans in its financial statements; (7) incorrectly recorded its estimated losses; (8) did not provide adequate documentation in its Single Employer Program's Statement of Cash Flows; (9) inconsistently reviewed its financial assistance to multiemployer plans; (10) had yet to evaluate the effectiveness of its ratio screens in identifying troubled plans; (11) incorrectly listed 16 multiemployer plans as inactive in its Premium Processing System; (12) incorrectly allocated some of its losses to the Multiemployer Program; and (13) had not fully implemented its new computerized premium accounting system, disaster recovery plan, and software changes.

Pension COLAs (GAO/HEHS–95–219R, Aug. 11, 1995)

GAO provided information on the frequency and characteristics of cost-of-living adjustments (COLA) that retirees receive from public and private pension plans. GAO noted that (1) Social Security and federal pension plans incorporate automatic, annual COLAs; (2) over half the states reporting to the Bureau of Labor Statistics provide automatic COLAs annually, generally capped between 3 and 5 percent; (3) the remaining states mainly provide ad hoc COLAs, although the number of states granting ad hoc COLAs has gradually decreased since 1987, due to lower inflation; (4) ad hoc COLAs in private pension plans occur less frequently than automatic COLAs in the public sector, and the plans often specify a maximum increase; (5) a number of factors, such as union negotiations, affect employers' decisions to provide COLA increases; (6)

COLA provisions vary widely among industries, ranging from 3 percent of pension plans in the retail sector to over 60 percent in the transportation industry; and (7) ad hoc adjustments to private sector pension benefits have declined in recent years from over 50 percent to under 10 percent of plans.

Private Pensions: Most Employers That Offer Pensions Use Defined Contribution Plans (GAO/GGD–97–1, Oct. 3, 1996)

In response to congressional interest in possibly changing the structure of federal employee retirement plans, this report provides information on the approaches that private sector employers are using to provide their employees with retirement benefits and the extent to which these approaches may be changing. GAO describes (1) the numbers and types of pension plans sponsored nationwide by private employers during 1984 to 1993, (2) the proportions of total contributions made to these plans by employers and employees, (3) the average administrative expense for the plans, and (4) the explanations provided in retirement literature on why employers might decide to sponsor a particular type of pension plan.

Proposed Pension Reversions (GAO/HEHS–96–54R, Oct. 24, 1995)

Pursuant to a congressional request, GAO provided information on pension plan underfunding, focusing on a proposed legislative provision that would allow companies to transfer excess assets out of their defined benefit pension plans for any purpose. GAO noted that (1) current and termination liabilities are measures of liabilities that a plan has accrued as of its valuation date, and each relies on different assumptions and yields very different estimates; (2) plans that are significantly funded over their current liability can lose plan funding rapidly due to bankruptcy, early retirements, or a decline in interest rates; (3) participants can lose benefits when a plan is terminated because the Pension Benefit Guaranty Corporation (PBGC) generally does not insure all benefit amounts; (4) companies may not transfer or obtain excess assets from a defined benefit plan under current law, but some transfers may be permissible if the plans merge and participants' benefits are not reduced; (5) it is unclear whether the transfer of excess plan assets would release capital for investment; and (6) although the proposed provision would allow withdrawal of overfunded assets, plan sponsors may be required to make larger cash contributions in the future.

Public Pensions: Section 457 Plans Pose Greater Risk Than Other Supplemental Plans (GAO/HEHS–96–38, Apr. 30, 1996)

Millions of state and local government employees are trying to increase their future retirement benefits by deferring some of their wages to supplemental pension plans, known as salary reduction arrangements or plans. The amount deferred or contributed to these plans, however, may be at risk. Recent media stories have recounted instances of imprudent investment, improper use of plan funds by sponsors, and possible seizure of plan funds by sponsoring governments' creditors. This report examines the risks of financial loss inherent in such plans and discusses whether the provisions of such plans treat participants comparably. See also *Public Pen-*

sions: Summary of Federal Pension Plan Data (GAO/AIMD–96–6, Feb. 16, 1996) and *Public Pensions: State and Local Government Contributions to Underfunded Plans* (GAO/HEHS–96–56, Mar. 14, 1996).

Public Pensions: State and Local Government Contributions to Underfunded Plans (GAO/HEHS–96–56, Mar. 14, 1996)

State and local governments with underfunded pension plans risk tough budget choices in the future if they do not make progress toward full funding. Their taxpayers will face a liability for benefits earned by current and former government workers, forcing these governments to choose between reducing future pension benefits or raising taxes. Funding of state and local pension plans has improved significantly since the 1970s. After adjusting for inflation, the amount of the unfunded liability has been cut in half. Still, in 1992, 75 percent of state and local government pension plans in the Public Pension Coordinating Council survey were underfunded; 38 percent were less than 80 percent funded. Sponsors of slightly more than half of the plans in the survey made contributions on schedule to pay off any unfunded liability. One-third of the pension plans, however, were underfunded in 1992 and were not receiving the actuarially required sponsor contributions. Of all plans with complete data, one-fifth were underfunded and were not receiving full contributions in both 1990 and 1992. See also *Public Pensions: Summary of Federal Pension Plan Data* (GAO/AIMD–96–6, Feb. 16, 1996) and *Public Pensions: Section 457 Plans Pose Greater Risk Than Other Supplemental Plans* (GAO/HEHS–96–38, Apr. 30, 1996).

Public Pensions: Summary of Federal Pension Plan Data (GAO/AIMD–96–6, Feb. 16, 1996)

This report—one in a series of three reports on the status of public pension plan funding—provides summary data on federal government pension plans. The other two reports in the series address state and local government pension plans. GAO focuses on federally sponsored defined benefit and defined contribution plans. See also *Public Pensions: State and Local Government Contributions to Underfunded Plans* (GAO/HEHS–96–56, Mar. 14, 1996) and *Public Pensions: Section 457 Plans Pose Greater Risk Than Other Supplemental Plans* (GAO/HEHS–96–38, Apr. 30, 1996).

Reemployment of Buyout Recipients (GAO/GGD–96–102R, June 14, 1996)

As part of its downsizing efforts, the federal government has offered employees of various federal agencies incentive payments, or buyouts, to leave federal employment through voluntary separations. Pursuant to a congressional request, GAO reviewed agencies' use of buyout authority and whether agencies subsequently reemployed buyout recipients as civil servants or government contractors. Using the Office of Personnel Management's (OPM) data, GAO determined that governmentwide agencies paid 87,743 buyouts from January 1993 through June 30, 1995. However, GAO could not determine the total number of employees who were eligible to receive buyouts. Of the 87,743 buyout recipients, agencies re-

hired 394 as civil servants. However, it is not clear how many were reemployed as federal contractors. The limited available data suggest the practice was not used extensively. Reemployment of buyout recipients as civil servants or contractors is not prohibited, but, under certain circumstances, buyout recipients are required to take steps to satisfy reemployment provisions. Of the 394 buyout recipients reemployed as civil servants, GAO identified 68 cases in which these reemployment provisions applied. Finally, through a survey of National Aeronautics and Space Administration and Department of Transportation units, respondents reported that they had management controls designed to prevent reemployment abuses.

Service Corps of Retired Executives (GAO/RCED–95–127R, Mar. 10, 1995)

GAO provided information on the Small Business Administration's Service Corps of Retired Executives Program (SCORE), focusing on how SCORE (1) determines budget allocations for regional locations; (2) officials view the fairness of the allocations; and (3) meets the needs of rural communities. GAO noted that (1) SCORE regional budget allocations are based primarily on historical trends in actual expenditures; (2) SCORE officials stated that their areas receive a fair share of SCORE funds, given the small size of the total budget; and (3) to meet the needs of rural communities, SCORE uses approaches such as waiving the guidelines for the number of volunteers needed to start a chapter and using persons or funds from larger chapters to subsidize rural chapters.

Social Security Administration: Effective Leadership Needed to Meet Daunting Challenges (GAO/HEHS–96–196, Sept. 12, 1996)

With a staff of 64,000, SSA runs the nation's largest federal program—Social Security—as well as the largest cash welfare program—the Supplemental Security Income (SSI) program. SSA's expenditures totaled $363 billion in fiscal year 1995, nearly one-fourth of the $1.5 trillion federal budget. SSA programs touch the lives of nearly every American, providing benefits to the retired, the disabled, and their dependents and survivors. This report, which is based on July 1995 testimony before the Congress (GAO/T–OCG–96–7), discusses SSA's progress in meeting the challenges of managing for results and accountability; funding future retirement benefits; rethinking SSI fraud, waste, and abuse; handling increasing workloads with fewer resources; and establishing effective leadership.

Social Security Administration: Leadership Challenges Accompany Transition to an Independent Agency (GAO/HEHS–95–59, Feb. 15, 1995)

In 1994, the Congress passed legislation making the Social Security Administration (SSA) an independent agency. As part of the transition, GAO was required to evaluate the interagency agreement for transferring personnel and resources from HHS to SSA. GAO concluded that the two agencies have developed an acceptable methodology for identifying the functions; personnel; and other resources, such as furniture and computer equipment, to be trans-

ferred to an independent SSA. They have also made good progress toward completing the initiatives necessary for SSA to be a fully functional independent agency by March 31, 1995. However, SSA will continue to face serious policy and management challenges, including the long-range shortfall in funds to pay future Social Security benefits. Also, questions have been raised by GAO and others about the future growth of the Disability Insurance (DI) program and recent increases in Supplemental Security Income (SSI) benefits.

Social Security: Telephone Access Enhanced at Field Offices Under Demonstration Project (GAO/HEHS–96–70, Feb. 23, 1996)

The Social Security Administration (SSA) runs a nationwide toll-free telephone number and is testing enhanced local office telephone service at selected offices. In February 1995, SSA began installing new telephone equipment, called automated attendant and voice mail, at 30 of its 800 nationwide field offices that list their telephone numbers in local telephone directories. The equipment was installed in different configurations. Telephone access—calls reaching an SSA employee with the caller spending less than 2 minutes on hold—improved 23 percent under one of the configurations being tested by SSA. In addition, busy signals dropped by more than 55 percent. Staffing, however, did not increase, and many callers reaching SSA did spend some time on hold before reaching an SSA representative. SSA field office staff viewed the installation of voice mail equipment at their desks as having a very positive effect on office efficiency and public service. SSA has not yet completed its two internal evaluations of the demonstration project. GAO concludes that the technology tested in the demonstration projects has the potential to further SSA's public service goals. Public reaction and the effect on operations, however, will need to be considered as SSA weighs the costs and the benefits of this technology.

Social Security: Union Activity at the Social Security Administration (GAO/HEHS–97–3, Oct. 2, 1996)

The Social Security Administration (SSA), like other federal agencies and some private sector firms, pays for approved time spent by its employees on union activities. SSA has a special fiduciary responsibility to effectively manage and maintain the integrity of the social security trust funds from which most of these expenses are paid. In a time of shrinking budgets, it is crucial that SSA, as well as other agencies, evaluate how resources are being spent and have reliable monitoring systems to support this evaluation. To ensure accurate tracking of time spent on union activities and the staff conducting these activities, SSA has developed and is testing a new time-reporting system for its field offices and teleservice centers. GAO believes that the new system should be implemented agencywide. With an improved agencywide system, SSA management should have better information on where its money is being spent.

SSA Benefit Statements: Well Received by the Public But Difficult to Comprehend (GAO/HEHS–97–19, Dec. 5, 1996)

SSA in 1995 began sending statements—called Personal Earnings and Benefit Estimate Statements—automatically to workers who had reached age 60. By fiscal year 2000, these statements will reach an estimated 123 million people annually—almost every U.S. worker aged 25 and older. These six-page statements provide workers with information on their yearly earnings on record at SSA, information on their eligibility for social security retirement and other benefits, and estimates of these benefits. Experts agree that SSA's approach is generally reasonable, and feedback suggests that the public generally finds the statements to be helpful in retirement planning. However, GAO believes that the statements could benefit from extensive revisions. Specifically, the statements need a better layout and design and simpler explanations. SSA will need to start now to complete these changes by its 1999 redesign target date because the agency will require time to collect data and test alternatives.

SSA Disability: Program Redesign Necessary to Encourage Return to Work (GAO/HEHS–96–62, Apr. 24, 1996)

During the past decade, the number of persons receiving benefits from Social Security's DI and SSI programs increased 70 percent because of program changes and economic and demographic factors. These programs, which provide assistance to persons with disabilities until they return to work, if that is possible, provided $53 billion in cash benefits to 7.2 million people in 1994. Advances in technology, such as standing wheelchairs and synthetic voice systems, and the medical management of some physical and mental disabilities have allowed some persons to work. Moreover, there has been a greater trend toward inclusion of and participation by people with disabilities in the mainstream of society. Yet both programs have done little to identify recipients who might benefit from rehabilitation and employment assistance and ultimately return to work.

SSA Overpayment Recovery (GAO/HEHS–96–104R, Apr. 30, 1996)

Pursuant to a congressional request, GAO reviewed how SSA recovers overpayments of benefits. GAO found that (1) the amount of SSI, RSI, and DI payments that SSA withholds to recoup overpayments is not upwardly adjusted with cost-of-living increases in the many cases in which the withholding is based on a fixed dollar amount negotiated with the beneficiary, as opposed to a fixed percentage of the recipient's monthly income or monthly benefit amount; (2) basing the withholding on a percentage instead of a dollar amount would accelerate the recovery of overpayments without imposing an undue burden on recipients or causing excessive administrative costs; (3) accelerating recoveries while recipients are still receiving benefits improves the chance of collecting overpayments; (4) SSA administrative costs would likely increase only in the first year of implementation; and (5) the cost of notifying recipients of the new withholding procedures would be negligible, because SSA already notifies recipients when overpayments occur.

Social Security: Issues Involving Benefit Equity for Working Women (GAO/HEHS–96–55, Apr. 10, 1996)

When the social security program was established in the 1930s, less than 15 percent of married women held paying jobs outside the home; today, about 60 percent of married women are paid workers. Despite the movement of women into the labor market, the social security benefit structure has remained essentially unchanged over the years. The fairness of the benefit structure has come under increasing scrutiny, especially as it affects women who have earned benefits in their own right. For example, a two-earner couple will receive lower combined benefits in retirement than an otherwise identical one-earner couple. And, a married woman who works and pays social security taxes might not, because of the dual entitlement limitation, receive higher benefits than if she had never worked and received only a spousal benefit. Several proposals seek to remedy these inequities. These include two broad proposals—"earnings sharing" and a "double-decker" plan—and several narrower proposals, such as reducing spousal benefits. None of the measures has been adopted, however, partly because they would either boost program costs or reduce benefits for some beneficiaries. Their enactment could also impose a large administrative burden on SSA.

Social Security Disability: Backlog Reduction Efforts Under Way; Significant Challenges Remain (GAO/HEHS–96–87, July 11, 1996)

SSA runs the nation's largest programs providing cash benefits to people with severe long-term disabilities. The number of persons receiving either Disability Insurance (DI) or SSI benefits has soared during the past decade. At the same time, SSA has struggled to deal with unprecedented growth in appeals of its disability decisions and the resulting backlog of cases awaiting hearing decisions. Processing delays stemming from a backlog of more than half a million appealed cases have created hardships for disability claimants, who often wait more than a year for final disability decisions. This report discusses (1) factors contributing to the growth in appealed cases, (2) SSA initiatives to reduce the backlog, and (3) long-term steps that need to be taken to make the disability appeals process more timely and efficient.

Social Security Trust Funds (GAO/AIMD–96–30R, Dec. 12, 1995)

Pursuant to a congressional request, GAO reviewed the Secretary of the Treasury's actions during the 1995 debt ceiling crisis, focusing on whether the Department of the Treasury followed normal investment and redemption policies regarding the Social Security trust funds. GAO noted that Treasury records show that the Secretary followed normal investment and redemption policies for all transactions affecting the trust funds between November 1, 1995, and December 8, 1995.

SSI Disability Issues (GAO/HEHS–95–154R, May 11, 1995)

GAO provided information on several SSI issues related to (1) SSI outreach activities; (2) the status of continuing disability reviews involving interpreter fraud; (3) the function of referral and

monitoring agencies (RMA) in overseeing the drug addict and alcoholic populations; and (4) the number of drug and alcohol addicts in treatment. GAO noted that (1) very few SSI outreach activities are targeted to drug addicts and alcoholics; (2) SSA has not requested funding for SSI outreach for fiscal years 1993 through 1996; (3) in two states, SSA continuing disability reviews are yielding a high rate of initial benefit terminations, of which about 60 percent have been appealed; (4) SSA is developing an interpreter database to understand the extent of the fraud problem; (5) RMAs assess beneficiaries' treatment needs, make treatment referrals, monitor beneficiaries' compliance with treatment, and report their compliance status to SSA; (6) RMAs do not conduct SSI outreach activities; (7) only 1 in 6 addicted beneficiaries are in required treatment, mainly due to the lack of RMA funding to monitor beneficiaries' treatment; and (8) in fiscal year 1996, the administration is requesting $195 million for RMA monitoring activities, which is a significant increase over 1990 through 1993 levels.

Supplemental Security Income: Administrative and Program Savings Possible by Directly Accessing State Data (GAO/HEHS–96–163, Aug. 29, 1996)

The Supplemental Security Income program, which provides cash benefits to the aged, the blind, and the disabled, could be run more efficiently. More importantly, millions of dollars in overpayments could be prevented or detected quickly if information were available on-line during eligibility assessments. GAO estimates that direct on-line access to state computerized income information could have prevented or quickly detected more than $131 million in overpayments caused by unreported or underreported income nationwide in one 12-month period. However, in SSA field offices where direct access to computerized state information has been implemented, SSA claims representatives did not use it to detect overpayments. The claims representatives did use it to process claims more efficiently, and SSA's preliminary results have shown that its use has reduced administrative expenses. Establishing on-line access between SSA field offices and state agency databases would require only minimal computer programming in most states; some states would need additional hardware, such as computer lines.

Supplemental Security Income: Growth and Changes in Recipient Population Call for Reexamining Program (GAO/HEHS–95–137, July 7, 1995)

The SSI program is the largest cash assistance program for the poor and one of the fastest growing entitlement programs; program costs have risen 20 percent annually during the last 4 years. SSI provides means-tested income support payments to aged, blind, or disabled persons. Last year, more than 6 million people received about $25 billion in federal and state benefits. In response to SSI's rapid growth, the Congress passed legislation limiting drug addicts' benefits, and this year it is considering further restrictions for these recipients as well as for children and noncitizens. This report provides an overview of the SSI program and its recent history. Specifically, it examines factors contributing to caseload growth and changes in the characteristics of SSI recipients.

Supplemental Security Income: SSA Efforts Fall Short in Correcting Erroneous Payments to Prisoners (GAO/HEHS–96–152, Aug. 30, 1996)

Despite SSA procedures to detect supplemental security income recipients in county and local jails, GAO found that $5 million had been erroneously paid to prisoners in the jail systems it reviewed. SSA had been unaware of many of these payments and, therefore, had made no attempt to recover them. Various factors contributed to these payments. First, SSA field offices have not been obtaining information regularly on prisoners in county and local jails. Second, the supplemental security income recipient—or the person or organization designated to receive payments on the recipient's behalf—has not been reporting the incarceration, as required. Third, SSA sometimes falls short in periodically reviewing—either by mail or interview—a recipient's continued financial eligibility for supplemental security income. Under a new SSA initiative, field offices will be required to obtain prisoner information from county and local jails, and SSA plans to monitor field office compliance with this requirement. It is too early to tell, however, whether this initiative will be successful.

Supplemental Security Income: Some Recipients Transfer Valuable Resources to Qualify for Benefits (GAO/HEHS–96–79, Apr. 30, 1996)

Existing law does not prohibit people from transferring resources to qualify for benefits under the SSI program—the largest cash assistance program for the poor and one of the fastest growing entitlement programs. Between 1990 and 1994, 3,505 SSI recipients transferred resources, including cash, houses, land, and other items, valued at $74 million. Reported resource transfer values ranged as high as $800,000; most transfers fell between $10,000 and $25,000. The total amount of resources transferred, however, is likely to be larger than GAO's estimate because SSA is not required to verify the accuracy of resource transfer information, which is self-reported by individuals. Moreover, because the information is self-reported, SSA is unlikely to detect unreported transfers. Without a transfer-of-resource restriction, GAO estimated the 3,505 SSI recipients who reported transferring resources to qualify for benefits would receive nearly $8 million in SSI benefits during the 24 months after they transferred resources. Many of these recipients also could have received Medicaid acute-care benefits at an annual value of between $2,800 and $5,300 per recipient. GAO estimated that from 1990 through 1995, SSA could have saved $14.6 million with a transfer-of-resource restriction similar to that used for Medicaid which delays individuals' date of eligibility for benefits. Such a restriction could also boost the public's confidence in the program's integrity.

Thrift Savings Plan (GAO/HEHS–96–66R, Nov. 14, 1995)

Pursuant to a congressional request, GAO reviewed (1) why the Congress replaced CSRS with FERS; and (2) the Federal Retirement Thrift Investment Board's response to the GAO recommendation concerning the inclusion of participant information on contributions to TSP retirement accounts. GAO noted that (1) the Con-

gress replaced CSRS with FERS to provide federal employees with a retirement benefit that included a Social Security payment, a basic FERS annuity, and payments from amounts accumulated in a TSP account; and (2) the board did not implement the recommendation because it believed that it would be violating its fiduciary duty to TSP participants and misusing its funds.

Welfare Benefits: Potential to Recover Hundreds of Millions More in Overpayments (GAO/HEHS–95–111, June 20, 1995)

Under welfare reform legislation being considered by the Congress, resources for helping poor families may become increasingly limited—making it critical that only those who are eligible for benefits receive them. In 1992, benefit overpayments in three welfare programs—Aid to Families With Dependent Children (AFDC), Food Stamps, and Medicaid—totaled $4.7 billion, or about 4 percent of the total benefits paid. Moreover, nationwide recovery of these benefits was relatively low. This report discusses (1) what states are doing to recover benefit overpayments, what the more effective practices are, and what states could do better and (2) what the federal government could do to help states recover more overpayments.

Welfare Programs: Opportunities to Consolidate and Increase Program Efficiencies (GAO/HEHS–95–139, May 31, 1995)

The federal government provides billions of dollars in public assistance each year through an inefficient welfare system that is increasingly cumbersome for program administrators to manage and difficult for eligible clients to access. Program consolidation may be one strategy to reduce the inefficiency of the current system of overlapping and fragmented programs. This report (1) describes low-income families' participation in multiple welfare programs, (2) examines program inefficiencies, such as program overlap and fragmentation, and (3) identifies issues to consider in deciding whether and to what extent to consolidate welfare issues. Regardless of how the welfare system is restructured, ensuring that federal funds are used efficiently and that programs focus on outcomes remains important. Without a focus on outcomes, concerns about the effectiveness of welfare programs will not be adequately addressed.

Welfare Reform: Implications of Proposals on Legal Immigrants Benefits (GAO/HEHS–95–58, Feb. 2, 1995)

GAO found that the percentage of immigrants receiving public assistance—specifically SSI or AFDC—is higher than the percentage of citizens receiving these benefits. Six percent of all immigrants receive benefits compared with 3.4 percent of all citizens. Most immigrant recipients live in four states: California, New York, Florida, and Texas; more than one-half of all immigrant recipients live in California. Between 1983 and 1993, the number of immigrants receiving SSI more than quadrupled, increasing from 151,000 to 683,000. During this period, immigrants grew from about 4 percent of all SSI recipients to more than 11 percent. As a percentage of all adult AFDC recipients, immigrants grew from about 5 percent to 8 percent. In all, immigrants received an estimated $3.3 billion in SSI benefits and $1.2 billion in AFDC benefits

in 1993. Most immigrant recipients are lawful permanent residents or refugees, but other characteristics of immigrants receiving SSI and AFDC vary. For example, the number of immigrants receiving SSI aged benefits—available to those 65 years and older—has increased dramatically. According to the Congressional Budget Office, a welfare reform proposal now before the Congress (H.R. 4) would save $9.2 billion from the SSI program and $1 billion from the AFDC program over 4 years. GAO estimates that 522,000 SSI recipients and 492,000 AFDC recipients would become ineligible for benefits under H.R. 4.

401(k) Pension Plans: Many Take Advantage of Opportunity to Ensure Adequate Retirement Income (GAO/HEHS–96–176, Aug. 2, 1996)

Many workers fill the gap between social security and an adequate retirement income with pension benefits, and one in four workers with pension coverage participates in a 401(k) program. GAO found, among other survey results, that workers with higher incomes and college educations tended to contribute more to 401(k) plans than others and women tend to invest more conservatively than do men. Also, higher-income workers and better-educated workers with 401(k) pension plans tend to contribute a larger percentage of their salaries to their pension accounts and to invest their pension funds in higher-yielding assets than do other 401(k) plan participants. Consequently, although many workers will have enough retirement income, some workers, especially those with less education and lower incomes, risk inadequate retirement incomes.

VETERANS' AND DOD ISSUES

Defense Health Care: Effects of Mandated Cost Sharing on Uniformed Services Treatment Facilities Likely to Be Minor (GAO/HEHS–96–141, May 13, 1996)

The establishment of uniform benefits and cost sharing for DOD beneficiaries is a key component of the TRICARE program—DOD's new nationwide managed health care program—and is something that GAO and others have long advocated. Such uniformity would, in GAO's view, eliminate inequities and confusion that now exist among beneficiaries of military health plans. Although adopting TRICARE cost shares may cause some minor adverse selection for the Uniformed Services Treatment Facilities (USTF), there should be no lasting negative financial impact on the USTFs. Moreover, the new cost shares, which are similar to HMOs, are appropriate for the risks to be borne by the USTFs and will likely make the USTF population more similar to DOD's general beneficiary population. DOD's current USTF capitation methodology takes into account and allows for adjusted reimbursement levels for such higher costs that result from changes in the enrollee cost shares and population characteristics.

Defense Health Care: Issues and Challenges Confronting Military Medicine (GAO/HEHS–95–104, Mar. 22, 1995)

DOD's military health care system provides medical services and support both in peacetime and in war to members of the armed

forces and their families, as well as to retirees and survivors. Post-Cold War planning scenarios, efforts to reduce the overall size of the military, federal budget cuts, and base closures and realignments have focused attention on the size of DOD's health care system, its makeup, how it operates, whom it serves, and whether its missions can be carried out in a more cost-effective way. This report describes the Military Health Services System, past problems faced by DOD as it ran the system and efforts to solve those problems, and the management challenges now confronting DOD. GAO summarized this report in testimony before the Congress; see *Defense Health Care: DOD's Managed Care Program Continues to Face Challenges* (GAO/T–HEHS–95–117, Mar. 28, 1995), by David P. Baine, Director of Federal Health Care Delivery Issues, before the Subcommittee on Military Personnel, House Committee on National Security.

Defense Health Care: Medicare Costs and Other Issues May Affect Uniformed Services Treatment Facilities' Future (GAO/HEHS–96–124, May 17, 1996)

Since fiscal year 1994, the Congress has appropriated nearly $1 billion for USTF to deliver health care to what now totals 124,000 beneficiaries. In recent years, the Congress has grown concerned about the rising cost to treat USTF members, in part because some members retain dual eligibility and unrestricted access to other government health care services, such as Medicare and DOD hospitals. The Congress directed DOD in 1991 to reform the USTF program by introducing a managed care program. As DOD begins to implement its new nationwide managed care program—TRICARE—questions about the program's future persist. This report discusses (1) whether unnecessary costs result from USTF members' use of other federally funded health care sources and (2) other issues that need to be considered as the Congress deliberates reauthorization of the USTF program.

Defense Health Care: New Managed Care Plan Progressing, But Cost and Performance Issues Remain (GAO/HEHS–96–128, June 14, 1996)

The DOD health care system, which costs $15 billion annually, is undergoing sweeping reform. Through TRICARE, DOD is trying to improve access to care among its 8.3 million beneficiaries while containing costs. How well DOD implements and operates TRICARE may define and shape military medicine for years to come. Because of TRICARE's complexity, scale, and impact on beneficiaries, GAO reviewed the program, focusing on (1) whether DOD's experiences with early implementation yielded the expected results, (2) how early outcomes may affect costs, and (3) whether DOD has defined and is capturing data needed to manage and assess TRICARE's performance. GAO concludes that despite initial confusion among beneficiaries arising from marketing and education problems, as well as problems with the compatibility of computer systems, early implementation of TRICARE is progressing consistent with congressional and DOD goals. However, the success of DOD's efforts to implement resource-sharing agreements and utilization management is critical to containing health care costs.

DOD also needs to gather enrollment and performance data so that it and the Congress can assess TRICARE's success in the future.

Defense Health Care: Problems with Medical Care Overseas Are Being Addressed (GAO/HEHS–95–156, July 12, 1995)

The American military presence in Europe has declined dramatically since 1989. The active duty population has been cut by 57 percent—from 332,000 to 138,000. At the same time, the military health services systems has also been substantially reduced. Many beneficiaries have expressed concern about their reduced access to health care from military medical facilities overseas and are dissatisfied with the care they receive from host nation providers. This report discusses (1) the availability of health care in military facilities, (2) any obstacles to providing that care, (3) the experiences of beneficiaries who have used host nation providers as an alternative to military health care, and (4) whether DOD is addressing service delivery problems and beneficiary concerns. To develop this information, GAO visited 15 military communities in Germany and northern Italy, where many of the beneficiary complaints about medical and dental care originated.

Neoplasms in Persian Gulf Veterans (GAO/PEMD–96–15R, June 21, 1996)

Pursuant to a congressional request, GAO reviewed Department of Veterans Affairs' (VA) data on the frequency of abnormal tissue growths among Persian Gulf War veterans and other military personnel. GAO noted that (1) VA data show that Persian Gulf War veterans have a neoplasm-diagnosis rate that is more than three times higher than that of nonwar veterans; (2) the higher neoplasm rate for war veterans may be due to causes other than service in the Persian Gulf, such as war veterans seeking VA hospital treatment more often than nonwar veterans; (3) the rate of surgical procedures for the two groups is not significantly different, which could mean that war veterans' neoplasms are not as serious as those diagnosed among nonwar veterans; and (4) analyzing alternative explanations for war veterans' neoplasm rates would require extensive statistical analysis and professional judgment.

Proposed VA Hospital at Travis Air Base (GAO/HEHS–95–268R, Sept. 19, 1995)

GAO provided information on the proposed construction of a Department of Veterans Affairs (VA) hospital at Travis Air Force Base in Fairfield, California, focusing on (1) reasons that the project cost estimate was higher than VA originally proposed to the Congress and (2) where veterans living in the Travis facility target area currently receive medical care. GAO noted that (1) the project cost estimate increased because VA believed it needed to construct and renovate more space than originally anticipated; (2) many veterans in the Travis target area currently receive hospital care at VA medical centers in the northern California and Nevada areas; and (3) although veterans' use of VA medical centers decreased in fiscal years 1992 and 1993, the reason for the decrease was unclear.

Readjustment Counseling Service: Vet Centers Address Multiple Client Problems, But Improvement Is Needed (GAO/HEHS–96–113, July 17, 1996)

VA operates 205 community-based facilities known as Vet Centers to help veterans make a successful transition from military to civilian life. Vet Center counselors reported visiting with about 138,000 veterans during fiscal year 1995, 84,000 of whom were new to Vet Centers. Most veterans do not establish long-term relationships with Vet Center counselors; however, those who do represent a core group who use services over extended periods for serious psychological problems, such as post-traumatic stress disorder. Other veterans usually visit Vet Center counselors only once or twice for social concerns, such as employment or benefit needs.

Substance Abuse Treatment: VA Programs Serve Psychologically and Economically Disadvantaged Veterans (GAO/HEHS–97–6, Nov. 5, 1996)

About 25 percent of all Department of Veterans Affairs (VA) patients discharged from inpatient settings in fiscal year 1995 were diagnosed with alcohol or drug abuse problems. VA estimates that it spent $2 billion—or about 12 percent of its total health care budget in fiscal year 1995—to treat veterans with substance abuse disorders. The VA health care system is now evaluating what services to offer and where to provide them. VA's new organizational structure, called the Veterans Integrated Service Network, replaces VA's central office and regional structure with 22 networks of hospitals and clinics. VA expects this consolidation and realignment to boost efficiency by trimming management layers, eliminating duplicative medical services, and making better use of available public and private resources. This report provides information on the (1) characteristics of veterans who receive substance abuse treatment, (2) services that VA offers to veterans with substance abuse problems, (3) methods that VA uses to monitor the effectiveness of its substance abuse treatment programs, (4) community services available to veterans who suffer from substance abuse disorders, and (5) implications of changing VA's current methods for delivering substance abuse treatment.

VA Clinic Funding (GAO/HEHS–95–273R, Sept. 19, 1995)

GAO provided information on how two VA medical centers financed their new free-standing primary care clinics to improve veterans' access to health care services. GAO noted that (1) the two centers have financed their 4 new clinics from savings derived from local management initiatives to improve operating efficiency; (2) the centers plan to open 10 more clinics over the next several years that will also be financed from other cost-saving initiatives; (3) the centers have contracted with predominantly rural clinics to provide primary care to veterans; (4) the yearly contract costs for the current and future clinics are expected to be less than $2 million; (5) cost savings have been derived from inpatient ward consolidations, patient utilization reviews, health education classes, service contract modifications, and staff reductions; and (6) the new clinics are expected to reduce veterans' use of fee-for-service private care and reimbursements for travel expenses to VA medical facilities.

VA Health Care: Better Data Needed to Effectively Use Limited Nursing Home Resources (GAO/HEHS–97–27, Dec. 20, 1996)

VA reported spending $1.6 billion in fiscal year 1995 on nursing home care for nearly 80,000 veterans—about 14 percent of the estimated demand by veterans for such care. VA provides nursing home care in its own facilities, contracts with community nursing homes, and pays state veterans' homes part of the cost to care for veterans. All veterans are eligible for nursing home care essentially on a first-come, first-served basis within VA's budget constraints. As the number of veterans aged 65 and older increases to 9.3 million by the year 2000, the demand for nursing home care will likely rise. The funds for VA nursing home care, however, are expected to be limited. This report provides information on the (1) distribution of veterans in VA, community, and state nursing homes; (2) costs to VA for these nursing homes; (3) factors affecting VA's use of community and state veterans' nursing homes; and (4) relative quality of the care provided by VA, community, and state veterans' homes.

VA Health Care: Effects of Facility Realignment on Construction Needs Are Unknown (GAO/HEHS–96–19, Nov. 17, 1995)

As part of the fiscal year 1996 budget, the President requested $524 million for major VA construction projects. These projects include the construction of two new VA medical facilities and major renovations at seven existing facilities. This report discusses how the projects are expected to benefit veterans and the relationships between the proposed projects and VA's recent efforts to realign all of its facilities into a new service network. GAO also discusses the potential effects of funding delays on VA's construction award dates and costs.

VA Health Care: Exploring Options to Improve Veterans' Access to VA Facilities (GAO/HEHS–96–52, Feb. 6, 1996)

Since its creation in 1930, VA's health care system has become one of the nation's largest networks of direct delivery health care providers, with 173 hospitals and 376 outpatient clinics nationwide. But because public and private health insurance programs have also grown, most veterans now have alternatives to VA health care. Many veterans indicate that they use private providers because they live too far from VA hospitals or outpatient clinics. VA has recently encouraged its facilities to improve veterans' access to VA health care. This report discusses (1) characteristics of recent users of VA medical facilities; (2) the geographic accessibility of VA and private medical facilities that provide standard benefits; and (3) options that VA facilities might want to consider to improve the accessibility of VA health care, such as locating new medical facilities closer to where veterans live and contracting with private providers.

VA Health Care: How Distance From VA Facilities Affects Veterans' Use of VA Services (GAO/HEHS–96–31, Dec. 20, 1995)

Living within 5 miles of a VA Hospital or outpatient clinic significantly increases the likelihood that veterans will use VA health care services. Although most veterans live within 25 miles of a VA

hospital or outpatient clinic, use of VA facilities declines significantly among veterans living more than 5 miles from a VA facility. Only about 11 percent of veterans live within 5 miles of a VA hospital providing acute medical and surgical care and 17 percent within 5 miles of a VA outpatient clinic. Use of VA health care services does not decline with distance as rapidly among veterans receiving VA compensation or pension payments. Even those veterans with a service-connected disability who live more than 100 miles from a VA outpatient clinic are more likely to avail themselves of VA outpatient services than are higher-income veterans with nonservice-connected disabilities who live within 5 miles of a VA outpatient clinic. Other factors that may contribute to differences in the use of VA services include broader eligibility and entitlement to outpatient care for service-connected and low-income veterans, veterans' ages, and differences in available resources.

VA Health Care: Issues Affecting Eligibility Reform Efforts (GAO/HEHS–96–160, Sept. 11, 1996)

Pursuant to a congressional request, GAO reviewed various proposals that would simplify and expand eligibility for veterans' health care benefits. GAO found that (1) eligibility requirements for veterans' health care benefits have become increasingly complex and a source of frustration to veterans, VA physicians, and administrators; (2) VA does not have a defined or uniform benefits package and cannot ensure the availability of covered services; (3) VA physicians sometimes must decide to either deny needy veterans noncovered services or ignore the law and provide the noncovered services free of charge; (4) VA health care eligibility reform could expand the types of services provided and allow veterans lacking supplemental insurance access to needed services; (5) the four legislative proposals reviewed could more than double the demand for VA outpatient services, cause VA to ration care, and force VA to seek larger appropriations to preserve its safety-net mission; (6) alternative approaches including limiting the number of eligible veterans and range of benefits added or increasing cost sharing could preserve VA's ability to provide specialized services; (7) although the American Legion proposal incorporates all three of these approaches and is a basis for future reform proposals, changes need to be made to reduce the number of veterans covered, exempt VA from most federal contracting laws, and designate VA as a Medicare provider; and (8) one option to reduce the number of veterans who would be eligible under the proposal and target those veterans who have low incomes and lack supplemental insurance, would be to limit VA benefits for veterans with no service-related disabilities.

VA Health Care: Improving Veterans' Access Poses Financial and Mission-Related Challenges (GAO/HEHS–97–7, Oct. 25, 1996)

VA runs one of the nation's largest health care delivery systems, including more than 170 hospitals and nearly 400 clinics, over one-half of which are free-standing clinics. Veterans must often travel long distances, however, to receive care at these facilities. VA has a policy encouraging its hospitals to improve access to care for eligible veterans. As a result, many hospitals have either planned or

established new, free-standing outpatient clinics, known as "access points." Access points provide primary care to veterans and generally refer those needing specialized services or inpatient stays to VA hospitals. This report examines VA's policy for establishing access points. GAO discusses the legal, financial, and mission-related implications of VA's efforts to establish access points.

VA Health Care: Need for Brevard Hospital Not Justified (GAO/HEHS–95–192, Aug. 29, 1995)

VA assumed control of the former Naval Hospital in Orlando, Florida, in June 1995. VA plans to convert the hospital into a nursing home while continuing to operate an existing outpatient clinic. VA also plans to build a new hospital and nursing home in Brevard County, 50 miles from Orlando. GAO concludes that VA's conversion of the former Orlando Naval Hospital into a nursing home and construction of a new hospital and nursing home in Brevard County is not the most prudent and economical use of its resources. These construction projects are based on questionable planning assumptions that may result in the unneeded expenditure of federal dollars. Specifically, VA did not adequately consider the availability of hundreds of community nursing home beds and unused VA hospital beds as well as potential decreases in future demand for VA hospital beds. VA could achieve its goals in Central Florida by using existing capacity.

VA Health Care: Opportunities for Service Delivery Efficiencies Within Existing Resources (GAO/HEHS–96–121, July 25, 1996)

VA, which operates one of the nation's largest health care systems, faces increasing pressure to contain or reduce spending as part of governmentwide efforts to balance the budget. This report discusses ways VA could operate more efficiently and reduce the resources needed to meet the needs of veterans in what is commonly referred to as the mandatory care category. GAO addresses (1) VA's forecasts of future resource needs, (2) opportunities to run VA's system more efficiently, (3) differences between VA and the private sector in efficiency incentives, and (4) recent VA efforts to reorganize its health care system and create efficiency incentives. GAO concludes that successful implementation of a range of reforms, coupled with reduced demand for services, could save the VA health care system billions of dollars during the next 7 years. The success of these efforts, however, depends on introducing efficiency incentives at VA that have long existed in the private sector.

VA Health Care: Opportunities to Significantly Reduce Outpatient Pharmacy Costs (GAO/HEHS–97–15, Oct. 11, 1996)

All pharmacies run by VA provide medications and medical supplies that are available over the counter through other local outlets. The most frequently dispensed over-the-counter products include (1) medications, such as aspirin and insulin; (2) dietary supplements, including Sustacal and Ensure; and (3) medical supplies, such as alcohol prep pads, lancets, and glucose test strips. Unlike VA, public and private health plans cover few, if any, over-the-counter products for their beneficiaries. VA pharmacies dispensed

over-the-counter products more than 15 million times during fiscal year 1995 at an estimated cost of $165 million, including handling costs of $48 million. VA recovered about $7 million through veterans' copayments, or about four percent of its total over-the-counter costs. Although many veterans shared a modest portion of the costs and some paid the full amount, most veterans paid nothing. GAO suggests several ways that VA could cut costs associated with dispensing over-the-counter products or boost revenues from copayments. First, VA could more narrowly define when to provide over-the-counter products. Second, VA could more efficiently dispense over-the-counter products and collect copayments. Third, VA facilities could further reduce the number of over-the-counter products available to veterans on an outpatient basis. Finally, the Congress could expand copayment requirements.

VA Health Care: Physician Peer Review Identifies Quality of Care Problems But Actions to Address Them Are Limited (GAO/HEHS–95–121, July 7, 1995)

Physician peer review—physicians reviewing the work of other physicians—is crucial to ensuring that quality care is provided to patients. An essential element of peer review is management support for actions recommended by the peer review process. Without such support, peer review is meaningless because no action is taken on the peer reviewers' recommendations. This report examines the relationship between problem identification and problem resolution in VA physician peer review. GAO discusses (1) how the results of VA peer review are being used in reprivileging and disciplining doctors with performance problems; (2) what the impediments to effective peer review are; and (3) whether VA is taking steps to identify, follow up on, and report to state medical boards and the National Practitioner Data Bank on the actions of those physicians who are not performing in accordance with professional standards.

VA Health Care: Retargeting Needed to Better Meet Veterans' Changing Needs (GAO/HEHS–95–39, Apr. 21, 1995)

Many veterans have health care needs that are not adequately met through current health care programs, including VA's health care system. About one-third of the nation's homeless are veterans, nearly one-half of whom have serious mental problems, suffer from substance abuse, or both. The homeless have limited access to health care services and may not seek medical treatment. About 38 percent of male and 25 percent of female Vietnam veterans with post-traumatic stress disorder have not sought treatment. About 91,000 low-income, uninsured veterans with no apparent health care options indicated in a 1987 VA survey that they had never used VA health facilities because they were unaware that they were eligible or they had concerns about the quality or accessibility of VA health care. VA cannot adequately address many of these health care needs because (1) it relies primarily on direct delivery of health care services in VA facilities, (2) its complex eligibility and entitlement provisions limit the services that veterans can obtain from VA facilities, and (3) space and resource limitations prevent eligible veterans from obtaining covered services. This report

presents several options for restructuring VA's health care system to enable it to better meet the health care needs of veterans.

VA Savings Options (GAO/HEHS–95–165R, May 18, 1995)

GAO reviewed several options for achieving budgetary savings in VA's health care system without adversely affecting the current level of services provided to low-income or disabled veterans. GAO noted that VA could achieve health care cost savings by (1) shifting care from VA hospitals to alternative settings, such as ambulatory care; (2) adopting state veterans' home charging policies; (3) authorizing estate recovery programs; (4) increasing copayments for health services; (5) reducing or eliminating care for veterans with high incomes; (6) delaying VA hospital construction projects; (7) increasing the use of community nursing homes as an alternative to new VA nursing homes; (8) strengthening veterans' income verification requirements; (9) changing VA dispensing practices for prescription drugs; (10) eliminating the dispensing of over-the-counter drugs; (11) recovering the full costs of services provided to nonveterans; (12) consolidating its mail service pharmacies; (13) consolidating underutilized services in nearby VA medical centers; (14) suspending locality-based pay adjustments; and (15) restructuring its ambulatory care system.

VA's Florida Network Planning (GAO/HEHS–95–160R, May 16, 1995)

GAO addressed a series of questions related to VA's acquisition and intended use of the Naval Hospital in Orlando, Florida. GAO noted that (1) the VA Integrated Planning Model is based upon veterans' ages, average lengths of hospital stays, and number of patients treated in selected medical services; (2) VA used its model to project veterans' inpatient, outpatient, and nursing home needs for the year 2005; (3) VA did not consider the number of VA hospitals per square mile per capita in making its construction planning decisions for central Florida and significantly overestimated the number of hospital beds it would need in 1995; (4) it is unclear why Florida's hospital utilization rates are far below the national rates; (5) the veteran population is expected to decline in Florida and the nation over the next 15 years, while the total population in these areas is expected to increase; (6) there are waiting periods for certain elective medical treatments in central Florida VA hospitals due to staffing reductions; and (7) the VA Integrated Planning Model adequately accounts for the aging nature of the veteran population.

VA Health Care: Travis Hospital Construction Project Is Not Justified (GAO/HEHS–96–198, Sept. 3, 1996)

Pursuant to a congressional request, GAO provided information on VA's planned construction of an outpatient clinic and additional bed space at the David Grant Medical Center, focusing on (1) whether the project could be adequately justified and (2) whether there are cost-effective alternatives to planned hospital construction. GAO found that (1) VA planned construction of additional bed space and an outpatient clinic at Travis Air Base appears to be unjustified; (2) VA has not revised its construction plans to reflect the

changes that have occurred in the health care marketplace and advances in medical practices and technology that have reduced the demand for hospital beds in northern California; (3) VA has not considered whether its construction plans will negatively affect surrounding community hospitals; (4) the veteran population in northern California is expected to decline by 25 percent between 1995 and 2010 and may not be large enough to support a new outpatient clinic; (5) VA is adequately meeting the health care needs of Northern California Health Care System veterans; (6) although VA clinics have experienced some space constraints, they have had no problem in placing veterans needing hospital care and using community hospitals for medical emergencies; (7) alternatives to VA construction plans include modifying VA hospital referral patterns, expanding use of other military and VA hospitals, granting VA more authority to contract for lower cost community hospital services, or allowing it to purchase a local Air Force hospital for use as a hospital or outpatient clinic; (8) VA Sierra Pacific Network officials are evaluating the best way to meet veterans' future health care needs, make better use of VA facilities, and increase the use of private and other public facilities; and (9) Congress' decision on whether to fund the construction plan will significantly affect the alternatives and options that can be implemented.

VA Health Care: Trends in Malpractice Claims Can Aid in Addressing Quality of Care Problems (GAO/HEHS–96–24, Dec. 21, 1995)

From fiscal year 1990 to fiscal year 1994, malpractice claims against VA medical centers have steadily increased, from 678 to 978, with payments made to claimants totaling more than $200 million. In 1992, VA entered into an agreement with the Armed Forces Institute of Pathology (AFIP) to analyze trends in VA malpractice claims. VA's quality assurance staff, however, are making only limited use of the information being developed by AFIP. Although malpractice claim information is available from DOD, it is not comparable to the malpractice data that VA collects. The main reason for the lack of comparability is the absence of a standard data collection format. Nonetheless, GAO found that DOD information may be useful to VA to draw comparisons in areas in which malpractice claims are being generated, such as incidents related to surgery, diagnosis, and medication.

Veterans' Benefits: Basing Survivors' Compensation on Veterans' Disability Is a Viable Option (GAO/HEHS–95–30, Mar. 6, 1995)

In 1993, VA's Dependency and Indemnity Compensation (DIC) program paid benefits totaling $2.7 billion to about 276,000 surviving spouses of service members who had died on active duty and surviving spouses of some disabled veterans. These benefits were paid under the Veterans' Benefits Act of 1992, which changed the basis for DIC benefits from the military rank of the deceased service member or veteran to a flat rate for all surviving spouses. This report (1) estimates DIC recipients' total income and determines the kinds and the amounts of benefits received from other programs, (2) determines the financial impact on surviving spouses of

the deaths of totally disabled veterans and of veterans who were receiving supplemental payments because they had multiple severe disabilities and could not care for themselves, and (3) assesses alternative ways to set DIC benefits.

Veterans' Benefits: Better Assessments Needed to Guide Claims Processing Improvements (GAO/HEHS–95–25, Jan. 13, 1995)

Slow claims processing and poor customer service have long been recognized as serious problems for VA. As early as 1990, VA began encouraging its regional offices to improve their claims processing system, but processing times and backlogs have increased rather than decreased. At the end of fiscal year 1994, nearly 500,000 claims awaited a VA decision. About 65,000 of these were initial disability compensation claims. On average during fiscal year 1994, veterans waited more than 7 months for their initial disability claims to be decided and, if approved, payments to begin; some waited much longer. This report discusses VA's current plans to change regional office claims processing and assesses VA's plans to determine the effectiveness of those changes.

Veterans' Benefits: Effective Interaction Needed Within VA to Address Appeals Backlog (GAO/HEHS–95–190, Sept. 27, 1995)

Veterans often wait months for VA to decide their compensation and pension claims. In addition, the 40,000 veterans who appeal VA's decisions each year wait much longer—more than 2 years for a final decision, according to agency officials. GAO found that VA's appeals process is increasingly bogged down, and the outlook for the future is not bright. Legislation and court rulings have expanded veterans' rights but also expanded VA's adjudication responsibilities. VA is having difficulty integrating these responsibilities into its already complex and unwieldy adjudication process. Since 1991, the number of appeals awaiting board action has risen by 175 percent and the average processing time has increased by more than 50 percent. Studies by GAO, VA, and others have recommended the need for autonomous organizations in VA to work together to identify and resolve problems. Yet GAO found that problems continue to go unidentified and unresolved. Unless VA clearly defines its adjudication responsibilities, it will be unable to determine whether it has the resources to meet those responsibilities and whether new solutions may be needed, including laws amending VA's responsibilities or reconfiguring the department.

Veterans' Benefits: VA Can Prevent Millions in Compensation and Pension Overpayments (GAO/HEHS–95–88, Apr. 28, 1995)

Despite its responsibility to ensure accurate benefit payments, VA continues to overpay veterans and their survivors hundreds of millions of dollars in compensation and pension benefits each year. VA has the ability to prevent millions of dollars in overpayments but has not done so because it has not focused on prevention. For example, VA does not use available information, such as when beneficiaries will become eligible for Social Security benefits, to prevent the overpayments from occurring. Furthermore, VA does not systematically collect, analyze, and use information on the spe-

cific causes of overpayments that will help it target preventive efforts.

Veterans Compensation: Offset of DOD Separation Pay and VA Disability Compensation (GAO/NSIAD–95–123, Apr. 3, 1995)

DOD uses separation pay to induce people to serve in the military despite the risk of involuntary separation. The Congress authorized special separation pay to minimize the use of involuntary separations in the ongoing force drawdown. Pay offsets prevent service members from receiving dual compensation for a single period of service. Repealing offsets for separation and disability pay would cost the federal government an estimated $435 million for those service members who separated during fiscal years 1995 to 1999. A repeal would cost about $799 million if it was made retroactive to fiscal year 1992, when the special separation pay program began. Separation and disability pay offsets have not significantly undermined the voluntary separation incentive. According to DOD, the bulk of the drawdown since fiscal year 1992 has been accomplished through voluntary separations. DOD requires the services to inform separating service members about the offset.

Veterans' Health Care: Facilities' Resource Allocations Could Be More Equitable (GAO/HEHS–96–48, Feb. 7, 1996)

VA confronts the challenge of equitably allocating more than $16 billion in health care appropriations across a nationwide network of hospitals, clinics, and nursing homes. The challenge is made greater by the changing demographics of veterans. Although nationally the veteran population is declining, some veterans have relocated from the Northeast and the Midwest to southern and southwestern states in the past decade, offsetting veteran deaths in these states. VA has tried for years to implement an equitable resource allocation method—one that would link resources to facility workloads and foster efficiency. The need for such a system has become more urgent in recent years because of the demographic shift in veterans and the dramatic changes in health care resulting from increasingly limited resources. The resource allocation system can help VA achieve this goal by forecasting workload changes and providing comparative data on facilities' costs. Nonetheless, VA has not taken steps to overcome several barriers that can prevent it from acting on the data the system produces. If the system is to live up to its potential, several changes must be made, including linking resource allocation to VA's strategic plan, conducting a formal review and evaluation of facility cost variations, evaluating the basis for not allocating funds through resource planning and management, and using resource planning and management to overcome differences in veterans' access to care.

Veterans' Health Care: VA's Approaches to Meeting Veterans' Home Health Care Needs (GAO/HEHS–96–68, Mar. 15, 1996)

In fiscal year 1994, VA provided home health care to more than 40,000 veterans at a cost of $64 million to VA and millions more to Medicare. By providing them with home health care, VA allows these veterans to continue living at home and in their communities, rather than receive care in institutions. Veterans need home

health care for various reasons. Some veterans have chronic health problems, such as heart disease, and require periodic visits, while others have been discharged from VA medical centers following surgery and need dressings changed or medications administered. The number of veterans needing home health care is expected to grow as the veteran population ages and as VA discharges patients from its hospitals to reduce the costs of hospitalization. This report provides information on (1) the characteristics and the services of the home health care programs that VA uses, (2) the available data on program costs, and (3) the way in which VA ensures that veterans receive quality service.

Vocational Rehabilitation: VA Continues to Place Few Disabled Veterans in Jobs (GAO/HEHS–96–155, Sept. 3, 1996)

Pursuant to a congressional request, GAO reviewed VA's vocational rehabilitation program, focusing on (1) the percentage of rehabilitated veterans, (2) the services provided, (3) the characteristics of clients served, (4) the cost of rehabilitation, and (5) VA's efforts to improve program effectiveness. GAO found that (1) the VA vocational rehabilitation program continues to focus on training and higher education, but it places few veterans in jobs; (2) from 1991 to 1995, VA rehabilitated only about 8 percent of eligible veterans, while 51 percent continued to receive program services; (3) those program participants with a serious employment handicap declined from 40 percent to 29 percent over the last 5 years and those with a 10-to-20 percent disability increased from 34 percent to 42 percent; (4) over 90 percent of program applicants were male and had completed high school and almost 25 percent had taken some college courses; (5) VA spent, on average, about $20,000 on each employed veteran and $10,000 on each program dropout; (6) over one-half of VA rehabilitation costs were for veterans' subsistence allowances; (7) state vocational rehabilitation agencies rehabilitated 37 percent of eligible individuals, while the remaining individuals continued to receive state program services; (8) the state vocational rehabilitation programs provided a wide range of rehabilitation services, and a majority of their clients were severely disabled; (9) almost 60 percent of the state program applicants were male and had completed high school, and 17 percent had completed some college courses; (10) the state programs spent, on average, about $3,000 on each rehabilitated client and about $2,000 on each dropout, none of which covered clients' living expenses; (11) VA established a design team in 1995 to improve program effectiveness, primarily by increasing the percentage of suitably employed veterans, improving staff job finding and placement skills, and developing a data management system; and (12) VA plans to implement these program changes in fiscal year 1997.

VHA's Management Improvement Initiative (GAO/HEHS–96–191R, Aug. 30, 1996)

Pursuant to a congressional request, GAO examined VA's progress in implementing management improvement initiatives to its health care system, administered by the Veterans Health Administration (VHA). GAO noted that (1) VA has concentrated its efforts on implementing those initiatives aimed at reducing centrally

funded activities while deferring most of the more significant recommendations and (2) VA addressed the 1995 and 1996 budget reductions mainly through across-the-board cuts. In an August 20, 1996, letter, VA commented to GAO that the agency is making considerable progress toward implementing those initiatives still appropriate.

[Enclosure II]

CALENDAR YEARS 1995 AND 1996 TESTIMONIES ON ISSUES AFFECTING OLDER AMERICANS

GAO testified 69 times before congressional committees during calendar years 1995 and 1996 on issues relating to older Americans. Of these testimonies, 2 were on education and employment, 35 on health, 3 on housing, 20 on income security, and 9 on veterans and DOD issues.

EDUCATION AND EMPLOYMENT ISSUES

Department of Labor: Rethinking the Federal Role in Worker Protection and Workforce Development (GAO/T–HEHS–95–125, Apr. 4, 1995)

Although the Department of Labor has accomplished much over the years, its current approaches to worker protection are dated and frustrate both workers and employers. What is needed is greater service orientation, improved communication, greater access to compliance information, and expanded meaningful input into the standard-setting and enforcement processes. By developing alternative regulatory strategies that supplement and even replace its current labor-intensive compliance and enforcement approach, Labor can carry out its responsibilities in a less costly, more effective manner. Similarly, in the workforce development area, the government's job training effort consists of a patchwork of federal programs with similar goals, conflicting requirements, overlapping populations, and questionable outcomes. The roughly $20 billion appropriated in fiscal year 1995 for job training assistance to adults and out-of-school youth was distributed to 15 agencies, including Labor, and supported 163 separate programs. This situation suggests that a major overhaul and consolidation of the programs are needed.

Senior Community Service Employment: Program Delivery Could Be Improved Through Legislative and Administrative Actions (GAO/T–HEHS–96–57, Nov. 2, 1995)

The Labor Department's Senior Community Service Employment Program finances part-time minimum-wage community service jobs for about 100,000 poor elderly Americans. GAO found that Labor distributes program funds through noncompetitive grants to 10 national organizations, called national sponsors, and to state agencies. These national sponsors and state agencies, in turn, use the grant funds to finance local employment projects run by community service host agencies, such as libraries, nutrition centers, and parks, that directly employ older Americans. GAO found that the relative distribution of funds to the national sponsors and state

agencies along with Labor's method of implementing the hold-harmless provisions have resulted in the distribution of funds among and within states that bear little relationship to actual need. GAO also found that, under Labor's regulations, expenditures that GAO believes to be administrative in nature may be charged to another cost category, allowing grantees to exceed the statutory 15-percent limit on administrative costs.

HEALTH ISSUES

Blue Cross and Blue Shield: Change in Pharmacy Benefits Affects Federal Enrollees (GAO/T–HEHS–96–206, Sept. 5, 1996)

Of the 400 health plans available to federal workers, the Blue Cross and Blue Shield plan is the largest, covering nearly 42 percent of the 4 million federal enrollees. To control drug costs, Blue Cross and Blue Shield recently began requiring federal enrollees to pay 20 percent of the price of prescriptions purchased at participating retail pharmacies. Previously, federal enrollees did not have to pay anything for prescription drugs. Enrollees may continue to receive drugs free of charge, however, if they buy them through the plan's mail-order program. Members of Congress and retail pharmacies have raised concerns about the quality of mail-order services and the effect of the change on the business of retail pharmacies that serve plan enrollees. To provide pharmacy services to its federal employee health plan, Blue Cross and Blue Shield contracts with two pharmacy benefit managers (PBM): PCS Health Systems, Inc., which provides retail prescription drug services, and Merck-Medco Managed Care, Inc., which provides mail-order drug services. This testimony discusses (1) Blue Cross and Blue Shield's reasons for the benefit change, (2) how it was implemented, (3) the change's effect on retail pharmacies, and (4) the extent to which PCS and Merck-Medco have met their contract requirements for services provided to the federal health plan.

Community Health Centers: Challenges in Transitioning to Prepaid Managed Care (GAO/T–HEHS–95–143, May 4, 1995)

As states move to prepaid managed care to control costs and improve access for their Medicaid clients, the number of participating community health centers continues to grow. Medicaid prepaid managed care is not incompatible with health centers' mission of delivering health care to medically underserved populations. However, health centers face substantial risks and challenges as they move into these arrangements. Such challenges require new knowledge, skills, and information systems. Centers lacking expertise and systems face an uncertain future, and those in a vulnerable financial position are at even greater risk. Today's debate over possible changes in federal and state health programs heightens the concern over the financial vulnerability of centers participating in prepaid managed care. If this funding source continues to grow as a percentage of total health center revenues, centers must face building larger cash reserves while not compromising services to vulnerable populations.

Consumer Health Informatics: Emerging Issues (GAO/T–AIMD–96–134, July 26, 1996)

Technology has increased the amount of health information available to the public, allowing consumers to become better educated and more involved in their own health care. Government and private health care organizations rely on a variety of technologies to disseminate health information on preventive care, illness and injury management, treatment options, post-treatment care, and other topics. This report discusses consumer health informatics—the use of computers and telecommunications to help consumers obtain information, analyze their health care needs, and make decisions about their own health. GAO provides information on (1) the demand for health information and the expanding capabilities of technology; (2) users' and developers' views on potential systems advantages and issues surrounding systems development and use; (3) government involvement—federal, state, and local—in developing these technologies; and (4) the status of related efforts by HHS. As part of this review, GAO surveyed consumer health informatics experts and presents their views on issues that need to be addressed when developing consumer health information systems.

Employer-Based Health Plans: Issues, Trends, and Challenges Posed by ERISA (GAO/T–HEHS–95–223, July 25, 1995)

As the movement for comprehensive federal health care reform has lost steam, the focus of reform has shifted to the states and private market. States remain concerned about the growing number of persons lacking health coverage and about financing health plans for poor persons. Employers have become increasingly aggressive in managing their health plans and have adopted various managed care plans and innovative funding arrangements. However, ERISA effectively blocks states from directly regulating most employer-based health plans, although it allows states to regulate health insurers. GAO found that nearly 40 percent of enrollees in employer-based health plans—44 million people—are in self-funded plans. The divided federal and state framework for regulating health plans produces a complex set of trade-offs. Self-funded plans, which are exempt from state regulation under ERISA, provide employers greater flexibility to design a health benefits package that may have been less feasible to provide under state regulation. At the same time, however, states are unable to extend regulations, such as solvency standards, preexisting condition clause limits, and guaranteed issue and renewal requirements, even indirectly, to enrollees in these self-funded plans.

Fraud and Abuse: Medicare Continues To Be Vulnerable to Exploitation by Unscrupulous Providers (GAO/T–HEHS–96–7, Nov. 2, 1995)

Most Medicare providers try to abide by program rules and strive to meet beneficiaries' needs. Nevertheless, Medicare is overwhelmed in its attempts to keep pace with, much less stay ahead of, those bent on cheating the system. GAO's recent investigations of Medicare fraud and abuse have implicated home health agencies, medical suppliers, pharmacists, rehabilitation therapy companies, and clinical laboratories. They are attracted by the high reimburse-

ment levels for some supplies and services, and the few barriers to entry into this lucrative marketplace. Once engaged in these profitable activities, exploitative providers too often escape detection because of inadequate claims scrutiny, elude pursuit by law enforcement authorities because of the authorities' limited resources and fragmented responsibilities, and face little risk of speedy or appropriate punishment.

Fraud and Abuse: Providers Excluded From Medicaid Continue To Participate in Federal Health Programs (GAO/T–HEHS–96–205, Sept. 5, 1996)

Although HHS' Office of Inspector General (OIG) has excluded thousands of health care providers from state Medicaid programs because they committed fraud or delivered poor care to beneficiaries, weaknesses in the OIG's process could leave such providers on the rolls of federal health programs for unacceptable periods of time. This puts at risk the health and safety of beneficiaries and compromises the financial integrity of Medicaid, Medicare, and other federal health programs. The weaknesses include (1) lengthy delays in the OIG's decision process, even in cases where a provider has been convicted of fraud or patient abuse and neglect; (2) inconsistencies among OIG field offices regarding which providers will be considered for nationwide exclusion; (3) states not informing the OIG about providers who agree to stop participating in their Medicaid programs even though the provider withdrew because of egregious patient care or abusive billing practices; and (4) how states use information from the OIG to remove excluded providers from state programs. Because of incomplete records in the OIG field offices, GAO could not reach a conclusion as to the magnitude of these problems.

Health Insurance Regulation: National Portability Standards Would Facilitate Changing Health Plans (GAO/T–HEHS–95–205, July 18, 1995)

Many Americans face discontinuity in their health care coverage when they change employers, and others do not change jobs because of concerns about losing health care coverage. GAO surveyed the status of federal and state insurance reforms and the number of individuals who would be affected by legislation to establish national portability standards. GAO found that federal and state laws reflect steps taken to improve the portability of health insurance, but the possibility remains that an individual's coverage would be reduced when changing jobs because most private health plans still require waiting periods before making people with preexisting conditions fully eligible for coverage. On the basis of existing data on the number of people who change jobs and studies on the effect of health insurance on job mobility, GAO estimates that up to 21 million Americans would benefit from legislation waiving preexisting condition exclusions for individuals who have maintained continuous health care coverage.

Medicaid: Experience With State Waivers To Promote Cost Control and Access to Care (GAO/T–HEHS–95–115, Mar. 23, 1995)

The Congress has begun reexamining the $131 billion Medicaid program—one of the fastest growing components of both federal and state budgets. In 1993, Medicaid cost nearly $100 billion more and served about 10 million more low-income residents than it did a decade ago. To contain exploding costs and enrollment, many states are seeking greater flexibility in implementing statewide Medicaid managed care programs. Currently, this flexibility is available only through the waiver authority established by section 1115 of the Social Security Act. Although many states have expressed interest in waivers, only four states have waivers in place. Two additional states have received federal approval, but their plans still must be ratified by state legislatures. States face significant challenges as they move from traditional fee-for-service systems into managed care. Specifically, the emphasis that states put on program implementation and oversight may affect whether states' managed care programs successfully contain costs while increasing access to quality health care.

Medicaid: Matching Formula's Performance and Potential Modifications (GAO/T–HEHS–95–226, July 27, 1995)

When the Medicaid program was established in 1965, a matching formula was developed to narrow differences likely to arise among Medicaid programs in wealthier and poorer states. By giving poorer states a higher federal match, it was believed that disparities would be reduced across states in (1) population groups and services covered in each state program and (2) the tax burden imposed by the financing of Medicaid relative to the size of the state's financial resources. GAO testified that the matching formula, with its reliance on per capita income as a measure of state wealth, has not significantly reduced wide differences in states' Medicaid programs or the tax burdens to support them. Large disparities persist in the coverage of population groups and types of services as well as in the burdens that state taxpayers bear in financing state programs. Modifying the formula could enhance the ability of federal payments to narrow program disparities.

Medicaid: Spending Pressures Drive States Toward Program Reinvention (GAO/T–HEHS–95–129, Apr. 4, 1995)

The $131 billion Medicaid program is at a crossroads. Between 1985 and 1993, Medicaid costs tripled and the number of beneficiaries rose by more than 50 percent. Medicaid costs are projected to rise to $260 billion, according to the Congressional Budget Office. Despite federal and state budgetary constraints, several states are exerting pressure to expand the program and enroll hundreds of thousands of new beneficiaries. The cost of expanded coverage, they believe, will be offset by the reallocation of Medicaid funds and the wholesale movement of beneficiaries into some type of managed care arrangement. This testimony examines (1) federal and state Medicaid spending, (2) some states' efforts to contain Medicaid costs and expand coverage through waiver of federal requirements, and (3) the potential impact of these waivers on federal spending and on Medicaid's program structure overall.

Medicaid: Spending Pressures Spur States Toward Program Restructuring (GAO/T–HEHS–96–75, Jan. 18, 1996)

Several factors, including federal mandates that expand eligibility, medical price inflation, and creative financing schemes, have boosted Medicaid costs. To contain these expenses, 22 states have recently sought waivers from federal regulations that limit their ability to run extensive managed care programs. Some of these states have required the enrollment of their acute care patients—primarily low-income women and children—into managed care programs and have expanded coverage to previously ineligible persons. Arizona, which runs a Medicaid managed care program under a federal waiver obtained more than 10 years ago, has lowered Medicaid spending by millions of dollars. It also leads the states in its development of information systems for collecting medical encounter data essential for assessing quality of care.

Medicaid: State Flexibility in Implementing Managed Care Programs Requires Appropriate Oversight (GAO/T–HEHS–95–206, July 12, 1995)

Requiring states to obtain waivers to broaden use of managed care may hamper their efforts to aggressively pursue cost-containment strategies. At the same time, because current program restrictions on managed care were designed to reinforce quality assurance, their absence requires the substitution of appropriate and adequate mechanisms to protect both Medicaid beneficiaries and federal dollars. Finally, the reinvestment of managed care savings to expand Medicaid coverage to several million additional persons suggests the need for up-front consultation with the Congress because of (1) the heavier financial burden such 1115 waivers may place on the federal government and (2) the issue of whether the U.S. Treasury should benefit from those savings.

Medicaid: Statewide Section 1115 Demonstrations' Impact on Eligibility Service Delivery and Program Cost (GAO/T–HEHS–95–182, June 21, 1995)

The growth of Medicaid, which accounted for $142 billion in federal and state outlays in 1994, is outpacing even the growth of Medicare. This is happening at a time when states are feeling pressured financially and are seeking ways to care for their uninsured populations. In response, states are, one by one, reinventing their Medicaid programs, using the authority of section 1115 waivers. Named for section 1115(a) of the Social Security Act, these waivers free states from some Medicaid restrictions on the use of managed care delivery systems. They also allow states to expand Medicaid-financed coverage to persons not normally eligible for Medicaid. This testimony presents a detailed look at Medicaid's growing expenditures, describes states' efforts to obtain section 1115 waivers, and summarizes the expenditures forecast of programs operating with waivers.

Medicare: Adapting Private Sector Techniques Could Curb Losses to Fraud and Abuse (GAO/T–HEHS–95–211, July 19, 1995)

Medicare's loss of billions of dollars to fraud and abuse could be curbed by adopting such private sector techniques as competitive

bidding, use of advanced software to detect gross overpayments, and preferred networks to better control costs. Medicare's losses stem from inappropriate pricing and inadequate scrutiny of claims for payments. Further, abusive and poorly qualified providers of medical services and supplies continue to participate in the program. These problems are not unique to Medicare. However, private payers are often able to react quickly, through a variety of management approaches, whereas Medicare's pricing methods and controls over utilization, which were consistent with health care financing and delivery when the program started, have not been adapted to today's environment.

Medicare: Allegations Against ABC Home Health Care (GAO/T–OSI–95–18, July 19, 1995)

In response to a congressional request, GAO investigated allegations against ABC Home Health Care, a home health agency (HHA), and its participation in the Medicare home health care program. In the Medicare program, providers may receive reimbursement for only those expenses that are reasonable in amount and related to patient care for eligible patients. Current and former employees told GAO that local ABC officer managers directed them to alter records to make it appear that patients continued to need home health visits. Additionally, managers directed employees to continue visiting patients who, in the employees' opinion, did not qualify for home health care because they no longer met Medicare rules defining homebound status. ABC also reportedly charged Medicare for the cost of acquiring other HHAs by paying owners a small sum up front and the balance in the form of salary under employment agreements, a practice that is inconsistent with Medicare regulations for reimbursement. Finally, according to former employees, some managers directed employees to market ABC and its services with the intent of charging Medicare for costs that were not reimbursable. GAO has shared information concerning possible illegal activities with appropriate law enforcement authorities.

Medicare Claims Billing Abuse: Commercial Software Could Save Hundreds of Millions Annually (GAO/T–AIMD–95–133, May 5, 1995)

With an investment of only $20 million in off-the-shelf commercial software, Medicare could save nearly $4 billion over 5 years by detecting fraudulent claims by physicians—primarily manipulation of billing codes. On the basis of a test in which four commercial firms reprocessed samples of more than 20,000 paid Medicare claims, GAO estimates that the software could have saved $603 million in 1993 and $640 million in 1994. GAO estimates that because beneficiaries are responsible for about 22 percent of the payment amounts—mainly in the form of deductibles and copayments—Medicare could have saved them $134 million in 1993 and $142 million in 1994. The test results indicate that only a small portion of providers are responsible for most of the abuses: fewer than 10 percent of providers in the sample had miscoded claims.

Medicare: Excessive Payments for Medical Supplies Continue Despite Improvements (GAO/T–HEHS–96–5, Oct. 2, 1995)

Despite improvements by HCFA in claims monitoring, problems in payments for medical supplies persist. The inflexibility of Medicare's fee schedule results in payment rates that are higher than wholesale and many retail prices. In addition, in the case of many part A claims, claims processing contractors do not know what they are paying for and in the case of part B claims, have not had a basis for questioning unreasonably high charges. Neither type of contractor has been able to test claims for possible duplicate payments. For these reasons, Medicare has lost hundreds of millions of dollars in unnecessary payments. By obtaining the legislative authority to modify payment rates in accordance with market conditions, requiring providers to itemize claims, and introducing the relevant medical policies before paying for new benefits, HCFA could reduce its dollar losses arising from medical supply payments. Contractors could avoid paying unreasonable charges and making duplicate payments.

Medicare: High Spending Growth Calls for Aggressive Action (GAO/T–HEHS–95–75, Feb. 6, 1995)

The government faces strong obstacles to bringing Medicare expenditures under control. Broad-based payment system reforms have slowed overall spending, but Medicare growth rates remain higher than overall inflation. And although more reforms may be needed, their nature is the subject of much debate. There is less dispute, however, that Medicare pays too much for some services and supplies. Fiscal pressures have increasingly led private and state-government payers to negotiate discounts with providers and to manage the form and the volume of care. Medicare has not exercised its potential market power in similar fashion when buying some services, such as rehabilitation therapy. GAO suggests that the government change the reimbursement policies for these excessively costly services to ensure that it is acting as a prudent buyer. Also, greater vigilance over wasteful or inappropriate payments could better protect Medicare against fraudulent and abusive billings from providers.

Medicare: Increased Federal Oversight of HMOs Could Improve Quality of and Access to Care (GAO/T–HEHS–95–229, Aug. 3, 1995)

This testimony discusses problems that HCFA has had monitoring HMOs it contracts with to provide services to Medicare beneficiaries and ensuring that they comply with Medicare's performance standards. GAO found weaknesses in HCFA's quality assurance monitoring, enforcement measures, and appeal processes. Although HCFA routinely reviews HMO operations for quality, these reviews are generally perfunctory and do not consider the financial risks that HMOs transfer to providers. Moreover, HCFA collects virtually no data on services received through HMOs to enable HCFA to identify providers who may be underserving beneficiaries. In addition, HCFA's HMO oversight has two other major limitations: enforcement actions are weak and the beneficiary appeal process is slow. HCFA's current regulatory approach to ensuring

good HMO performance appears to GAO to lag behind the private sector.

Medicare Managed Care: Enrollment Growth Underscores Need to Revamp HMO Payment Methods (GAO/T–HEHS–95–207, July 12, 1995)

Rapid growth in the number of Medicare beneficiaries in HMOs increases the urgency of correcting rate-setting flaws that result in unnecessary Medicare spending. By not tailoring its HMO capitation payment to how healthy or sick HMO enrollees are, HCFA cannot realize the savings that private-sector payers capture from HMOs. Two lessons can be learned from GAO's review of ways to fix Medicare's HMO capitation payments. First, a multipronged approach to rate setting makes sense. The large disparities in market conditions between states call for solutions keyed to market conditions. Second, with respect to achieving the promise of such initiatives, details matter. How these strategies are designed and implemented could mean the difference between success and failure. GAO believes that in the short term, HCFA can overcome its capitation problem by introducing a better health status risk adjustor. HCFA should also promptly test competitive bidding and other promising approaches to setting HMO rates that reduce Medicare costs.

Medicare Managed Care: Program Growth Highlights Need to Fix HMO Payment Problems (GAO/T–HEHS–95–174, May 24, 1995)

(This testimony is similar to our July 12, 1995, testimony summarized above.)

Medicare: Millions Can Be Saved by Screening Claims for Overused Services (GAO/T–HEHS–96–86, Feb. 8, 1996)

Medicare contractors routinely pay hundreds of millions of dollars in Medicare claims without first determining if the services provided are necessary. GAO reviewed payments to doctors for six groups of high-volume medical procedures—ranging from eye examinations to chest X rays—that accounted for nearly $3 billion in Medicare payments in 1994. GAO also surveyed 17 contractors to determine if they had used medical necessity criteria in their claims processing to screen for these six groups of procedures. For each of the six groups, more than half of the 17 contractors failed to use automated screens to flag claims for unnecessary, inappropriate, or overused treatments. These prepayment screens could have saved millions of taxpayer dollars now wasted on questionable services. Problems with controlling payments for widely overused procedures continue because HCFA lacks a national strategy to control these payments. HCFA now relies on contractors to focus on procedures where local use exceeds the national average. Although this approach helps reduce local overuse of some procedures, it is not designed to control overuse of a procedure nationwide.

Medicare: Modern Management Strategies Could Curb Fraud, Waste, and Abuse (GAO/T–HEHS–95–227, July 31, 1995)

Medicare's vulnerability to provider exploitation of its billing system stems from a combination of factors: (1) higher than market rates for some services, (2) inadequate checks for detecting fraud and abuse, (3) superficial criteria for confirming the authenticity of providers billing the program, and (4) weak enforcement efforts. Various health care management techniques help private payers avoid these problems, but Medicare generally does not use these techniques. The program's pricing methods and controls over utilization have not kept pace with changes in health care financing and delivery. To some extent, the predicament inherent in public programs—the uncertain line between adequate managerial control and excessive government intervention—helps explain the dissimilarity in the ways in which Medicare and private health insurers run their respective "plans." GAO believes that a viable strategy for remedying the program's weaknesses consists of adapting the health care management approach of private payers to Medicare's public payer role. This would entail (1) more competitively developed payment rates, (2) beefed-up fraud and abuse detection that uses modern information systems, and (3) more rigorous criteria for granting authorization to bill the program.

Medicare: Modern Management Strategies Needed to Curb Program Exploitation (GAO/T–HEHS–95–183, June 15, 1995)

(This testimony is similar to our July 31, 1995, testimony described above.)

Medicare: Opportunities Are Available to Apply Managed Care Strategies (GAO/T–HEHS–95–81, Feb. 10, 1995)

Although the private sector quickly embraced managed care as an effective way to control the growth of health care costs, Medicare has moved more slowly. GAO believes that Medicare could benefit from the experience of the private sector and should test such managed care strategies as competitive bidding for HMOs. Using market power to negotiate with HMOs over price and increasingly over quality and the production of report-card-type information, large employers are becoming more prudent and sophisticated purchasers of health care. The particulars of these efforts may not be directly transferable to the federal government, but their goals of using incentive-based solutions to contain costs, guarantee quality, and inform consumers are worthy of consideration and testing.

Medicare: Private Payer Strategies Suggest Options to Reduce Rapid Spending Growth (GAO/T–HEHS–96–138, Apr. 30, 1996)

Improvements to Medicare's traditional fee-for-service program could yield much-needed savings. With better management, this program, which now serves about 90 percent of beneficiaries, could run more efficiently while continuing to provide good service to the nation's elderly. This means allowing Medicare to use tools similar to those used by private payers to manage health care costs. Negotiated discounts, competitive bidding, preferred providers, case

management utilization reviews—these and other tools allow private payers to use market forces to control health care costs. Most, however, are not authorized for general use by HCFA, which runs Medicare. This results in a publicly financed program that pays higher-than-market rates for some goods and services and sometimes pays without question for improbably high bills. Recent HCFA efforts and pending legislation to address these problems appear promising. In addition, HCFA should test the feasibility of applying management strategies in high-cost, high-utilization areas. Finally, the Congress needs to give HHS the flexibility to make prompt price adjustments.

Medicare: Private Sector and Federal Efforts to Assess Health Care Quality (GAO/T–HEHS–96–215, Sept. 19, 1996)

HCFA now estimates that 4.3 million Medicare beneficiaries are enrolled in HMOs. Enrollment is believed to be growing at a rate of 100,000 new members per month. This testimony discusses ways to ensure that quality care is provided to the Medicare beneficiaries joining these HMOs. HCFA, which runs Medicare, finds the potential cost savings associated with managed care attractive. Concerns have been raised, however, that the cost control strategies employed by HMOs could undermine the quality of care. This testimony discusses (1) quality assessment methods used by large corporate purchasers of health insurance from HMOs, (2) quality assessment methods used by HCFA in administering the Medicare HMO program, (3) quality assessment methods HCFA plans for the future, and (4) what both corporate purchasers and HCFA are doing to share information about quality with employees and Medicare beneficiaries.

Medicare: Rapid Spending Growth Calls for More Prudent Purchasing (GAO/T–HEHS–95–193, June 28, 1995)

Last year, federal spending for Medicare totaled $162 billion—more than $440 million a day. In March 1995, the Congressional Budget Office estimated that these outlays would approach $350 billion by 2002. In 2005, they could exceed $460 billion unless changes are made. This testimony discusses ways in which the Medicare program could avoid excessive or unnecessary spending. GAO examines areas of rapid spending growth and ways to conserve program dollars—mainly by revising reimbursement policies and better controlling unwarranted use of services.

Medicare: Reducing Fraud and Abuse Can Save Billions (GAO/T–HEHS–95–157, May 16, 1995)

Medicare is overwhelmed in its efforts to keep pace with, much less stay ahead of, those bent on cheating the system. Various factors converge to create a particularly rich environment for profiteers. These include the following: (1) weak fraud and abuse controls to detect questionable billing practices, (2) few limits on those who may bill—companies using post office box numbers have qualified to bill the program for virtually unlimited amounts—and (3) overpayment for services. This testimony describes how providers exploit the system, why they are able to do so, and what steps Medicare has taken and what remains to be done to protect the

program and the taxpayers against fraudulent reimbursement schemes and abusive billing practices.

Medicare Transaction System: Strengthened Management and Sound Development Approach Critical to Success (GAO/T–AIMD–96–12, Nov. 16, 1995)

HCFA is developing a critical new claims-processing system, the Medicare transaction system (MTS), to replace the nine systems now used by Medicare. MTS' goal is to better protect program funds from waste, fraud, and abuse; allow better oversight of Medicare contractor operations; improve service to beneficiaries and providers; and cut administrative expenses. The weaknesses in HCFA's development of MTS stem from a lack of a disciplined management process; a process in which information systems and technology should be managed as investments. Not managing MTS in this way has led to system design and development proceeding despite (1) difficulties in defining requirements, (2) a compressed scheduled containing significant overlap of system-development phases, and (3) a lack of reliable information on costs and benefits. These risks in the development of MTS can be substantially reduced if HCFA adopts some of the best practices that have proven effective in other organizations: managing systems as investment, changing information management practices, creating line manager ownership, better managing resources, and measuring performance.

Pharmacy Benefit Managers: Early Results on Ventures With Drug Manufacturing (GAO/T–HEHS–96–85, Feb. 7, 1996)

Recently, some of the largest drug companies have merged or formed alliances with some of the largest PBMs. PBMs manage the prescription drug part of health insurance plans covering millions of Americans. These ventures gained attention not only because of their size but because of concerns that the PBMs would automatically give preference to their manufacturer partners' drugs over those made by competitors. The results of GAO's analysis of PBM formularies—a list of preferred prescription drugs by therapeutic class, often with cost designations—indicate that continued oversight of mergers and alliances between pharmaceutical manufacturers and PBMs is warranted to ensure competition in the marketplace. For example, the changes in Medco's formulary that appear to favor Merck drugs do not necessarily show that Medco automatically gave preference to Merck drugs over those of competitors. However, the formulary changes support the Federal Trade Commission's decision to continue monitoring the Merck/Medco merger and other such ventures.

Prescription Drug Pricing: Implications for Retail Pharmacies (GAO/T–HEHS–96–216, Sept. 19, 1996)

Congressional hearings during the late 1980s highlighted the fact that the prices that consumers paid for prescription drugs were increasing more rapidly than the rate of inflation. In 1990, the Congress tried to control prescription drug expenditures by significantly changing the way that Medicaid pays for outpatient drugs. Vertical integration in the pharmaceutical market later became a

concern, particularly mergers between large drug companies and PBMs. This testimony responds to the following three questions: How and why has the process by which drugs get from manufacturers to patients changed? What have been the consequences for retail pharmacies of changes in this process? What general strategies are retail pharmacies undertaking or proposing to respond to an increasingly competitive environment?

Prescription Drugs and the Elderly: Many Still Receive Potentially Harmful Drugs Despite Recent Improvements (GAO/T–HEHS–96–114, Mar. 28, 1996)

GAO's analysis of 1992 data found that 17.5 percent of nearly 30 million Medicare recipients were still being prescribed drugs that were generally unsuitable for their age group. Although this is an improvement over the almost 25 percent reported for 1987 data, the inappropriate use of prescription drugs remains a major health problem for the elderly. Insufficient coordination of patient drug therapies and weaknesses in communication between providers, pharmacists, and patients have compounded the problem. Inappropriate prescribing practices and the ensuing drug use have caused many elderly persons to suffer harmful effects that, according to FDA, have resulted in hospitalizations costing $20 billion annually. The costs are partly covered by Medicare and Medicaid. States, advocacy groups, and physician and pharmacy organizations have, however, taken steps to reduce inappropriate drug use. In addition, managed care, pharmacy benefit management, and other coordinated health care systems have features designed to reduce inappropriate prescription drug use among the elderly.

Prescription Drugs: Implications of Drug Labeling and Off-Label Use (GAO/T–HEHS–96–212, Sept. 12, 1996)

Physicians use a drug "off-label" when they prescribe an FDA-approved drug for treatments other than those specified on the label. GAO testified that off-label prescribing is prevalent and presents various problems for policymakers at different times. As it stands now, the problem is that the drug industry believes that labels overly constrain its ability to promote its products. This problem can be solved either by relying on sources in addition to the label to define appropriate promotion or by improving the process for updating the label. These two options are not necessarily mutually exclusive and both have benefits and drawbacks.

Status of Medicare's Federal Hospital Insurance Trust Fund (GAO/T–HEHS–96–94, Feb. 29, 1996)

This testimony focuses on GAO's ongoing review of the status of Medicare's Federal Hospital Insurance (part A) Trust Fund. GAO discusses (1) when the administration became aware that the trust fund had an operating deficit—that is, cash outlays exceeded cash receipts—of $36 million for fiscal year 1995 and how the information was disseminated and (2) what the status is of current projections regarding the trust fund.

Housing and Urban Development: Limited Progress Made on HUD Reforms (GAO/T–RCED–96–112, Mar. 27, 1996)

Despite the promise of reform, reinvention, and transformation initiatives aimed at solving problems at the Department of Housing and Urban Development (HUD), much more remains to be done. HUD is very much an agency in limbo, and few of the proposals in its reinvention blueprint have been adopted. This testimony addresses HUD's difficulties in addressing (1) its long-standing management shortcomings, (2) its portfolio of multi- and single-family housing insured by the Federal Housing Administration, (3) budget and management problems plaguing the public housing program, (4) the spiraling cost of assisted housing programs, and (5) the need for consensus on HUD reforms.

Housing and Urban Development: Public and Assisted Housing Reform (GAO/T–RCED–96–22, Oct. 13, 1995)

Current federal housing programs are seen as overly regulated and leading to warehousing of the poor, and the Congress is asking state and local governments to assume a larger role in defining how the programs work. The Congress is now reconsidering the most basic aspects of public housing policy—whom it will house, the resources devoted to it, the amount of existing housing stock that will be retained, and the rules under which it will operate. These statements provide GAO's views on legislation pending before Congress—S. 1260 and H.R. 2406—that would overhaul federal housing policy. GAO testified that the two bills contain provisions that will likely improve the long-term viability of public housing, such as allowing mixed incomes in public housing and conversion of some public housing to housing vouchers or tenant-based assistance when that makes the most sense. GAO also supports provisions to significantly beef up HUD's authority to intervene in the management of troubled housing authorities, but GAO cautions that questions remain about the reliability of the oversight system that HUD uses to designate these agencies as troubled.

Multifamily Housing: Issues and Options to Consider in Revising HUD's Low-Income Housing Preservation Program (GAO/T–RCED–96–29, Oct. 17, 1995)

HUD's program for preserving low-income housing seeks to maintain the affordable low-income housing that was created mainly under two federal housing programs during the 1960s and 1970s. Under these programs, when owners received HUD-insured mortgages with 40-year repayment periods, they entered into agreements with HUD that imposed affordability restrictions, such as limits on the income level of tenants and on the rents that could be charged at the properties. After 20 years, however, owners had the right to pay off their mortgages in full without prior HUD approval and terminate the affordability restrictions. The preservation program has proven to be complex and costly, prompting recommendations from HUD and others to change or repeal the program. This testimony focuses on (1) how the current preservation program works, (2) the status of preservation-eligible projects, (3)

concerns that have been raised about the program, and (4) options for revising the program.

INCOME SECURITY ISSUES

Congressional Retirement Issues (GAO/T–GGD–95–165, May 15, 1995)

The retirement benefits provided by the Civil Service Retirement System for Members of Congress are generally more generous than those provided for other federal employees. The major differences are found in the eligibility requirements for retirement and the formulas used to calculate benefits. The Member benefit formula applies to congressional staff, but they are covered by the general employee retirement eligibility requirements. Law enforcement officers and firefighters may retire earlier than general employees and are covered by a more generous benefit formula than are general employees. Under the Civil Service Retirement System, the provisions for air traffic controllers fall between those for law enforcement officers and firefighters and those for general employees. Many of the advantages afforded to Members of Congress and congressional staff under the Civil Service Retirement System were continued under the Federal Employees Retirement System, which covers workers hired in 1984 and thereafter. But under the Federal Employee Retirement System, provisions for law enforcement officers, firefighters, and air traffic controllers are very similar to provisions for Members.

Disability Insurance: Broader Management Focus Needed to Better Control Caseload (GAO/T–HEHS–95–164, May 23, 1995)

Rising numbers of applicants for disability benefits have increased workloads at SSA and led to growing backlogs of claims. As a result, applicants are waiting longer to find out if they have been awarded benefits. Applicants wait almost 90 days to learn whether they have been awarded benefits, while persons who appeal their claims to SSA's administrative law judges wait more than a year. These long waits can impose substantial hardship on applicants, particularly those with limited incomes and no medical insurance. SSA has undertaken several short-term initiatives to address the backlog problem. It has also begun a long-term effort to redesign its disability determination process. GAO shares congressional concerns that these changes may sacrifice decisional accuracy for faster processing. SSA is also addressing its workload increases while dealing with substantial resource constraints. Nonetheless, SSA needs to focus more attention on terminating benefits for those who are no longer eligible and encouraging beneficiaries to return to work. SSA, now an independent agency, also needs to provide more data and advice to the Congress on matters affecting disability insurance policy.

Federal Downsizing: The Administration's Management of Workforce Reductions (GAO/T–GGD–95–108, Mar. 2, 1995)

The Federal Workforce Restructuring Act of 1994 requires the federal government to eliminate about 270,000 positions between 1993 and 1999. To accomplish this downsizing without a reduction-

in-force, the act allows federal agencies to offer buyouts to employees who agree to resign or retire by March 31, 1995. This testimony discusses (1) the administration's compliance with the act, including which positions are counted toward full-time-equivalent reductions and from what baseline, and whether savings from the reductions are being used to pay for the Violent Crime Control and Law Enforcement Act of 1994; (2) the targets of workforce downsizing; and (3) how the workforce reductions are being managed.

Federal Downsizing: The President's Fiscal Year 1996 Budget and Its Compliance With the Federal Workforce Restructuring Act of 1994 (GAO/T–GGD–95–105, Mar. 30, 1995)

GAO's analysis of the President's fiscal year 1996 budget shows that government agencies are well on their way to achieving the downsizing goals mandated by the Federal Workforce Restructuring Act. Although payroll savings will no doubt accrue from these reductions, some of the projected savings may be offset by costs associated with what agencies do with the work previously done by separated employees. To the extent that work is shifted to other employees, contracted out, or transferred to other agencies, downsizing's true savings to taxpayers may be reduced.

Federal Downsizing: The Status of Agencies' Workforce Reduction Efforts (GAO/T–GGD–96–124, May 23, 1996)

The downsizing of the federal workforce is ahead of the schedule set by the Workforce Restructuring Act. At the same time, the administration has called on agencies to restructure their workforces by reducing management positions. These jobs have yet to be reduced to the extent called for by the National Performance Review. With regard to future workforce reductions, GAO found that in terms of absolute numbers—and given historical quit rates—the remaining employment ceilings called for by the act probably could be achieved governmentwide through attrition. Nevertheless, some agencies may be forced to downsize more than others. In such situations, buyouts or reductions in force (RIF) may be necessary. GAO found that buyouts offer greater savings than RIFs, except when employees affected by a RIF do not bump and retreat and are eligible to retire.

Federal Retirement Issues (GAO/T–GGD–95–111, Mar. 10, 1995)

This testimony focuses on ongoing GAO work on two issues involving federal employee retirement programs. First, GAO compares the retirement provisions for Members of Congress and congressional staff in the Civil Service Retirement System and the Federal Employees Retirement System with the provisions applicable to other employees covered by these systems. Second, GAO analyzes retirement programs in the private sector and state government.

Federal Retirement System Financing (GAO/T–GGD–95–197, June 28, 1995)

Federal retirement system financing is a complex issue. This testimony seeks to bring some perspective to the subject by describing how the government finances its retirement system and by describ-

ing the budget implications of the financing methods being used and possible changes to these methods. GAO concentrates on the Civil Service Retirement System and the Federal Employees Retirement System because they are the largest retirement programs for federal workers.

Financial Management: Interior's Efforts to Reconcile Indian Trust Fund Accounts and Implement Management Improvements (GAO/T–AIMD–96–104, June 11, 1996)

Although the Department of the Interior has brought to a close its project to reconcile the Indian trust funds, tribal accounts were never fully reconciled because of missing records and the lack of an audit trail in Interior's automated accounting systems. In addition, the 1996 report package that Interior provided to each tribe on the reconciliation results did not explain or describe the many changes in reconciliation scope and methodologies or the procedures that had been planned but were not implemented. As a result, the limitations of the reconciliation were not evident. Also, because of cost considerations and the potential for missing records, individual Indian trust fund accounts were not included in the reconciliation project. Indian tribes have raised concerns about the scope and the results of the reconciliation process. The vast majority of tribes have yet to decide whether to accept or dispute their account balances. If Interior cannot resolve the tribes' concerns, a legislated settlement process could be used to settle disputes over account balances. Interior has taken steps during the past 3 years to correct these long-standing problems with the accuracy of the Indian trust fund accounts, but these efforts will take years to complete. Moreover, the existing trust fund management and accounting systems cannot ensure accurate trust fund accounting and asset management. The appointment of a Special Trustee for American Indians was an important step in establishing high-level leadership at Interior for Indian trust fund management.

Means-Tested Programs: An Overview, Problems, and Issues (GAO/T–HEHS–95–76, Feb. 7, 1995)

Nearly 80 means-tested programs have been created over the years for low-income people. In fiscal year 1992, the federal government spent about $208 billion on these programs to meet the needs of poor Americans of all ages. The many means-tested programs are costly and difficult to administer. On the one hand, the programs sometimes overlap one another; on the other hand, they are often so narrowly focused that service gaps hinder clients. GAO notes that although advanced computer technology is essential to the programs operating efficiently, it is not being effectively developed or used. Due to their size and complexity, many of these programs are vulnerable to waste, fraud, and abuse. Moreover, the welfare system is often difficult for clients to use effectively. Finally, administrators have not articulated clear goals and objectives for some programs and have not collected data on how well the programs are working.

Overview of Federal Retirement Programs (GAO/T–GGD–95–172, May 22, 1995)

This testimony describes how the federal retirement systems work, the benefits they provide, and how they compare with private sector programs. GAO concentrates on the Civil Service Retirement System and the Federal Employees Retirement System because they are the largest retirement systems for federal civilian personnel. GAO describes the history of the two retirement systems and discusses four issues that are often raised in connection with federal retirement: (1) retirement eligibility provisions, (2) benefit formulas, (3) COLAs, and (4) system financing.

Social Security Disability: Management Action and Program Redesign Needed to Address Long-Standing Problems (GAO/T–HEHS–95–233, Aug. 3, 1995)

SSA has serious problems managing its Disability Insurance (DI) and Supplemental Security Income (SSI) programs. First, the lengthy and complicated decisionmaking process results in untimely decisions, especially for those who appeal, and shows troubling signs of inconsistency. Second, SSA has a poor record of reviewing beneficiaries to determine whether they remain eligible for benefits and an even worse record of providing rehabilitation to help move people off the disability rolls and into employment. This reinforces the public perceptions that SSA pays disability benefits to persons who are not entitled to them. Third, SSA needs to make better decisions about work capacity to restore public confidence and to better serve beneficiaries. Although these problems are serious, solutions do exist. GAO believes that relatively quick action could be taken to reduce inconsistent decisionmaking, step up review of beneficiaries who may be able to return to work, and improve rehabilitation outcomes. In some cases, SSA has the authority to take action, in others, decisionmakers may need to rethink the goals and objectives of the disability programs.

Social Security: Federal Disability Programs Face Major Issues (GAO/T–HEHS–95–97, Mar. 2, 1995)

This testimony discusses the reasons for the tremendous growth in federal disability programs during the past 10 years, including program factors and social changes. GAO also comments on the impact of fraud and abuse on this growth and its effect on program integrity. In addition, GAO notes legislative reforms included in the Social Security Independence Act last year that tried to improve program integrity. Finally, GAO discusses weaknesses in SSA's efforts to return DI and SSI beneficiaries to work.

Social Security: Disability Programs Lag in Promoting Return to Work (GAO/T–HEHS–96–147, June 5, 1996)

On average, SSA pays over $1 billion in cash payments to DI and SSI beneficiaries each week. Although these payments provide a measure of income security, they do little to enhance the work capacities and promote the economic independence of recipients. Societal attitudes have shifted, and current law, such as the Americans With Disabilities Act, promotes economic self-sufficiency among the disabled. A growing number of private companies are exploring

ways to return people with disabilities to the workforce. Moreover, medical advances and new technologies provide greater opportunities for people with disabilities to work. This testimony discusses how the structure of the DI and SSI programs impedes recipients' return to work and how strategies used in other disability systems could help restructure the programs to encourage recipients to return to work.

Social Security Administration: Effective Leadership Needed to Meet Daunting Challenges (GAO/T–OCG–96–7, July 25, 1996)

With a staff of 64,000, SSA runs the largest federal program—Social Security—as well as the largest cash welfare program—SSI. The agency's expenditures totaled $363 billion in fiscal year 1995, almost one-fourth of the $1.5 trillion federal budget. This testimony discussed the difficult challenges facing SSA in the coming decades: taking part in the debate over future financing of Social Security; encouraging disability recipients to return to work; reducing fraud and abuse; and managing workforce and technology investments so that SSA can meet the needs of America's retired, disabled, and poor.

SSA Benefit Statements: Statements Are Well Received by the Public But Difficult to Comprehend (GAO/T–HEHS–96–210, Sept. 12, 1996)

The personal earnings and benefit estimate is a six-page statement produced by SSA that supplies information about a worker's yearly earnings on record at SSA; eligibility for social security retirement, survivor, and disability benefits; and estimates of these benefits. SSA has tried to improve the statement, and the public has found it to be helpful for retirement planning. However, the statement falls short in clearly communicating the complex information that readers need to understand concerning SSA's programs and benefits. For example, the document's design and organization make it difficult for readers to locate important information. Readers are also confused by several important explanations, such as who in their family is also eligible for benefits and how much these family members might receive. SSA is considering redesigning the statement, but only if this effort reduces printing costs. This approach overlooks hidden costs, such as (1) inquiries from people who do not understand the statement and (2) the possibility that a poorly designed statement can undermine public confidence.

SSA Disability Reengineering: Project Magnitude and Complexity Impede Implementation (GAO/T–HEHS–96–211, Sept. 12, 1996)

Given the high cost and lengthy processing times of SSA's current disability claims process, the agency needs to continue its redesign efforts. SSA's redesign plan is proving to be overly ambitious, however. Some initiatives are also becoming more complex as SSA expands the work required to complete them. The agency's approach is likely to limit the chances for the project's success and has delayed implementation: testing milestones have slipped and support for the redesign effort has waned. In addition, the increasing length of the overall project and specific initiatives heighten the

risk of disruption from turnover among key executives. GAO believes that as SSA proceeds with its redesign project it should focus on key initiatives, starting first with those that will quickly and significantly reduce claims processing time and administrative costs.

Supplemental Security Income: Noncitizens Have Been a Major Source of Caseload Growth (GAO/T–HEHS–96–88, Feb. 6, 1996)

Noncitizens are among the fastest growing groups receiving benefits from the SSI program, which provides means-tested benefits to eligible blind, elderly, or disabled persons. Noncitizens represent nearly one-third of aged SSI recipients and 5.5 percent of disabled recipients. About two-thirds of noncitizen SSI recipients live in three states—California, New York, and Florida. On the whole, noncitizens are more likely to receive SSI than citizens, but this may be true primarily for refugees and asylum seekers. Adult children of aged immigrants and others who say they are willing to financially support them sometimes do not. Eventually, many of these aged immigrants receive SSI. Also, some translators help noncitizens to fraudulently obtain SSI disability benefits.

Supplemental Security Income: Noncitizen Caseload Continues to Grow (GAO/T–HEHS–96–149, May 23, 1996)

(This testimony is similar to our February 6, 1996, testimony summarized above. Since the data used was updated from that used in the February testimony, the May testimony is summarized below.)

Noncitizens are one of the fastest growing groups of recipients of SSI benefits. They represent nearly one-third of aged SSI recipients and about 6 percent of disabled recipients. Although the growth rate for noncitizen caseloads has slowed, it is still higher than that for citizens, and the percentage of noncitizens relative to other SSI recipients continues to rise. About two-thirds of noncitizen recipients—roughly 520,000—live in three states: California, New York, and Florida. On the whole, noncitizens are more likely to receive SSI than are citizens, but this may be primarily true for refugees and asylum seekers. Adult children of aged immigrants and others who say they are willing to financially support them sometimes do not. Eventually, some of these older immigrants receive SSI. Also, some translators have helped noncitizens to fraudulently obtain SSI disability benefits

Supplemental Security Income: Recent Growth in the Rolls Raises Fundamental Program Concerns (GAO/T–HEHS–95–67, Jan. 27, 1995)

This testimony discusses the growth of SSI rolls and changes in the characteristics of SSI recipients. Last year, SSA paid nearly $22 billion in federal benefit payments to about 6.3 million aged, blind, and disabled SSI recipients. Since 1986, payments have risen by $13.5 billion, more than doubling. Benefits for the disabled accounted for nearly 100 percent of this increase. Since 1986, the number of disabled SSI recipients under age 65 has increased an average of more than 8 percent annually, adding nearly 2 million

younger recipients to the rolls, while the number of aged and blind recipients has remained level. The trend toward younger beneficiaries, coupled with low exit rates from the program, means that costs will continue to burgeon in the near term. Without a slowing in the growth of this younger population, SSI will become even more costly. Since 1991, three groups—disabled children, legal immigrants, and adults with mental problems—have accounted for nearly 90 percent of the SSI caseload growth. Of the 2 million mentally disabled adults, roughly 100,000 are disabled mainly by drug addiction or alcoholism. The dramatic increases pose fundamental questions about eligibility standards, accountability, and program effectiveness.

Supplemental Security Income: Recipient Population Has Changed As Caseloads Have Burgeoned (GAO/T–HEHS–95–120, Mar. 27, 1995)

The SSI program provides means-tested income support payments to eligible aged, blind, or disabled persons. Last year, more than 6 million SSI recipients received nearly $22 billion in federal benefits and more than $3 billion in state benefits. SSI is one of the fastest growing programs, with program costs soaring 20 percent annually during the past 4 years. This testimony focuses on factors contributing to caseload growth, characteristics of SSI recipients, and ways to improve SSI.

VETERANS' AND DOD ISSUES

Defense Health Care: TRICARE Progressing, but Some Cost and Performance Issues Remain (GAO/T–HEHS–96–100, Mar. 7, 1996)

DOD's nationwide managed health care program—TRICARE—represents a sweeping reform of the $15 billion per year military health care system. TRICARE seeks to improve access to care and ensure high-quality, consistent health care benefits for the 1.7 million active-duty service members and some 6.6 million nonactive-duty beneficiaries. It also seeks to preserve choice for nonactive-duty beneficiaries by allowing them to choose whether to enroll in TRICARE Prime, which resembles an HMO; use a preferred provider organization; or use civilian health care providers under a fee-for-service arrangement. Despite initial beneficiary confusion caused by education and marketing problems, early implementation of the program is progressing consistent with congressional and DOD goals. Measures may be necessary, however, such as gathering cost and access-to-care data, to help the Congress and DOD better assess the program's future success. In addition, retirees, who make up half of those eligible for military health care, remain concerned about TRICARE's effect on their access to medical services.

VA Health Care: Approaches for Developing Budget-Neutral Eligibility Reform (GAO/T–HEHS–96–107, Mar. 20, 1996)

Reforming eligibility for health care benefits offered by VA would pose a major challenge even with unlimited resources. But with the Congress and VA facing mounting pressure to limit VA health care

spending as part of governmentwide efforts to reduce the deficit, this challenge has become even greater. This testimony discusses (1) the problems that VA's current eligibility and contracting provisions create for veterans and providers, (2) the relationship between inappropriate admissions to VA hospitals and VA eligibility provisions, (3) proposals to reform VA eligibility and contracting rules and their potential impact on the deficit, and (4) options for achieving budget-neutral eligibility reform.

VA Health Care: Challenges and Options for the Future (GAO/T–HEHS–95–147, May 9, 1995)

VA lags far behind the private sector in improving the efficiency of its hospitals. During the past decade, GAO has highlighted a series of management problems limiting VA's ability to (1) improve the efficiency and the effectiveness of its hospitals and (2) shift more of its inpatient care to less costly ambulatory settings. Although VA plans a major reorganization and other initiatives to improve its management capabilities, GAO remains concerned that some of the actions may not go far enough. Even if it improves the efficiency of its hospitals, VA is at a crossroads in the evolution of its health care system. The average daily workload in its hospitals dropped about 56 percent during the past 25 years, and further decreases are likely. At the same time, however, demand for outpatient care, nursing home care, and some specialized services is expanding, taxing VA's ability to meet veterans' needs. GAO concludes that a complete reevaluation of the VA health care system is needed. Absent such an effort, use of VA hospitals will likely continue to decline to a point at which VA's ability to provide quality care and support its secondary missions will be jeopardized.

VA Health Care: Efforts to Improve Veterans' Access to Primary Care Services (GAO/T–HEHS–96–134, Apr. 24, 1996)

VA runs one of the nation's largest health care systems, including 173 hospitals and 220 clinics. Last year, VA spent about $16 million serving 2.6 million veterans. This testimony focuses on VA's efforts to increase veterans' access to health care. GAO discusses legal, financial, and equity-of-access issues facing VA managers as they try to establish new access points—a VA clinic or a VA-funded or VA-reimbursed private clinic, group practice, or individual practitioner that is geographically separate from the parent facility. Access points are intended to provide primary care to all veterans and refer those needing specialized services or inpatient stays to VA hospitals.

VA Health Care: Issues Affecting Eligibility Reform (GAO/T–HEHS–95–213, July 19, 1995)

In this testimony GAO summarizes the results of a number of reviews that have detailed problems in administering VA's outpatient eligibility provisions; compared VA benefits and eligibility to those of other public and private health benefits programs; and assessed VA's role in a changing health care marketplace. In summary, veterans' eligibility for VA health care has evolved over time in terms of both the types of veterans eligible for care and the services they are eligible to receive. VA has gone from a system primarily cover-

ing hospital care for veterans with war-related injuries to a system covering a wide array of hospital and other medical services for both wartime and peacetime veterans and veterans both with and without service-connected disabilities. VA now has multiple categories of veterans eligibility based on a number of factors.

VA Health Care: Opportunities to Increase Efficiency and Reduce Resource Needs (GAO/T–HEHS–96–99, Mar. 8, 1996)

With a fiscal year 1995 appropriation of $16.2 billion, the VA health care system faces mounting pressure to contain or reduce spending as part of governmentwide efforts to reach a balanced budget. This testimony addresses (1) VA's forecasts of future resource needs, (2) opportunities to run the VA system more efficiently, (3) differences between VA and the private sector in terms of initiatives to become more efficient, and (4) recent VA efforts to reorganize its health care system and create incentives to operate more efficiently.

VA Health Care: Opportunities to Reduce Outpatient Pharmacy Costs (GAO/T–HEHS–96–162, June 11, 1996)

VA allows its doctors to prescribe over-the-counter products because concerns have been raised that some veterans may lack the money to buy needed items. VA requires prescriptions as a way to control veterans' access to over-the-counter products in VA pharmacies. In fiscal year 1995, for example, VA pharmacies dispensed analgesics, such as aspirin and acetaminophen, nearly 3 million times. The benefits package that most VA facilities offer for over-the-counter products is more generous than that available from other health plans. VA also provides other features, such as free over-the-counter product mail service and deferred credit for copayments owed, that are not common in other plans. GAO makes several suggestions for reducing the amount of money VA spends to dispense over-the-counter products. First, VA staff could more strictly adhere to statutory eligibility rules. Second, VA could more efficiently dispense over-the-counter products and collect copayments. Third, VA facilities could further reduce the number of over-the-counter products available to veterans on an outpatient basis. Finally, the Congress could expand copayment requirements.

Veterans' Benefits Modernization: Management and Technical Weaknesses Must Be Overcome If Modernization Is to Succeed (GAO/T–AIMD–96–103, June 19, 1996)

If the Veterans Benefits Administration (VBA) is to reduce operating costs and improve critical service to nearly 27 million veterans and their dependents, it needs to streamline its business processes and take more advantage of information technology. However, VBA is experiencing many of the classic management and technical problems that have prevented federal agencies from reaping the benefits of substantial investment in information technology. This testimony discusses the steps VBA needs to take in the following three areas to improve its chances for success: (1) creating a credible business strategy and supporting an information resources management plan; (2) developing a better investment strategy for choosing and managing its portfolio of information

technology projects in a more disciplined, businesslike way; and (3) strengthening its technical ability to develop software applications that are critical to its efforts to control costs and improve service to veterans.

Veterans' Health Care: Challenges for the Future (GAO/T–HEHS–96–172, June 27, 1996)

With a budget of $16.6 billion and a network of hundreds of hospitals, outpatient clinics, and nursing homes, VA's health care system provides medical services to more than 26 million veterans. VA has sought to fundamentally change the way in which it runs its health care delivery and financing systems. It has also sought authority to significantly expand eligibility for health care benefits and to both buy health care services from and sell them to the private sector. This testimony discusses (1) changes in the veterans population and the demand for VA health care services; (2) how well the existing VA system, and other public and private health benefits programs, meet the health care needs of veterans; (3) steps that could be taken, using existing resources and legislative authority, to address veterans' unmet health care needs and increase equity of access; (4) how other countries have addressed the needs of an aging and declining veteran population; and (5) approaches for preserving VA's direct delivery system, alternatives to preserving the direct delivery system, and combinations of both.

United States General Accounting Office

GAO

Report to the Special Committee on Aging, U.S. Senate

December 1996

AGING ISSUES

Related GAO Reports and Activities in Fiscal Year 1996

GAO/HEHS-97-41

GAO

United States
General Accounting Office
Washington, D.C. 20548

Health, Education, and
Human Services Division

B-275585

December 31, 1996

The Honorable William S. Cohen
Chairman
The Honorable David H. Pryor
Ranking Minority Member
Special Committee on Aging
United States Senate

This report responds to the Committee's request for a compilation of our fiscal year 1996 products and ongoing work regarding programs and issues affecting older Americans and their families.

GAO's work in aging issues reflects the continuing importance of federal programs supporting older Americans. By the year 2020, the number of older Americans who are 65 years old and older, will exceed 52 million. Because the elderly represent one of the fastest growing segments of the country's population, the Congress faces many issues involving income security and health care policy in which the federal government will play an important role. These issues range from demographic changes affecting the traditional structure and role of the family to the financing and provision of health care, social security, and pensions.

Our work during fiscal year 1996 covered many issues, including federal government activities concerning employment, health care, housing, income security, and veterans' issues. Some federal programs, such as Social Security and Medicare, are directed primarily at older Americans. Other federal programs target older Americans as one of several groups served, such as Medicaid or federal housing programs. In the appendixes, we describe three types of GAO products and activities that relate to older Americans:

- reports and correspondence (see app. I),
- congressional testimonies (see app. II), and
- ongoing assignments (see app. III).

The issues addressed by these products and ongoing work are presented in table 1. The table shows that health, income security, and veterans issues were the areas most frequently addressed among our products focused on older Americans.

Table 1: GAO Activities Relating to the Elderly in Fiscal Year 1996

Elderly issues	Reports and correspondence	Testimonies	Ongoing work
Education and employment	2	1	0
Health	37	15	18
Housing	1	3	0
Income security	21	8	6
Veterans/Department of Defense	15	7	8
Related issues	3	0	0
Total	**79**	**34**	**32**

As arranged with your office, we are sending copies of this report to interested congressional committees. Copies also will be made available to others upon request. This report was prepared under the direction of Vernette G. Shaw, Evaluator-in-Charge, who may be reached at (202) 512-7234.

Diana S. Eisenstat

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Associate Director, Income Security Issues

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Abbreviations

AARP	American Association of Retired Persons
AFIP	Armed Forces Institute of Pathology
CSRS	Civil Service Retirement System
DI	disability insurance
DOD	Department of Defense
DSH	disproportionate share hospital
FDA	Food and Drug Administration
FECA	Federal Employees' Compensation Act
FEHBP	Federal Employees Health Benefits Program
FERS	Federal Employees Retirement System
HCFA	Health Care Financing Administration
HHS	Department of Health and Human Services
HMO	health maintenance organization
HUD	Department of Housing and Urban Development
MAF	medical assistance facilities
MTS	Medicare transaction system
OIG	Office of Inspector General
PASS	plan for achieving self-support
PBGC	Pension Benefit Guaranty Corporation
PBM	pharmacy benefit manager
RIF	reduction in force
RSI	retirement and survivors insurance
SSA	Social Security Administration
SSI	supplemental security income
TRICARE	DOD's new nationwide managed health care program
TSP	Thrift Savings Plan
USTF	Uniformed Services Treatment Facility
VA	Department of Veterans Affairs
VBA	Veterans Benefits Administration

Appendix I

Fiscal Year 1996 Reports and Correspondence on Issues Affecting Older Americans

During fiscal year 1996, GAO issued 79 reports on issues affecting older Americans. Of these, 2 were on education/employment, 37 on health, 1 on housing, 21 on income security, 15 on veterans/Department of Defense (DOD), and 3 on other related issues.

Education Issues

Department of Labor: Senior Community Service Employment Program Delivery Could Be Improved Through Legislative and Administrative Actions (GAO/HEHS-96-4, Nov. 2, 1995)

The Department of Labor's Senior Community Service Employment Program finances part-time minimum-wage community service jobs for about 100,000 poor elderly Americans. GAO found that Labor distributes program funds through noncompetitive grants to 10 national organizations, called national sponsors, and to state agencies. These national sponsors and state agencies, in turn, use the grant funds to finance local employment projects run by community service host agencies, such as libraries, nutrition centers, and parks, that directly employ older Americans. GAO found that the relative distribution of funds to the national sponsors and state agencies along with Labor's method of implementing the hold-harmless provisions have resulted in the distribution of funds among and within states that bears little relationship to actual need. GAO also found that, under Labor's regulations, expenditures that GAO believes to be administrative in nature may be charged to another cost category, allowing grantees to exceed the statutory 15-percent limit on administrative costs. GAO summarized this report in testimony before Congress; see: Senior Community Service Employment: Program Delivery Could Be Improved Through Legislative and Administrative Actions, (GAO/T-HEHS-96-57, Nov. 2, 1995), by Cornelia M. Blanchette, Associate Director for Education and Employment Issues, before the Subcommittee on Early Childhood, Youth and Families, House Committee on Economic and Educational Opportunities.

People With Disabilities: Federal Programs Could Work Together More Efficiently to Promote Employment (GAO/HEHS-96-126, Sept. 3, 1996)

How efficient are federal efforts to help people with disabilities? In 1994, the government provided a range of services to people with disabilities through 130 different programs, 19 federal agencies, and a host of public and private agencies at the state and local levels. Although research groups and independent panels have stressed the need to simplify and streamline programs serving the disabled, creating a new service delivery system may prove difficult. GAO urged caution in 1992 when Congress was considering proposals that would have made fundamental changes in

human service delivery systems at the federal, state, and local levels. GAO also urges caution with regard to programs serving people with disabilities. Although the potential benefits of creating a new system to deliver services more comprehensively to people with disabilities may be great, so are the barriers and the risks of failure. Obstacles preventing officials from reorganizing service agencies, creating new funding and service agreements, and divesting authority from their own agencies are hard to overcome. Mandates alone are unlikely to secure the major time and resource commitments needed from officials—whether they are charged with directing reforms or have responsibility for administering services. In the current fiscal environment, a renewed focus by federal agencies on improving coordination would be a useful step toward improving services and enhancing the customer orientation of their programs.

Health Issues

AARP Medigap Premium Increases, 1996 (GAO/HEHS-96-119R, Apr. 19, 1996)

Pursuant to a congressional request, GAO examined why Medigap premiums offered through the American Association of Retired Persons (AARP) were increasing. GAO noted that: (1) premiums for more than 3 million AARP Medigap policyholders increased an average of 26 percent; (2) the increases varied by state and ranged between 0 to 40 percent for both standardized and prestandardized policies; (3) in 1994 and 1995, premiums increased in 8 and 10 states, respectively; (4) because benefit payments were less than expected, AARP standardized policyholders received an average credit of $75 and prestandardized policyholders received an average credit of $79 in 1994 and 1995; (5) in 1992, policyholders in 45 states received refunds averaging $47 because of lower-than-expected benefit payments; (6) AARP believes that the 1996 Medigap rate increases are justified because the number of services received and costs incurred by policyholders substantially increased; (7) although the average Medigap loss ratio decreased to 81 percent between 1991 and 1993, in 1994, the average loss ratio increased to 93 percent; (8) in 1994, the average loss ratio for prestandardized policies was 98 percent and 82 percent for standardized policies; and (9) the average loss ratio for 1995 policies was 100 percent and could increase to 112 percent without a rate increase.

Analysis of "Florida's Fair Share" (GAO/HEHS-96-168R, June 10, 1996)

Pursuant to a congressional request, GAO commented on the appropriateness of the Medicaid funding formula contained in H.R. 3507. GAO noted that: (1) over time, the proposed formula would cause Medicaid funding distribution to more closely reflect states' poverty and elderly populations; (2) there are more generous matching rates for low-income states that spend more on Medicaid services for eligible recipients; (3) because Florida spends less on benefits for eligible recipients than the other states reviewed, it receives less matching federal funds; (4) the new funding formula would establish targets for federal funding in proportion to the poor population in each state; (5) each state's federal allocation would increase depending on the differences between the level of federal funding and the target amount; and (6) by giving states like Florida higher growth rates, the new formula would enable states to receive federal funding in proportion to their poverty population.

Arizona Medicaid: Competition Among Managed Care Plans Lowers Program Costs (GAO/HEHS-96-2, Oct. 4, 1995)

Many states are converting their traditional fee-for-service Medicaid programs to managed care delivery systems. Arizona's Medicaid program offers valuable insights—especially in fostering competition and monitoring plan performance. Since 1982, Arizona has operated a statewide Medicaid program that mandates enrollment in managed care and pays health plans a capitated fee for each beneficiary served. Although the program had problems in its early years, such as the dismissal of the program administration and the state's takeover of the administration, it has successfully contained health care costs while maintaining beneficiaries access to mainstream medical care. Arizona's recent cost containment record is noteworthy. According to one estimate, Arizona's Medicaid program saved the federal government $37 million and the state $15 million in acute care costs during fiscal year 1991 alone. Arizona succeeded in containing costs by developing a competitive Medicaid health care market. Health plans that submit capitation rates higher than their competitors' bids risk not winning Medicaid contracts. Other states considering managed care programs can benefit from Arizona's experience. GAO concludes that the key conditions for holding down Medicaid costs without compromising beneficiaries' access to appropriate medical care include freedom from some federal managed care regulations, development and use of market forces, controls to protect beneficiaries from inadequate care, and investment in data collection and analysis capabilities.

Blue Cross FEHBP Pharmacy Benefits (GAO/HEHS-96-182R, July 19, 1996)	Pursuant to a congressional request, GAO provided information on the Blue Cross and Blue Shield Association's two pharmacy benefit managers (PBM) and the services they provide to the Federal Employees Health Benefits Program (FEHBP). GAO noted that: (1) to control drug costs, the Association is requiring Medicare part B participants to pay the standard copayment for drugs bought at participating retail pharmacies, but it is waiving copayments on drugs bought through its mail-order program for those participants; (2) the Association expects this change to achieve significant savings and prevent a premium increase in standard option coverage; (3) the Association's mail-order subcontractor has had significant difficulty meeting its customer-service performance measures because the increase in mail orders has been much larger and quicker than expected; (4) the subcontractor has increased its processing capacity to meet the unexpected demand; (5) retail pharmacies have experienced a 36-percent decrease in drug sales to part B participants and a 7-percent decrease in drug sales to all enrollees; and (6) the Association believes its pharmacy benefits managers provide valuable services to FEHBP, meet most of their contractual performance measures, and produce significant savings.
Consumer Health Informatics: Emerging Issues (GAO/AIMD-96-86, July 26, 1996)	Technology has increased the amount of health information available to the public, allowing consumers to become better educated and more involved in their own health care. Government and private health care organizations rely on a variety of technologies to disseminate health information on preventive care, illness and injury management, treatment options, post-treatment care, and other topics. This report discusses consumer health informatics—the use of computers and telecommunications to help consumers obtain information, analyze their health care needs, and make decisions about their own health. GAO provides information on (1) the demand for health information and the expanding capabilities of technology; (2) users' and developers' views on potential systems advantages and issues surrounding systems development and use; (3) government involvement—federal, state, and local—in developing these technologies; and (4) the status of related efforts by the Department of Health and Human Services (HHS). As part of this review, GAO surveyed consumer health informatics experts and presents their views on issues that need to be addressed when developing consumer health information systems. GAO summarized this report in testimony before Congress; see: Consumer Health Informatics: Emerging Issues (GAO/T-AIMD-96-134, July 26, 1996), by Patricia T. Taylor, Director of Information Resources Management Issues, before the Subcommittee on

	Human Services and Intergovernmental Relations, House Committee on Government Reform and Oversight.
Fraud and Abuse: Providers Target Medicare Patients in Nursing Facilities (GAO/HEHS-96-18, Jan. 24, 1996)	Nursing home patients are an attractive target for fraudulent and abusive health care providers that bill Medicare for undelivered or unnecessary services. A wide variety of providers, ranging from durable medical equipment suppliers to laboratories to optometrists and doctors, have been involved in fraudulent and abusive Medicare billing schemes. Several features make nursing home patients attractive targets. First, because a nursing facility houses many Medicare beneficiaries under one roof, unscrupulous billers of services can operate their schemes in volume. Second, nursing homes sometimes make patient records available to outsiders, contrary to federal regulations. Third, providers are permitted to bill Medicare directly, without certification from the nursing home or the attending physician that the items are necessary or have been provided as claimed. In addition, Medicare's automated systems do not collect data to flag improbably high charges or levels of services. Finally, even when Medicare spots abusive billings and seeks recovery of unwarranted payments, it often collects little money from wrongdoers, who either go out of business or deplete their resources so that they cannot repay the funds.
HCFA: Medicare Program—Changes to the Hospital Inpatient Prospective Payment Systems and Fiscal Year 1997 Rates (GAO/OGC-96-41, Sept. 13, 1996)	Pursuant to a legislative requirement, GAO reviewed the Health Care Financing Administration's (HCFA) new rule on changes to the Medicare program's hospital inpatient prospective payment systems and fiscal year 1997 rates. GAO found that: (1) the rule would adjust the classifications and weighting factors for diagnosis related groups, update the wage index associated with hospital operating costs, and make certain clarifications regarding the calculation of hospital payments excluded from the prospective payment systems; and (2) HCFA complied with applicable requirements in promulgating the rule.
Health Care Fraud: Information-Sharing Proposals to Improve Enforcement Efforts (GAO/GGD-96-101, May 1, 1996)	Estimates of health care fraud range from between 3 and 10 percent of all health care expenditures—as much as $100 billion based on estimated 1995 expenditures. In late 1993, the Attorney General designated health care fraud as an enforcement priority second only to violent crime initiatives. This report discusses (1) the extent of federal and state immunity laws protecting persons who report information on health care fraud and (2) the advantages and disadvantages of establishing a

	centralized health care fraud database to strengthen information-sharing and support enforcement efforts.
Health Insurance: Coverage of Autologous Bone Marrow Transplantation for Breast Cancer (GAO/HEHS-96-83, Apr. 24, 1996)	Although many insurers now cover the cost of autologous bone marrow transplantation, a new and expensive treatment for breast cancer, issues surrounding the procedure have put several goals of the U.S. health care systems in conflict: access to the best, most advanced care; cost containment; and research adequate to assess the value of new treatments. Proponents of insurance coverage argue that autologous bone marrow transplantation provides breast cancer patients with a promising, potentially life-saving treatment. Critics say that the proliferation of such unproven treatments is costly and harmful, potentially hindering clinical research to determine whether the treatment is effective. This report discusses (1) the factors that have influenced insurers' decisions on whether to cover the treatment, (2) the status of research on autologous bone marrow transplantation for breast cancer and the consensus on what is known about its effectiveness, and (3) the consequences of increased use and insurance coverage of the treatment while it is still being evaluated in clinical trials.
Health Insurance Regulation: Varying State Requirements Affect Cost of Insurance (GAO/HEHS-96-161, Aug. 19, 1996)	As concern about the affordability of health coverage has grown, the costs attributed to state regulation of health insurance have come under increasing scrutiny. State health insurance regulation is intended to protect consumers through oversight of health plans' financial solvency, monitoring of insurers' market conduct to prevent abuses, and mandated coverage for particular services. Although these measures do benefit consumers, they result in costs to insurers that are ultimately passed on to consumers in their premiums. These costs may influence an employer to self-fund its health plan—a move that avoids state insurance regulation. This report examines the costs associated with (1) premium taxes and other assessments, (2) mandated health benefits, (3) financial solvency standards, and (4) state health insurance reforms affecting small employers. GAO discusses the impact of these requirements on the costs of insured health plans compared with the cost of self-funded health plans.

Long-Term Care: Some States Apply Criminal Background Checks to Home Care Workers (GAO/PEMD-96-5, Sept. 27, 1996)	Pursuant to a congressional request, GAO examined federal and state requirements for criminal background checks of home health care workers. GAO found that: (1) there are few formal safeguards to protect elderly persons from unscrupulous home care workers; (2) the federal government indirectly regulates home care workers by requiring home care organizations or the individual provider to meet certain requirements for participation in Medicaid or Medicare; (3) states may be directed to disqualify home care providers convicted of fraudulent health care delivery, obstruction of justice, or the illegal manufacture, distribution, prescription, or dispensing of controlled substances; (4) state and local governments, as well as professional boards, impose certain restrictions on home care organizations and individual providers; (5) some states require all home care organizations to meet state imposed licensure or Medicare certification requirements; (6) some states incorporate home care workers into their state nursing home aide registry; (7) few states require criminal background checks of home care workers; and (8) most states do not use the Federal Bureau of Investigation's national criminal database system to check home care workers' backgrounds due to cost concerns.
Mammography Services: Initial Impact of New Federal Law Has Been Positive (GAO/HEHS-96-17, Oct. 27, 1995)	The Mammography Quality Standards Act of 1992 imposed uniform standards for mammography in all states, requiring certification and annual inspection of mammography facilities. GAO found that the act has had a positive impact, resulting in higher quality equipment, personnel, and practices. Mammography quality standards are now in place in all states, and these standards do not appear to have hampered access to services. To avoid large-scale closure of facilities, however, the Food and Drug Administration (FDA) settled on an approach that allowed some delay in meeting the certification requirements. For this and other reasons, such as the availability of outcome data, more time will be needed before the act's full impact can be determined. GAO is required to assess the effects of the act again in 2 years and to issue a report in 1997.
Medicaid Funding Formula Changes (GAO/HEHS-96-164R, June 10, 1996)	Pursuant to a congressional request, GAO provided information on the proposed changes to Medicaid funding formulas under H.R. 3507. GAO noted that: (1) states with large numbers of poor and disabled persons receive less federal assistance than states with larger numbers of poor and weaker tax bases; (2) states that offer extensive services and provide high provider reimbursement rates receive more federal funding; (3) the revised Medicaid formula would link the amount of federal aid a state receives to

the number of poor people in need of Medicaid services; (4) over 90 percent of the federal formula grant programs target funding on the basis of need; (5) H.R. 3507 would realign federal Medicaid funding over a number of years, so that funding is more related to state need rather than state spending patterns; (6) H.R. 3507 would place greater weight on the number of elderly and disabled people that require expensive services; and (7) the proposed formula change would enable states with low funding to acquire more federal funds.

Medicaid Long-Term Care: State Use of Assessment Instruments in Care Planning (GAO/PEMD-96-4, Apr. 2, 1996)

GAO examined how publicly funded programs assess the need for home and community-based long-term care for the elderly with disabilities. This care is provided to persons living at home who, because of a chronic condition or illness, cannot care for themselves. Services ranges from skilled nursing to assistance with day-to-day activities, such as bathing and housekeeping. Under the Medicaid program, 49 states have obtained waivers to provide home and community-based services to low-income elderly persons who would otherwise need institutional care paid for by Medicaid. These states are responsible for developing a care plan tailored to a client's specific needs. A well-designed assessment instrument helps identify all appropriate needs—increasing the likelihood that important aspects of the client's situation will not be overlooked in care planning. Standardized administration of the assessment instrument increases the likelihood that the needs of all clients will be determined in the same way. This report provides information on the (1) comprehensiveness of assessment instruments, (2) uniformity of their administration, and (3) training for staff who do the assessments.

Medicaid Managed Care: Serving the Disabled Challenges State Programs (GAO/HEHS-96-136, July 31, 1996)

With its emphasis on primary care, restricted access to specialists, and control of services, managed care is seen as a way to control spiraling Medicaid costs, which totaled $159 billion in fiscal year 1995. So far, states have extended prepaid care largely to low-income families—about 30 million persons—but to few of the additional 6 million Medicaid beneficiaries who are mentally or physically disabled. Managed care's emphasis on primary care and control of services is seemingly at odds with the care requirements of disabled beneficiaries, many of whom need extensive services and access to highly specialized providers. However, because more than one-third of all Medicaid payments go for the care of the disabled, policymakers have been exploring the possibility of enrolling disabled persons in managed care plans. These efforts affect three key groups: disabled beneficiaries, who include a small number of very

	vulnerable persons who may be less able to effectively advocate on their own behalf for access to needed services; prepaid care plans, which are concerned about the degree of financial risk in treating persons with extensive medical needs; and the state and federal governments, which run Medicaid. This report examines the (1) extent to which states are implementing Medicaid prepaid managed care programs for disabled beneficiaries and (2) steps that have been taken to safeguard the interests of all three groups. GAO's review of safeguards focuses on two areas: efforts to ensure quality of care and strategies for setting rates and sharing financial risk.
Medicaid Section 1115 Waivers: Flexible Approach to Approving Demonstrations Could Increase Federal Costs (GAO/HEHS-96-44, Nov. 8, 1995)	Several states have been given waivers allowing them to use savings from managed care Medicaid programs to cover additional beneficiaries. GAO found that contrary to assertions that such waivers would be "budget neutral," most of them could increase federal Medicaid expenditures. Specifically, approved spending limits for demonstration waivers in Oregon, Hawaii, and Florida could boost federal Medicaid outlays. Only Tennessee's 1115 waiver agreement should cost no more than the continuation of its smaller, prewaiver program and, in fact, should yield savings. Federal Medicaid spending could rise significantly if the administration continues to show a similar flexibility in reviewing state 1115 financing strategies. Five waivers have been approved since Florida's in late 1994, and the large backlog of pending waivers includes three states with large Medicaid programs—New York, Illinois, and Texas. Additional federal dollars are available along with other funding sources identified in state waiver applications. GAO believes that the potential for additional federal funding serves as a hedge against the many uncertainties states face in implementing these ambitious demonstrations—including changing economic conditions, the accuracy of cost-containment assumptions, the availability of anticipated funding cited in waiver applications, and the lack of reliable cost data on the uninsured.
Medicaid: Waiver Program for Developmentally Disabled Is Promising but Poses Some Risks (GAO/HEHS-96-120, July 22, 1996)	More than 300,000 adults with developmental disabilities—typically mental retardation—receive long-term care paid for by Medicaid or, to a lesser extent, state and local programs. Such long-term care often involves supervision and assistance with everyday activities, such as dressing or managing money. Persons with developmental disabilities receive more than $13 billion annually in public funding for long-term care, second only to the elderly. Recently, states have begun to significantly expand the use of the Medicaid waiver program, which seeks to provide alternatives to

	institutional care for persons with developmental disabilities. The waiver program has two advantages. First, it helps states to control costs by allowing them to limit the number of recipients being served. Without the waiver, states must serve all eligible persons in the regular Medicaid program. Second, it permits states to meet the needs of many persons with developmental disabilities by offering them a broader range of services in less restrictive settings, such as group or family homes, rather than in an institutional setting. This report examines (1) expanded state use of the waiver program, (2) the growth in long-term care costs for individuals with developmental disabilities, (3) how costs are controlled, and (4) strengths and limitations in states' approaches to ensuring quality in community settings.
Medical ADP Systems: Defense Achieves Worldwide Deployment of Composite Health Care System (GAO/AIMD-96-39, Apr. 5, 1996)	As the backbone of the military's medical operations, the Composite Health Care System—an automated medical system developed by DOD at a cost of $2.8 billion—will provide doctors and nurses with almost instant access to patient information, from medical history to current treatment and vital statistics. DOD should be able to significantly improve operations at its medical facilities while reducing costs. Improved appointment scheduling will increase patients' access to health care, while better access to patient information will save medical personnel time. If DOD is to realize the system's full potential, however, physicians and other health care providers must be able to access the system at all times. Although DOD's backup and recovery plan provides for recovery from disruptions in computer service because of power outages, it does not effectively address major disruptions requiring the repair or the replacement of equipment damaged by a natural disaster. Health care providers have become dependent on the patient data in the system, so any major disruption could result in injury or even death. DOD could greatly reduce this risk by developing a more effective backup and recovery plan for its equipment.
Medicare: Early Resolution of Overcharges for Therapy in Nursing Homes Is Unlikely (GAO/HEHS-96-145, Aug. 16, 1996)	Nursing homes and therapy companies continue to bill Medicare at very high rates for occupational and speech therapy. Moreover, the bills do not specify the amount of time spent with patients or the treatments provided. The weaknesses that GAO reported more than a year ago—the lack of salary guidelines setting limits on Medicare reimbursements for occupational and speech therapist's services and unclear billing for these services—persist. Although HCFA recognized as early as 1990 that inappropriate charges for occupational speech therapy were a problem, it

is still trying to establish salary equivalency guidelines for these services. HCFA proposed guidelines based on a Bureau of Labor Statistics survey of average salaries for hospital therapists, but the industry was not satisfied and did its own survey. HCFA is now analyzing those survey results. The prospect for a quick resolution to the billing problem with therapy services is unlikely. Historically, it has taken HCFA years to reduce high payment rates for supplies or services. Given the typical time involved in meeting federal notification and publication requirements for changing Medicare prices, salary equivalency guidelines may not be implemented until the summer of 1997 at the earliest. GAO urges Congress to consider granting HCFA legislative relief from these requirements.

Medicare: Federal Efforts to Enhance Patient Quality of Care (GAO/HEHS-96-20, Apr. 10, 1996)

In the past decade, Medicare costs have risen on average more than 10 percent per year. Expanding managed care options for Medicare patients has been proposed as a way to contain costs. Concerns have been raised, however, that such changes may undermine the quality of care provided to Medicare beneficiaries. Currently, Medicare reimburses only for care provided in health maintenance organizations (HMO) and by the fee-for-service sector. This report (1) discusses the present and future strategies of HCFA, which administers the Medicare program, to ensure that Medicare providers furnish quality health care in both fee-for-service and HMO arrangements and (2) provides the views of experts on attributes a quality assurance program should have if more managed care options are made available to Medicare beneficiaries.

Medicare HMOs: Rapid Enrollment Growth Concentrated in Selected States (GAO/HEHS-96-63, Jan. 18, 1996)

Private-sector insurers cite extensive use of HMO and other managed care approaches as a key factor in slowing the growth of their insurance premiums. As a result, part of the current interest in controlling Medicare costs has centered on ways to increase HMO use among Medicare beneficiaries. This report provides information on trends in the number of (1) Medicare beneficiaries enrolling in HMOs and (2) HMOs enrolling beneficiaries. GAO analyzes these data for factors that might be influencing decisions by HMOs to enroll Medicare beneficiaries and decisions by beneficiaries to enroll in HMOs. GAO found that about 2.8 million Medicare beneficiaries—about 7 percent of the total—were enrolled in risk-contract HMOs as of August 1995. This was double the percentage enrolled in 1987. The growth has been particularly rapid during the past 4 years and has centered on certain states. California and Florida, for example, have more than half of all enrollees.

Medicare: Home Health Utilization Expands While Program Controls Deteriorate (GAO/HEHS-96-16, Mar. 27, 1996)

Use of the Medicare home health benefit has increased dramatically, with spending rising from $2.7 billion in 1989 to $12.7 billion in 1994. Costs are projected to reach $21 billion by the year 2000. In earlier reports (GAO/HRD-81-155 and GAO/HRD-87-9), GAO cited lax controls over the use of the home health benefit and recommended measures to improve Medicare's ability to detect claims that were not medically necessary or did not meet the coverage criteria. Medicare's escalating home health outlays continue to raise concerns about the extent of benefit abuse. This report examines the factors underlying the growth in the use of the home health benefit. GAO discusses (1) changes in the composition of the home health industry, (2) changes in the composition of Medicare home health users, (3) differences in utilization patterns across geographic areas, (4) incentives to overuse services, and (5) the effectiveness of payment controls in preventing payments for services not covered by Medicare.

Medicare Insured Groups (GAO/HEHS-96-93R, May 1, 1996)

Pursuant to a legislative requirement, GAO examined Medicare insured groups, focusing on (1) the status of the demonstration program and individual projects; and (2) efforts to establish a reliable payment system. GAO found that: (1) with the passage of the Omnibus Reconciliation Act of 1987, five groups had entered into agreements with HCFA to operate Medicare insured groups; (2) HCFA expenditures for the agreements totalled $1.1 million over the last 8 years; (3) all the agreements have been terminated due to concerns over the projects' financial viability; (4) HCFA terminated one of the projects after experiencing prolonged delays and problems with contract negotiations; (5) another company encountered delays in obtaining employer commitments and data needed for rate-setting analysis; (6) the most recent group to terminate had developed an operating plan and proposed a payment rate-setting method before experiencing lengthy delays and problems with payment update methodology; (7) the proposed payment methodology would have established a base rate using 1986 to 1990 claims data and updated the rate on the basis of revised per capita costs; and (8) in using more recent claims data, groups would have faced financial risk, as well as additional time and expense.

Medicare Managed Care: Growing Enrollment Adds Urgency to Fixing HMO Payment Problem (GAO/HEHS-96-21, Nov. 8, 1995)	Enrollment of Medicare beneficiaries in HMOs has soared in recent years, concentrated in some states and locales. This rapid growth in enrollment highlights the urgency of correcting Medicare's excessive payment rates to HMOs—particularly in certain areas. Likewise, enrollment stagnation elsewhere underscores the need to examine the causes of payment rate disparities among states and counties. Medicare's HMO payment method is plagued by three flaws. First, the rigidity of the formula-based fixed payment rate does not allow Medicare to capitalize on the competition among HMOs that, in the private market, leads to lower rates. Second, rate adjustment for differences in beneficiaries' health status are so imprecise that Medicare overpays HMOs that enroll beneficiaries who are in good health. Third, the reliance on a country's fee-for-service health care costs to establish a payment rate produces rates that vary considerably within market areas. GAO concludes that a sensible approach would be to pursue three promising strategies concurrently—foster price competition among HMOs, improve risk adjusters' accuracy, and allow for adjustments in the current formula to reflect market competition and HMO's local health care costs. HCFA plans demonstration projects using competitive bidding and improved risk adjustment but results of a full-scale evaluation of these projects are years away. In the interim, HCFA should promptly gather and use valuable design and implementation data as they become available. HCFA's legislative authority to carry out these projects does not address managed care options explicitly, which raises questions about HCFA's authority to mandate HMO participation in the projects.
Medicare Managed Care Growth (GAO/HEHS-96-47R, Oct. 18, 1995)	Pursuant to a congressional request, GAO reviewed the growth of Medicare beneficiaries in managed health care plans. GAO noted that: (1) although more than 50 percent of employees covered by employer-provided insurance are enrolled in managed health care plans, fewer Medicare beneficiaries are enrolled in such plans; (2) the only managed care option Medicare offers is HMOs and they are not uniformly available; (3) the percentage of Medicare beneficiaries enrolled in an HMO has increased from about 3 percent in 1987 to about 7 percent in 1995; (4) although Medicare beneficiaries are increasingly choosing HMOs, about 87 percent of these beneficiaries live in 10 states, while about 55 percent live in just 2 states; and (5) only 3 states have Medicare HMO enrollment of 20 percent or more, while 7 states have non-Medicare HMO enrollments of 30 percent or more.

Medicare: Millions Can Be Saved by Screening Claims for Overused Services (GAO/HEHS-96-49, Jan. 30, 1996)	Medicare contractors routinely pay hundreds of millions of dollars in Medicare claims without first determining if the services provided are necessary. GAO reviewed payments to doctors for six groups of high-volume medical procedures—ranging from eye examinations to chest X rays—that accounted for nearly $3 billion in Medicare payments in 1994. GAO also surveyed 17 contractors to determine if they had used medical necessity criteria in their claims processing to screen for these six groups of procedures. For each of the six groups, more than half of the 17 contractors failed to use automated screens to flag claims for unnecessary, inappropriate, or overused treatments. These prepayment screens could have saved millions of taxpayer dollars now wasted on questionable services. Problems with controlling payments for widely overused procedures continue because HCFA lacks a national strategy to control these payments. HCFA now relies on contractors to focus on procedures where local use exceeds the national average. Although this approach helps reduce local overuse of some procedures, it is not designed to control overuse of a procedure nationwide. GAO summarized this report in testimony before Congress; see: Medicare: Millions Can Be Saved by Screening Claims for Overused Services (GAO/T-HEHS-96-86, Feb. 8, 1996), by Sarah F. Jaggar, Director of Health Financing and Public Health Issues, before the Subcommittee on Human Resources and Intergovernmental Relations, House Committee on Government Reform and Oversight.
Medigap Insurance: Alternatives for Medicare Beneficiaries to Avoid Medical Underwriting (GAO/HEHS-96-180, Sept. 10, 1996)	Although the Medicare program covers a substantial share of its beneficiaries' health expenses, it does require deductibles and coinsurance that can amount to thousands of dollars a year. Most beneficiaries obtain private insurance to supplement Medicare when they become eligible for the program at age 65. On occasion, beneficiaries decide to change Medigap policies and may then become subject to medical underwriting; that is, the insurer can take into account a person's health status or medical history in deciding whether to sell a policy. GAO found that few beneficiaries decide later to change their policies and those that do have at least one alternative for changing without being subject to medical underwriting. These alternatives, however, are not guaranteed by federal law, and it is possible that circumstances could change in the future. Federal Medigap law could be amended to furnish such a guarantee to beneficiaries who have been continuously covered by Medigap. Such a change should not have any major effect because it would not alter beneficiary incentives for Medigap coverage.

MediGrant: Florida (GAO/HEHS-96-11R, Oct. 2, 1995)	Pursuant to a congressional request, GAO provided information on how the proposed MediGrant Program will affect Florida's federal Medicaid funding between fiscal years 1996 to 2002. GAO noted that: (1) Florida state officials estimate that Florida would receive $7.6 billion less under the proposed MediGrant program; (2) Florida is expected to match $30.6 billion under Medicaid spending law and $15.8 billion under the MediGrant proposal; (3) the MediGrant program would guarantee minimum growth rates for some states and place limits on the maximum growth a state receives annually; and (4) the MediGrant program would increase Florida's share of federal Medicaid spending from 3.67 percent in fiscal year 1994 to 4.13 percent in fiscal year 2002.
Montana's Medical Assistance Facilities (GAO/HEHS-96-12R, Oct. 2, 1995)	Pursuant to a congressional request, GAO provided information on Montana's medical assistance facilities (MAF), focusing on the (1) services performed at MAF; (2) inpatient service costs to Medicare at MAF and acute-care hospitals; and (3) number of hospitals nationwide that qualify as MAF. GAO noted that: (1) MAF mainly serve patients with uncomplicated conditions or stabilize patients with more severe conditions before transferring them to full-service hospitals; (2) MAF serve as primary care providers for Medicare beneficiaries living in rural areas; (3) Medicare costs are generally less at MAF than at urban hospitals; (4) patients who are transferred from MAF to acute-care hospitals increase Medicare costs, because the two facilities receive payments for the same patient; and (5) although over 500 hospitals nationwide meet the qualifying criteria for MAF, no more than 150 hospitals would convert to MAF or rural primary care hospitals due to various circumstances.
Nonphysician Specialists (GAO/HEHS-96-135R, May 29, 1996)	Pursuant to a congressional request, GAO provided information on the policies and procedures governing the participation of certain nonphysician health specialists in several federal health care programs. GAO noted that: (1) although nonphysician specialists are authorized to participate and provide services in federal health care programs, participation requirements and allowable services vary among and within the programs; (2) participation requirements vary as to training, supervision, and specialty autonomy; and (3) some agencies that administer federal health programs are more involved in setting requirements and establishing service parameters for nonphysician specialists than other agencies.

Practice Guidelines: Managed Care Plans Customize Guidelines to Meet Local Interests (GAO/HEHS-96-95, May 30, 1996)	The inappropriate use of medical services can be costly and raises quality-of-care concerns. For example, a 1988 study found that 14 percent of bypass surgeries were performed inappropriately. To narrow the gap between current and optimal practice, some federal agencies and other groups develop clinical practice guidelines on the best practices for effective and appropriate care. Managed care plans, which employ various techniques intended to reduce inappropriate care, are likely sites of guideline use. This report discusses (1) the purposes clinical practice guidelines serve and (2) how health plans make use of already published guidelines developed by federal agencies and other groups.
Psychiatric Hospital Oversight (GAO/HEHS-96-132R, May 24, 1996)	Pursuant to a congressional request, GAO reviewed federal and state oversight of state-operated and private psychiatric hospitals. GAO noted that: (1) as of August 1995, 702 psychiatric hospitals were certified to participate in Medicare and Medicaid; (2) to become certified for participation in Medicare and Medicaid, psychiatric hospitals must satisfy general hospital requirements for health and safety, and special psychiatric hospital requirements for active treatment; (3) hospital medical records must reflect the degree of active treatment and hospitals must have qualified staff to evaluate and treat patients; (4) HCFA requires states to conduct surveys of psychiatric hospitals to determine whether they satisfy certification requirements; (5) surveys of psychiatric hospitals include examinations of hospital and patient records, direct observations of patients, and interviews with staffs and patients; (6) as of August 1995, most certified psychiatric hospitals satisfied HCFA requirements for medical records and staffing; and (7) the failure to evaluate a patient's strengths when developing a treatment plan, specify each patient's treatment goals, and indicate the methods of treatment were the most common deficiencies cited in surveys of psychiatric hospitals that failed to satisfy HCFA certification requirements.
State Medicaid Financing Practices (GAO/HEHS-96-76R, Jan. 23, 1996)	Pursuant to a congressional request, GAO provided information on state Medicaid financing arrangements in Michigan, Tennessee, and Texas. GAO noted that: (1) until HCFA ruled in 1985 that states could use Medicaid provider donations to reduce their share of Medicaid expenditures, states could only use provider donations for the cost of training administrative personnel; (2) Michigan raised $684 million for its Medicaid program through hospital donations and federal matching funds in fiscal years 1991 through 1993, allowing it to fund $566 million in additional Medicaid payments; (3) in 1993, Tennessee required certain medical providers to pay

	a $2,600 tax on their nursing home beds and a 6.75-percent tax on services, but it discontinued the hospital services tax in 1994 when it implemented the TennCare program; (4) Tennessee earned $458 million from nursing home and hospital taxes in fiscal year 1993 and received $954 million in federal matching funds, which accounted for over half of its 1993 Medicaid spending; (5) Congress enacted legislation in 1993 that restricted state financing arrangements by limiting disproportionate share hospital (DSH) program payments, causing states to modify their DSH programs and overall DSH payments to decline; and (6) despite the 1993 legislation, states were able to use intergovernmental transfers and other creative funding arrangements to reduce their share of Medicaid costs.
Cholesterol Treatment: A Review of the Clinical Trials Evidence (GAO/PEMD-96-7, May 14, 1996)	Clinical trials and other scientific studies have consistently shown that cholesterol-lowering treatment benefits middle-aged white men with high cholesterol levels and a history of heart disease. Medical research also shows that men with moderate-to-high cholesterol levels and no history of heart disease have lower rates of nonfatal heart attacks but no statistically significant reductions in death rates as a result of cholesterol-lowering treatment. Clinical trials generally have not evaluated the value of cholesterol-lowering treatment for several important groups, including women, the elderly, and minorities. Thus, they provide little or no evidence of benefits or possible risks for these groups. Two recent trials using a new drug class—the statins—show greater reductions in heart problems with their greater reductions in cholesterol and no increase in fatalities from coronary heart disease. One trial studied men and women with coronary heart disease and found a significant reduction in total fatalities; the other, which studied only men who did not have coronary heart disease, showed encouraging but not statistically significant reductions in fatalities from coronary heart disease.
District of Columbia: Information on Health Care Costs (GAO/AIMD-96-42, Apr. 22, 1996)	Recent studies on the District of Columbia's health care system have concluded that the city's health care problems are aggravated by such social factors as high rates of poverty, crime, substance abuse, and unemployment. These factors account for the sizable numbers of persons who do not seek preventive health care and cannot pay for medical treatment, the inappropriate use of D.C. General Hospital for primary care, and the many trauma care patients at area hospitals. To help Congress evaluate various restructuring proposals being considered for the District, this report discusses the District's health care budget and the composition

	of the District's health care system, including the number of Medicaid recipients and uninsured and the distribution of hospitals and clinics.
Medicare: Enrollment Growth and Payment Practices for Kidney Dialysis Services (GAO/HEHS-96-33, Nov. 22, 1995)	Medicare is the predominant health care payer for people with end-stage renal disease—the permanent and irreversible loss of kidney function. Medicare's cost for this program has increased, mainly because of the substantial increase in new program enrollees. The average annual rate of increase averaged 11.6 percent between 1978 and 1991. In addition to the rise in enrollment, the mortality rate for new patients decreased. For example, deaths among beneficiaries during the first year in the program fell from 28 percent to 24 percent between 1982 and 1991. Because the program began in 1973, technological advances and greater availability of kidney dialysis machines have meant that persons who were not considered good candidates for kidney dialysis in 1973—those 65 years old or older and those whose kidney failure was caused by diabetes and hypertension—are now routinely placed on dialysis. GAO's review of medical services and supplies provided to all Medicare end-stage renal disease patients in 1991 shows that no separately billable service or supply was provided often enough to make it a good candidate to be considered part of the standard dialysis treatment and thus included in a future composite rate.
Prescription Drugs and Medicaid: Automated Review Systems Can Help Promote Safety, Save Money (GAO/AIMD-96-72, June 11, 1996)	Inappropriate use of prescription drugs can lead to drug-induced illness, hospitalization, and even death. Inappropriate drug use can also prove expensive for the Medicaid program. As a result, Congress mandated that states establish utilization review programs—called prospective reviews—to review Medicaid prescriptions before drugs are dispensed. Automated prospective drug utilization review systems are proving a low-cost way for states to help both doctors and pharmacies safeguard Medicaid recipients from potentially harmful medical reactions. Although the main emphasis of these systems—appropriately—has been safety, both safety benefits and dollar savings accrue from their use. Because results vary on the basis of how such systems are administered, it is important that states share their experiences. Absent any analysis of data from the Iowa demonstration project or any concerted effort by HCFA to collect and share other states' experiences, states have had only limited access to both safety and cost data—information that is critical to informed decisionmaking and to maximizing the effectiveness and efficiency of automated prospective drug utilization review systems.

Housing Issues

Rural Housing Programs: Opportunities Exist for Cost Savings and Management Improvement (GAO/RCED-96-11, Nov. 16, 1995)

The Agriculture Department's Rural Housing and Community Development Service provides about $2.85 billion each year for rural housing loans. As of June 1995, the Service had an outstanding single-family and multifamily housing loan portfolio of about $30 billion, which represented a significant federal investment in affordable housing for the rural poor. The largest portion of the loan portfolio is for single-family direct and guaranteed mortgage loans that are made to families or individuals who are without adequate housing and who are unable to obtain loans from private lenders at reasonable costs. Rural multifamily rental housing loans, made to finance apartment-style housing or to buy and rehabilitate existing rental units, make up the rest of the portfolio. This report provides information on the Service's single- and multifamily housing loan programs and discusses suggestions made by GAO and others that could yield cost savings or improve management in these programs.

Income Security Issues

Social Security: Telephone Access Enhanced at Field Offices Under Demonstration Project (GAO/HEHS-96-70, Feb. 23, 1996)

The Social Security Administration (SSA) runs a nationwide toll-free telephone number and is testing enhanced local office telephone service at selected offices. In February 1995, SSA began installing new telephone equipment, called automated attendant and voice mail, at 30 of its 800 nationwide field offices that list their telephone numbers in local telephone directories. The equipment was installed in different configurations. Telephone access—calls reaching an SSA employee with the caller spending less than 2 minutes on hold—improved 23 percent under one of the configurations being tested by SSA. In addition, busy signals dropped by more than 55 percent. Staffing, however, did not increase, and many callers reaching SSA did spend some time on hold before reaching an SSA representative. SSA field office staff viewed the installation of voice mail equipment at their desks as having a very positive effect on office efficiency and public service. SSA has not yet completed its two internal evaluations of the demonstration project. GAO concludes that the technology tested in the demonstration projects has the potential to

	further SSA's public service goals. Public reaction and the effect on operations, however, will need to be considered as SSA weighs the costs and the benefits of this technology.
Food Stamp Program: Achieving Cost Neutrality in Minnesota's Family Investment Program (GAO/RCED-96-54, Feb. 12, 1996)	In 1994, Minnesota began a 5-year federally authorized welfare reform project known as the Minnesota Family Investment Program. Aimed at simplifying the welfare system, the project consolidates the food assistance and the cash benefits provided by three programs—Aid to Families With Dependent Children, the Food Stamp Program, and Minnesota's Family General Assistance Program—into a single monthly payment. The Food Stamp Act of 1977 requires that the federal government spend no more for this project's food assistance component in any fiscal year than it would have spent for the Food Stamp Program. That is, the project must be cost neutral. To ensure cost neutrality, the act requires the Agriculture Department and the state of Minnesota to agree upon methodologies for estimating what the costs of the Food Stamp Program for both benefits and administration would have been had there been no project. This report (1) describes the methodologies that Minnesota agreed to use for estimating Food Stamp Program costs that would have been incurred if the project had not been implemented; (2) determines if Minnesota implemented these methodologies; (3) assesses the reasonableness of these methodologies, as implemented, for estimating the cost of the Food Stamp Program for fiscal year 1994; and (4) compares the payments that would have been paid to Minnesota using the agreed-upon methodologies with the actual payments in fiscal year 1994.
Congressional Retirement Costs (GAO/GGD-96-24R, Oct. 12, 1995)	Pursuant to a congressional request, GAO provided information on the proposal to change the congressional retirement system, focusing on (1) the cost of congressional retirement benefits; (2) the potential savings from the proposal; (3) how private sector retirement systems compare with the congressional retirement system; and (4) the extent to which private sector employers are replacing defined benefit pension plans with defined contribution plans. GAO noted that: (1) the estimated cost of providing future retirement benefits to 1994 congressional members would total $14,327,224; (2) over a 5-year period, the cost of providing retirement benefits would total $71.5 million; (3) if the proposal were enacted, it would significantly reduce the cost of member retirement programs; (4) the cost of providing retirement benefits to 1994 congressional staff members would total $116.5 million; (5) although federal employees

	receive greater benefit amounts under the Civil Service Retirement System (CSRS) than nonfederal employees before age 62, they receive smaller amounts after age 62 and older when social security benefits are available to nonfederal employees; and (6) the private sector does not appear to be moving toward replacing defined benefit plans with defined contribution plans.
District's Workforce: Annual Report Required by the District of Columbia Retirement Reform Act (GAO/GGD-96-95, Mar. 29, 1996)	The federal government makes annual payments to the District of Columbia retirement fund for police officers and firefighters. To encourage the District government to control disability retirement costs, these payments must be reduced when disability retirement rates exceed a certain limit. GAO concludes that no reduction is required in the fiscal year 1997 payment to the fund.
Federal Employees' Compensation Act: Issues Associated With Changing Benefits for Older Beneficiaries (GAO/GGD-96-138BR, Aug. 14, 1996)	The Federal Employees' Compensation Act (FECA) now allows beneficiaries who are at or beyond retirement age to receive worker's compensation benefits. Possible changes to the legislation would reduce these benefits. This briefing report provides (1) a profile of beneficiaries on the long-term FECA rolls, (2) views of proponents and opponents of changing FECA benefits for older beneficiaries, and (3) questions and issues that Congress might consider if crafting benefit changes.
Federal Pensions: Thrift Savings Plan Has Key Role in Retirement Benefits (GAO/HEHS-96-1, Oct. 19, 1995)	As of September 1994, about 940,000 federal workers covered by the Federal Employees Retirement System (FERS) were voluntarily contributing an average of 5.7 percent of their salaries to the Thrift Savings Plan (TSP). Most of the remaining 300,000 workers covered by FERS who were not contributing were in the lower pay ranges. Lower-paid workers who were contributing were doing so at lower rates than higher-paid workers—an average of 4.4 percent of their salaries. However, lower-paid workers may achieve satisfactory retirement income levels even with low contribution rates because Social Security benefits are proportionately greater for them than for higher-paid workers. Higher-paid workers need to defer at least 5 percent of their salaries throughout their careers—if not more—to achieve retirement income of 60 to 80 percent of their preretirement salaries. Educating FERS workers can play a key role in their making wise preretirement investment choices. Although TSP materials discuss the plan's financial aspects, they do not explicitly discuss how TSP can help workers covered by FERS achieve their retirement income goals. The TSP Board is seeking legislation that would enable employees to invest

	in a domestic small capitalization fund and an international stock fund. GAO found that these two additions would make TSP's investment options more closely resemble those in similar private sector plans.
Older Americans Act Funding Formula (GAO/HEHS-96-137R, Apr. 24, 1996)	Pursuant to a congressional request, GAO provided information on how proposed changes to the funding formula for title III of the Older Americans Act would affect equity in state funding and per-person-in-need income. GAO found that: (1) the proposed formula changes would improve funding equity and target more aid to the elderly in the oldest age groups and low-income states; (2) the formula changes would not affect small states that are guaranteed at least 0.5 percent of the funds made available for state distribution; (3) the changes would reduce cross-state disparities, increase funding for states whose funding is below the national average, and decrease funding for those states whose funding is above the average; and (4) funding disparities could be further reduced if minority status and poverty were included in the formula changes.
PASS Program: SSA Work Incentive for Disabled Beneficiaries Poorly Managed (GAO/HEHS-96-51, Feb. 28, 1996)	SSA is poorly managing a small but growing program to encourage disability beneficiaries to seek employment. The plan for achieving self-support (PASS) program, established in 1972, is currently small—only about 10,300 persons participated in December 1994—but the number of participants has swelled more than fivefold during the past 5 years as awareness of the program has increased and millions more disabled beneficiaries have become eligible to participate. The PASS program is vulnerable to abuse because of vague guidelines, and its impact on employment is unknown because SSA does not collect basic data on participants and their employment. In addition, SSA top management has not adequately considered the potential problems posed by professional PASS preparers, whose fees—as much as $800—are often included as PASS expenses. SSA is trying to address some of these internal control weaknesses, but it cannot guarantee today that taxpayer dollars are being well spent.
Proposed Pension Reversion (GAO/HEHS-96-54R, Oct. 24, 1995)	Pursuant to a congressional request, GAO provided information on pension plan underfunding, focusing on a proposed legislative provision that would allow companies to transfer excess assets out of their defined benefit pension plans for any purpose. GAO noted that: (1) current and termination liabilities are measures of liabilities that a plan has accrued as of its valuation date and each relies on different assumptions and yields very

different estimates; (2) plans that are significantly funded over their current liability can lose plan funding rapidly due to bankruptcy, early retirements, or a decline in interest rates; (3) participants can lose benefits when a plan is terminated because the Pension Benefit Guaranty Corporation (PBGC) generally does not insure all benefit amounts; (4) companies may not transfer or obtain excess assets from a defined benefit plan under current law, but some transfers may be permissible if the plans merge and participants' benefits are not reduced; (5) it is unclear whether the transfer of excess plan assets would release capital for investment; and (6) although the proposed provision would allow withdrawal of overfunded assets, plan sponsors may be required to make longer cash contributions in the future.

Public Pensions: Section 457 Plans Pose Greater Risk Than Other Supplemental Plans (GAO/HEHS-96-38, Apr. 30, 1996)

Millions of state and local government employees are trying to increase their future retirement benefits by deferring some of their wages to supplement pension plans, known as salary reduction arrangements or plans. The amount deferred or contributed to these plans, however, may be at risk. Recent media stories have recounted instances of imprudent investment, improper use of plan funds by sponsors, and possible seizure of plan funds by sponsoring governments' creditors. This report examines the risks of financial loss inherent in such plans and discusses whether the provisions of such plans treat participants comparably. See also Public Pensions: Summary of Federal Pension Plan Data (GAO/AIMD-96-6, Feb. 16, 1996) and Public Pensions: State and Local Government Contributions to Underfunded Plans (GAO/HEHS-96-56, Mar. 14, 1996).

Public Pensions: State and Local Government Contributions to Underfunded Plans (GAO/HEHS-96-56, Mar. 14, 1996)

State and local governments with underfunded pension plans risk tough budget choices in the future if they do not make progress toward full funding. Their taxpayers will face a liability for benefits earned by current and former government workers, forcing these governments to choose between reducing future pension benefits or raising taxes. Funding of state and local pension plans has improved significantly since the 1970s. After adjusting for inflation, the amount of the unfunded liability has been cut in half. Still, in 1992, 75 percent of state and local government pension plans in the Public Pension Coordinating Council survey were underfunded; 38 percent were less than 80 percent funded. Sponsors of slightly more than half of the plans in the survey made contributions on schedule to pay off any unfunded liability. One-third of the pension plans, however, were underfunded in 1992 and were not receiving the actuarially required sponsor contributions. Of all plans with complete data, one-fifth

	were underfunded and were not receiving full contributions in both 1990 and 1992. See also Public Pensions: Summary of Federal Pension Plan Data (GAO/AIMD-96-6, Feb. 16, 1996) and Public Pensions: Section 457 Plans Pose Greater Risk Than Other Supplemental Plans (GAO/HEHS-96-38, Apr. 30, 1996).
Public Pensions: Summary of Federal Pension Plan Data (GAO/AIMD-96-6, Feb. 16, 1996)	This report—one in a series of three reports on the status of public pension plan funding—provides summary data on federal government pension plans. The other two reports in the series address state and local government pension plans. GAO focuses on federally sponsored defined benefit and defined contribution plans. See also Public Pensions: State and Local Government Contributions to Underfunded Plans (GAO/HEHS-96-56, Mar. 14, 1996) and Public Pensions: Section 457 Plans Pose Greater Risk Than Other Supplemental Plans (GAO/HEHS-96-38, Apr. 30, 1996).
Social Security Administration: Effective Leadership Needed to Meet Daunting Challenges (GAO/HEHS-96-196, Sept. 12, 1996)	With a staff of 64,000, SSA runs the nation's largest federal program—social security—as well as the largest cash welfare program—the supplemental security income (SSI) program. SSA's expenditures totaled $363 billion in fiscal year 1995, nearly one-fourth of the $1.5 trillion federal budget. SSA programs touch the lives of nearly every American, providing benefits to the retired, the disabled, and their dependents and survivors. This report, which is based on July 1995 testimony before Congress (GAO/T-OCG-96-7), discusses SSA's progress in meeting the challenges of managing for results and accountability; funding future retirement benefits; rethinking SSI fraud, waste, and abuse; handling increasing workloads with fewer resources; and establishing effective leadership.
Social Security Disability: Backlog Reduction Efforts Under Way: Significant Challenges Remain (GAO/HEHS-96-87, July 11, 1996)	SSA runs the nation's largest programs providing cash benefits to people with severe long-term disabilities. The number of persons receiving either disability insurance (DI) or SSI benefits has soared during the past decade. At the same time, SSA has struggled to deal with unprecedented growth in appeals of its disability decisions and the resulting backlog of cases awaiting hearing decisions. Processing delays stemming from a backlog of more than half a million appealed cases have created hardships for disability claimants, who often wait more than a year for final disability decisions. This report discusses (1) factors contributing to the growth in appealed cases, (2) SSA initiatives to reduce the backlog, and (3) long-term steps that need to be taken to make the disability appeals process more timely and efficient.

Social Security: Issues Involving Benefit Equity for Working Women (GAO/HEHS-96-55, Apr. 10, 1996)	When the social security program was established in the 1930s, less than 15 percent of married women held paying jobs outside the home; today, about 60 percent of married women are paid workers. Despite the movement of women into the labor market, the social security benefit structure has remained essentially unchanged over the years. The fairness of the benefit structure has come under increasing scrutiny, especially as it affects women who have earned benefits in their own right. For example, a two-earner couple will receive lower combined benefits in retirement than an identical one-earner couple. Also, a married woman who works and pays social security taxes might not, because of the dual entitlement limitation, receive higher benefits than if she had never worked and received only a spousal benefit. Several proposals seek to remedy these inequities. These include two broad proposals—"earnings sharing" and a "double-decker" plan—and several narrower proposals, such as reducing spousal benefits. None of the measures has been adopted, however, partly because they would either boost program costs or reduce benefits for some beneficiaries. Their enactment could also impose a large administrative burden on SSA.
Social Security Trust Funds (GAO/AIMD-96-30R, Dec. 12, 1995)	Pursuant to a congressional request, GAO reviewed the Secretary of the Treasury's actions during the 1995 debt ceiling crisis, focusing on whether the Department of the Treasury followed normal investment and redemption policies regarding the Social Security trust funds. GAO noted that Treasury records show that the Secretary followed normal investment and redemption policies for all transactions affecting the trust funds between November 1, 1995, and December 8, 1995.
SSA Disability: Program Redesign Necessary to Encourage Return to Work (GAO/HEHS-96-62, Apr. 24, 1996)	During the past decade, the number of persons receiving benefits from Social Security's DI and SSI programs increased 70 percent because of program changes and economic and demographic factors. These programs, which provide assistance to persons with disabilities until they return to work, if that is possible, provided $53 billion in cash benefits to 7.2 million people in 1994. Advances in technology, such as standing wheelchairs and synthetic voice systems, and the medical management of some physical and mental disabilities have allowed some persons to work. Moreover, there has been a greater trend toward inclusion of and participation by people with disabilities in the mainstream of society. Yet both programs have done little to identify recipients who might benefit from rehabilitation and employment assistance and ultimately return to work.

SSA Overpayment Recovery (GAO/HEHS-96-104R, Apr. 30, 1996)	Pursuant to a congressional request, GAO reviewed how SSA recovers overpayments of benefits. GAO found that: (1) the amount of SSI, BSI, and DI payments that SSA withholds to recoup overpayments is not upwardly adjusted with cost-of-living increases in the many cases in which the withholding is based on a fixed dollar amount negotiated with the beneficiary, as opposed to a fixed percentage of the recipient's monthly income or monthly benefit amount; (2) basing the withholding on a percentage instead of a dollar amount would accelerate the recovery of overpayments without imposing an undue burden on recipients or causing excessive administrative costs; (3) accelerating recoveries while recipients are still receiving benefits improves the chance of collecting overpayments; (4) SSA administrative costs would likely increase only in the first year of implementation; and (5) the cost of notifying recipients of the new withholding procedures would be negligible, because SSA already notifies recipients when overpayments occur.
Supplemental Security Income: Some Recipients Transfer Valuable Resources to Qualify for Benefits (GAO/HEHS-96-79, Apr. 30, 1996)	Existing law does not prohibit people from transferring resources to qualify for benefits under the SSI program—the largest cash assistance program for the poor and one of the fastest growing entitlement programs. Between 1990 and 1994, 3,500 SSI recipients transferred assets, including cash, houses, land, and other items, valued at $74 million. Transfer values ranged as high as $800,000; most transfers fell between $10,000 and $25,000. The total amount of resources transferred, however, is likely to be larger than GAO's estimate because SSA is not required to verify the accuracy of resource transfer information, which is self-reported by individuals. Moreover, because the information is self-reported, SSA is unlikely to detect unreported transfers. Without a transfer-of-resource restriction, SSI recipients who transferred assets to qualify for benefits would receive nearly $8 million in benefits in the 24 months after they transferred resources. Many of these recipients also could have received Medicaid acute-care benefits at an annual value of between $2,800 and $5,300 per recipient. GAO estimates that from 1990 through 1995, SSA could have saved $14.6 million with a transfer-of-income restriction similar to that used for Medicaid. Such a restriction could also boost the public's confidence in the program's integrity.
Thrift Savings Plan (GAO/HEHS-96-66R, Nov. 14, 1995)	Pursuant to a congressional request, GAO reviewed (1) why Congress replaced CSRS with FERS; and (2) the Federal Retirement Thrift Investment Board's response to the GAO recommendation concerning the inclusion of participant information on contributions to TSP retirement accounts. GAO

	noted that: (1) Congress replaced CSRS with FERS to provide federal employees with a retirement benefit that included a Social Security payment, a basic FERS annuity, and payments from amounts accumulated in a TSP account; and (2) the Board did not implement the recommendation because it believed that it would be violating its fiduciary duty to TSP participants and misusing its funds.
401(k) Pension Plans: Many Take Advantage of Opportunity to Ensure Adequate Retirement Income (GAO/HEHS-96-176, Aug. 2, 1996)	Many workers fill the gap between social security and an adequate retirement income with pension benefits, and one in four workers with pension coverage participates in a 401(k) program. GAO found, among other survey results, that workers with higher incomes and college educations tended to contribute more to 401(k) plans than others and women tend to invest more conservatively than do men. Also, higher-income workers and better-educated workers with 401(k) pension plans tend to contribute a larger percentage of their salaries to their pension accounts and to invest their pension funds in higher-yielding assets than do other 401(k) plan participants. Consequently, although many workers will have enough retirement income, some workers, especially those with less education and lower incomes, risk inadequate retirement incomes.

Veterans/DOD Issues

Neoplasms in Persian Gulf Veterans (GAO/PEMD-96-15R, June 21, 1996)	Pursuant to a congressional request, GAO reviewed Department of Veterans Affairs' (VA) data on the frequency of abnormal tissue growths among Persian Gulf War veterans and other military personnel. GAO noted that: (1) VA data show that Persian Gulf War veterans have a neoplasm-diagnosis rate that is more than three times higher than that of nonwar veterans; (2) the higher neoplasm rate for war veterans may be due to causes other than service in the Persian Gulf, such as war veterans seeking VA hospital treatment more often than nonwar veterans; (3) the rate of surgical procedures for the two groups is not significantly different, which could mean that war veterans' neoplasms are not as serious as those diagnosed among nonwar veterans; and (4) analyzing alternative explanations for war veterans' neoplasm rates would require extensive statistical analysis and professional judgment.

Defense Health Care: Effects of Mandated Cost Sharing on Uniformed Services Treatment Facilities Likely to Be Minor (GAO/HEHS-96-141, May 13, 1996)	The establishment of uniform benefits and cost sharing for DOD beneficiaries is a key component of the TRICARE program—DOD's new nationwide managed health care program—and is something that GAO and others have long advocated. Such uniformity would, in GAO's view, eliminate inequities and confusion that now exist among beneficiaries of military health plans. Although adopting TRICARE cost shares may cause some minor adverse selection for the Uniformed Services Treatment Facilities (USTF), there should be no lasting negative financial impact on its operations. Moreover, the new cost shares, which are similar to HMOs, are appropriate for the risks to be borne by the USTFs and will likely make the USTF population more similar to DOD's general beneficiary population. More importantly, there should be a financial impact. DOD's current USTF capitation methodology takes into account and allows for adjusted reimbursement levels for such higher costs that result from changes in the enrollee cost shares and population characteristics.
Defense Health Care: Medicare Costs and Other Issues May Affect Uniformed Services Treatment Facilities' Future (GAO/HEHS-96-124, May 17, 1996)	Since fiscal year 1994, Congress has appropriated nearly $1 billion for USTF to deliver health care to what now totals 124,000 beneficiaries. In recent years, Congress has grown concerned about the rising cost to treat USTF members, in part because some members retain dual eligibility and unrestricted access to other government health care services, such as Medicare and DOD hospitals. Congress directed DOD in 1991 to reform the USTF program by introducing a managed care program. As DOD begins to implement its new nationwide managed care program—TRICARE—questions about the program's future persist. This report discusses (1) whether unnecessary costs result from USTF members' use of other federally funded health care sources and (2) other issues that need to be considered as Congress deliberates reauthorization of the USTF program.
Defense Health Care: New Managed Care Plan Progressing, but Cost and Performance Issues Remain (GAO/HEHS-96-128, June 14, 1996)	The DOD health care system, which costs $15 billion annually, is undergoing sweeping reform. Through TRICARE, DOD is trying to improve access to care among its 8.3 million beneficiaries while containing costs. How well DOD implements and operates TRICARE may define and shape military medicine for years to come. Because of TRICARE's complexity, scale, and impact on beneficiaries, GAO reviewed the program, focusing on (1) whether DOD's experiences with early implementation yielded the expected results, (2) how early outcomes may affect costs, and (3) whether DOD has defined and is capturing data needed to manage and assess TRICARE's performance. GAO concludes that despite initial confusion among beneficiaries arising from marketing and education problems, as

	well as problems with the compatibility of computer systems, early implementation of TRICARE is progressing consistent with congressional and DOD goals. However, the success of DOD's efforts to implement resource-sharing agreements and utilization management is critical to containing health care costs. DOD also needs to gather enrollment and performance data so that it and Congress can assess TRICARE's success in the future.
Readjustment Counseling Service: Vet Centers Address Multiple Client Problems, but Improvement Is Needed (GAO/HEHS-96-113, July 17, 1996)	VA operates 205 community-based facilities known as Vet Centers to help veterans make a successful transition from military to civilian life. Vet Center counselors reported visiting with about 138,000 veterans during fiscal year 1995, 84,000 of whom were new to Vet Centers. Most veterans do not establish long-term relationships with Vet Center counselors; however, those who do represent a core group who use services over extended periods for serious psychological problems, such as post-traumatic stress disorder. Other veterans usually visit Vet Center counselors only once or twice for social concerns, such as employment or benefit needs.
VA Health Care: Effects of Facility Realignment on Construction Needs Are Unknown (GAO/HEHS-96-19, Nov. 17, 1995)	As part of the fiscal year 1996 budget, the President requested $524 million for major VA construction projects. These projects include the construction of two new VA medical facilities and major renovations at seven existing facilities. This report discusses how the projects are expected to benefit veterans and the relationships between the proposed projects and VA's recent efforts to realign all of its facilities into a new service network. GAO also discusses the potential effects of funding delays on VA's construction award dates and costs.
VA Health Care: Exploring Options to Improve Veterans' Access to VA Facilities (GAO/HEHS-96-52, Feb. 6, 1996)	Since its creation in 1930, VA's health care system has become one of the nation's largest networks of direct delivery health care providers, with 173 hospitals and 376 outpatient clinics nationwide. But because public and private health insurance programs have also grown, most veterans now have alternatives to VA health care. Many veterans indicate that they use private providers because they live too far from VA hospitals or outpatient clinics. VA has recently encouraged its facilities to improve veterans' access to VA health care. This report discusses (1) characteristics of recent users of VA medical facilities; (2) the geographic accessibility of VA and private medical facilities that provide standard benefits; and (3) options that VA facilities might want to consider to improve the accessibility of VA

	health care, such as locating new medical facilities closer to where veterans live and contracting with private providers.
VA Health Care: How Distance From VA Facilities Affects Veterans' Use of VA Services (GAO/HEHS-96-31, Dec. 20, 1995)	Living within 5 miles of a VA Hospital or outpatient clinic significant increases the likelihood that a veterans will use VA health care services. Although most veterans live within 25 miles of a VA hospital or outpatient clinic, use of VA facility declines significantly among veterans living more than 5 miles from a VA facility. Only about 11 percent of veterans live within 5 miles of a VA hospital providing acute medical and surgical care and 17 percent within 5 miles of a VA outpatient clinic. Use of VA health care services does not decline with distance as rapidly among veterans receiving VA compensation or pension payments. Even those veterans with a service-connected disability who live more than 100 miles from a VA outpatient clinic are more likely to avail themselves of VA outpatient services than are higher-income veterans with nonservice-connected disabilities who live within 5 miles of a VA outpatient clinic. Other factors that may contribute to differences in the use of VA services include broader eligibility and entitlement to outpatient care for service-connected and low-income veterans, veterans' ages, and differences in available resources.
VA Health Care: Issues Affecting Eligibility Reform Efforts (GAO/HEHS-96-160, Sept. 11, 1996)	Pursuant to a congressional request, GAO reviewed various proposals that would simplify and expand eligibility for veterans' health care benefits. GAO found that: (1) eligibility requirements for veterans health care benefits have become increasingly complex and a source of frustration to veterans, VA physicians, and administrators; (2) VA does not have a defined or uniform benefits package and cannot ensure the availability of covered services; (3) VA has forced physicians to either deny needy veterans ineligible services or provide these services illegally free of charge; (4) VA health care eligibility reform could expand the types of services provided and allow veterans lacking supplemental insurance access to needed services; (5) the four legislative proposals reviewed could more than double the demand for VA outpatient services, cause VA to ration care, and force VA to seek larger appropriations to preserve its safety-net mission; (6) alternative approaches including limiting the number of eligible veterans and range of benefits added or increasing cost sharing could preserve VA ability to provide specialized services; (7) although the American Legion proposal incorporates all three of these approaches and is a basis for future reform proposals, changes need to be made to reduce

	the number of veterans covered, exempt VA from most federal contracting laws, and designate VA as a Medicare provider; and (8) one option to reduce the number of veterans who would be eligible under the proposal and target those veterans who have low incomes and lack supplemental insurance, would be to limit VA benefits for veterans with no service-related disabilities.
VA Health Care: Opportunities for Service Delivery Efficiencies Within Existing Resources (GAO/HEHS-96-121, July 25, 1996)	VA, which operates one of the nation's largest health care systems, faces increasing pressure to contain or reduce spending as part of governmentwide efforts to balance the budget. This report discusses ways VA could operate more efficiently and reduce the resources needed to meet the needs of veterans in what is commonly referred to as the mandatory care category. GAO addresses (1) VA's forecasts of future resource needs, (2) opportunities to run VA's system more efficiently, (3) differences between VA and the private sector in efficiency incentives, and (4) recent VA efforts to reorganize its health care system and create efficiency incentives. GAO concludes that successful implementation of a range of reforms, coupled with reduced demand for services, could save the VA health care system billions of dollars during the next 7 years. The success of these efforts, however, depends on introducing efficiency incentives at VA that have long existed in the private sector.
VA Health Care: Travis Hospital Construction Project Is Not Justified (GAO/HEHS-96-198, Sept. 3, 1996)	Pursuant to a congressional request, GAO provided information on VA's planned construction of an outpatient clinic and additional bed space at the David Grant Medical Center, focusing on (1) whether the project could be adequately justified and (2) if there are cost-effective alternatives to planned hospital construction. GAO found that: (1) VA planned construction of additional bed space and an outpatient clinic at Travis Air Base appears to be unjustified; (2) VA has not revised its construction plans to reflect the changes that have occurred in the health care marketplace and advances in medical practices and technology that have reduced the demand for hospital beds in Northern California; (3) VA has not considered whether its construction plans will negatively affect surrounding community hospitals; (4) the veteran population in Northern California is expected to decline by 25 percent between 1995 and 2010 and may not be large enough to support a new outpatient clinic; (5) VA is adequately meeting the health care needs of Northern California Health Care System veterans; (6) although VA clinics have experienced some space constraints, they have had no problem in

	placing veterans needing hospital care and using community hospitals for medical emergencies; (7) alternatives to VA construction plans include modifying VA hospital referral patterns, expanding use of other military and VA hospitals, granting VA more authority to contract for lower cost community hospital services, or allowing it to purchase a local Air Force hospital for use as a hospital or outpatient clinic; (8) VA Sierra Pacific Network officials are evaluating the best way to meet veterans' future health care needs, make better use of VA facilities, and increase the use of private and other public facilities; and (9) Congress' decision on whether to fund the construction plan will significantly affect the alternatives and options that can be implemented.
VA Health Care: Trends in Malpractice Claims Can Aid in Addressing Quality of Care Problems (GAO/HEHS-96-24, Dec. 21, 1995.)	From fiscal year 1990 to fiscal year 1994, malpractice claims against VA medical centers have steadily increased, from 678 to 978, with payments made to claimants totaling more than $200 million. In 1992, VA entered into an agreement with the Armed Forces Institute of Pathology (AFIP) to analyze trends in VA malpractice claims. VA's quality assurance staff, however, are making only limited use of the information being developed by AFIP. Although malpractice claim information is available from DOD, it is not comparable to the malpractice data that VA collects. The main reason for the lack of comparability is the absence of a standard data collection format. Nonetheless, GAO found that DOD information may be useful to VA to draw comparisons in areas in which malpractice claims are being generated, such as incidents related to surgery, diagnosis, and medication.
Veterans' Health Care: Facilities' Resource Allocations Could Be More Equitable (GAO/HEHS-96-48, Feb. 7, 1996)	VA confronts the challenge of equitably allocating more than $16 billion in health care appropriations across a nationwide network of hospitals, clinics, and nursing homes. The challenge is made greater by the changing demographics of veterans. Although nationally the veteran population is declining, some veterans have relocated from the Northeast and the Midwest to southern and southwestern states in the past decade, offsetting veteran deaths in these states. VA has tried for years to implement an equitable resource allocation method—one that would link resources to facility workloads and foster efficiency. The need for such a system has become more urgent in recent years because of the demographic shift in veterans and the dramatic changes in health care resulting from increasingly limited resources. The resource allocation system can help VA achieve this goal by forecasting workload changes and providing comparative data on facilities' costs. Nonetheless, VA has not taken steps to overcome several barriers that can prevent it from acting on the data

	the system produces. If the system is to live up to its potential, several changes must be made, including linking resource allocation to VA's strategic plan, conducting a formal review and evaluation of facility cost variations, evaluating the basis for not allocating funds through resource planning and management, and using resource planning and management to overcome differences in veterans' access to care.
Veterans' Health Care: VA's Approaches to Meeting Veterans' Home Health Care Needs (GAO/HEHS-96-68, Mar. 15, 1996)	In fiscal year 1994, VA provided home health care to more than 40,000 veterans at a cost of $64 million to VA and millions more to Medicare. By providing them with home health care, VA allows these veterans to continue living at home and in their communities, rather than receive care in institutions. Veterans may need home health care for various reasons. Some veterans may have chronic health problems, such as heart disease, and require periodic visits, while others may be discharged from VA medical centers following surgery and need dressings changed or medications administered. The number of veterans needing home health care is expected to grow as the veteran population ages and as VA discharges patients from its hospitals to reduce the costs of hospitalization. This report provides information on (1) the characteristics and the services of the home health care programs that VA uses, (2) the available data on program costs, and (3) the way in which VA ensures that veterans receive quality service.
Vocational Rehabilitation: VA Continues to Place Few Disabled Veterans in Jobs (GAO/HEHS-96-155, Sept. 3, 1996)	Pursuant to a congressional request, GAO reviewed VA's vocational rehabilitation program, focusing on (1) the percentage of rehabilitated veterans, (2) the services provided, (3) the characteristics of clients served, (4) the cost of rehabilitation, and (5) VA's efforts to improve program effectiveness. GAO found that: (1) the VA vocational rehabilitation program continues to focus on training and higher education, but it places few veterans in jobs; (2) from 1991 to 1995, VA rehabilitated only about 8 percent of eligible veterans, while 51 percent continued to receive program services; (3) those program participants with a serious employment handicap declined from 40 percent to 29 percent over the last 5 years and those with a 10-to-20 percent disability increased from 34 percent to 42 percent; (4) over 90 percent of program applicants were male and had completed high school and almost 25 percent had some college courses; (5) VA spent on average about $20,000 on each employed veteran and $10,000 on each program dropout; (6) over one-half of VA rehabilitation costs were for

veterans' subsistence allowances; (7) state vocational rehabilitation agencies rehabilitated 37 percent of eligible individuals, while the remaining individuals continued to receive state program services; (8) the state vocational rehabilitation programs provided a wide range of rehabilitation services and had a majority of severely disabled clients; (9) almost 60 percent of the state program applicants were male and had completed high school and 17 percent had completed some college courses; (10) the state programs spent on average about $3,000 on each rehabilitated client and about $2,000 on each dropout, none of which covered clients' living expenses; (11) VA established a design team in 1995 to improve program effectiveness, primarily by increasing the percentage of suitably employed veterans, improving staff job finding and placement skills, and developing a data management system; and (12) VA plans to implement these program changes in fiscal year 1997.

Other Related Issues

Aging Issues: Related GAO Reports and Activities in Fiscal Year 1995 (GAO/HEHS-96-82, Mar. 6, 1996)

This report provides a compilation of GAO's fiscal year 1995 products and ongoing work on older Americans. Because the elderly are one of the fastest-growing segments of American society, Congress faces a host of issues—from health care to social security to pensions—in which the federal government will play an important role. This booklet is divided into three sections, which summarize different types of GAO products relating to older Americans: reports and correspondence, testimony before Congress, and ongoing work. Overall, health, income security, and veterans issues were the areas most frequently addressed by GAO work on older Americans.

Health, Education, Employment, Social Security, Welfare, and Veterans Reports: Five-Year Report 1991-96 (GAO/HEHS-96-98W, Mar. 1, 1996)

GAO published a listing of reports and testimonies issued from March 1991 through February 1996, regarding such issues as: (1) health care services and access; (2) health insurance and financing; (3) health care reform; (4) long-term care; (5) Medicare and Medicaid; (6) public health and education; (7) early childhood, elementary, secondary, and higher education; (8) school-to-work transition; (9) equal employment opportunities; (10) labor-management relations; (11) workplace quality; (12) children; (13) social security, disability, and welfare benefits; (14) pensions; (15) military health care; and (16) veterans' benefits.

Health, Education, Employment, Social Security, Welfare, and Veterans Reports (GAO/HEHS-96-15W, Oct. 1, 1995)	This booklet lists GAO documents on government programs related to health, education, employment, social security, welfare, and veterans issues, which are primarily run by the Departments of Health and Human Services, Labor, Education, and Veterans Affairs. One section identifies reports and testimony issued during the past month and summarizes key products. Another section lists all documents published during the past year, organized chronologically by subject. Order forms are included.

Appendix II

Fiscal Year 1996 Testimonies on Issues Affecting Older Americans

GAO testified 34 times before congressional committees during fiscal year 1996 on issues relating to older Americans. Of these testimonies, 1 was on education/employment, 15 on health, 3 on housing, 8 on income security, and 7 on veterans/DOD issues.

Education and Employment Issues

Senior Community Service Employment: Program Delivery Could Be Improved Through Legislative and Administrative Actions (GAO/T-HEHS-96-57, Nov. 2, 1995)

The Labor Department's Senior Community Service Employment Program finances part-time minimum-wage community service jobs for about 100,000 poor elderly Americans. GAO found that Labor distributes program funds through noncompetitive grants to 10 national organizations, called national sponsors, and to state agencies. These national sponsors and state agencies, in turn, use the grant funds to finance local employment projects run by community service host agencies, such as libraries, nutrition centers, and parks, that directly employ older Americans. GAO found that the relative distribution of funds to the national sponsors and state agencies along with Labor's method of implementing the hold-harmless provisions have resulted in the distribution of funds among and within states that bear little relationship to actual need. GAO also found that, under Labor's regulations, expenditures that GAO believes to be administrative in nature may be charged to another cost category, allowing grantees to exceed the statutory 15-percent limit on administrative costs.

Health Issues

Blue Cross and Blue Shield: Change in Pharmacy Benefits Affects Federal Enrollees (GAO/T-HEHS-96-206, Sept. 5, 1996)

Of the 400 health plans available to federal workers, the Blue Cross and Blue Shield plan is the largest, covering nearly 42 percent of the 4 million federal enrollees. To control drug costs, Blue Cross and Blue Shield recently began requiring federal enrollees to pay 20 percent of the price of prescriptions purchased at participating retail pharmacies. Previously, federal enrollees did not have to pay anything for prescription drugs. Enrollees may continue to receive drugs free of charge, however, if they buy them through the plan's mail order program. Members of Congress and retail pharmacies have raised concerns about the quality of mail order services and the effect of the change on the business of retail pharmacies

	that serve plan enrollees. To provide pharmacy services to its federal employee health plan, Blue Cross and Blue Shield contracts with two PBMs: PCS Health Systems, Inc., which provides retail prescription drug services, and Merck-Medco Managed Care, Inc., which provides mail order drug services. This testimony discusses (1) Blue Cross and Blue Shield's reasons for the benefit change, (2) how it was implemented, (3) the change's effect on retail pharmacies, and (4) the extent to which PCS and Merck-Medco have met their contract requirements for services provided to the federal health plan.
Consumer Health Informatics: Emerging Issues (GAO/T-AIMD-96-134, July 26, 1996)	Technology has increased the amount of health information available to the public, allowing consumers to become better educated and more involved in their own health care. Government and private health care organizations rely on a variety of technologies to disseminate health information on preventive care, illness and injury management, treatment options, post-treatment care, and other topics. This report discusses consumer health informatics—the use of computers and telecommunications to help consumers obtain information, analyze their health care needs, and make decisions about their own health. GAO provides information on (1) the demand for health information and the expanding capabilities of technology; (2) users' and developers' views on potential systems advantages and issues surrounding systems development and use; (3) government involvement—federal, state, and local—in developing these technologies; and (4) the status of related efforts by HHS. As part of this review, GAO surveyed consumer health informatics experts and presents their views on issues that need to be addressed when developing consumer health information systems.
Fraud and Abuse: Medicare Continues to Be Vulnerable to Exploitation by Unscrupulous Providers (GAO/T-HEHS-96-7, Nov. 2, 1995)	Most Medicare providers try to abide by program rules and strive to meet beneficiaries' needs. Nevertheless, Medicare is overwhelmed in its attempts to keep pace with, much less stay ahead of, those bent on cheating the system. GAO's recent investigations of Medicare fraud and abuse have implicated home health agencies, medical suppliers, pharmacists, rehabilitation therapy companies, and clinical laboratories. They are attracted by the high reimbursement levels for some supplies and services, and the few barriers to entry into this lucrative marketplace. Once engaged in these profitable activities, exploitative providers too often escape detection because of inadequate claims scrutiny, elude pursuit by law enforcement authorities because of the authorities' limited

	resources and fragmented responsibilities, and face little risk of speedy or appropriate punishment.
Fraud and Abuse: Providers Excluded From Medicaid Continue to Participate in Federal Health Programs (GAO/T-HEHS-96-205, Sept. 5, 1996)	Although HHS' Office of Inspector General (OIG) has excluded thousands of health care providers from state Medicaid programs because they committed fraud or delivered poor care to beneficiaries, weaknesses in the OIG's process could leave such providers on the rolls of federal health programs for unacceptable periods of time. This puts at risk the health and safety of beneficiaries and compromises the financial integrity of Medicaid, Medicare, and other federal health programs. The weaknesses include (1) lengthy delays in the OIG's decision process, even in cases where a provider has been convicted of fraud or patient abuse and neglect; (2) inconsistencies among OIG field offices regarding which providers will be considered for nationwide exclusion; (3) states not informing the OIG about providers who agree to stop participating in their Medicaid programs even though the provider withdrew because of egregious patient care or abusive billing practices; and (4) how states use information from the OIG to remove excluded providers from state programs. Because of incomplete records in the OIG field offices, GAO could not reach a conclusion as to the magnitude of these problems.
Medicaid: Spending Pressures Spur States Toward Program Restructuring (GAO/T-HEHS-96-75, Jan. 18, 1996)	Several factors, including federal mandates that expand eligibility, medical price inflation, and creative financing schemes, have boosted Medicaid costs. To contain these expenses, 22 states have recently sought waivers from federal regulations that limit their ability to run extensive managed care programs. Some of these states have required the enrollment of their acute care patients—primarily low-income women and children—into managed care programs and have expanded coverage to previously ineligible persons. Arizona, which runs a Medicaid managed care program under a federal waiver obtained more than 10 years ago, has lowered Medicaid spending by millions of dollars. It also leads the states in its development of information systems for collecting medical encounter data essential for assessing quality of care.

Medicare: Excessive Payments for Medical Supplies Continue Despite Improvements (GAO/T-HEHS-96-5, Oct. 2, 1995)	Despite improvements by HCFA in claims monitoring, problems in payments for medical supplies persist. The inflexibility of Medicare's fee schedule results in payment rates that are higher than wholesale and many retail prices. In addition, in the case of many part A claims, claims processing contractors do not know what they are paying for and in the case of part B claims, have not had a basis for questioning unreasonably high charges. Neither type of contractor has been able to test claims for possible duplicate payments. For these reasons, Medicare has lost hundreds of millions of dollars in unnecessary payments. By obtaining the legislative authority to modify payment rates in accordance with market condition, requiring providers to itemize claims, and introducing the relevant medical policies before paying for new benefits, HCFA could reduce its dollar losses arising from medical supply payments. Contractors could avoid paying unreasonable charges and making duplicate payments.
Medicare: Millions Can Be Saved by Screening Claims for Overused Services (GAO/T-HEHS-96-86, Feb. 8, 1996)	Medicare contractors routinely pay hundreds of millions of dollars in Medicare claims without first determining if the services provided are necessary. GAO reviewed payments to doctors for six groups of high-volume medical procedures—ranging from eye examinations to chest X rays—that accounted for nearly $3 billion in Medicare payments in 1994. GAO also surveyed 17 contractors to determine if they had used medical necessity criteria in their claims processing to screen for these six groups of procedures. For each of the six groups, more than half of the 17 contractors failed to use automated screens to flag claims for unnecessary, inappropriate, or overused treatments. These prepayment screens could have saved millions of taxpayer dollars now wasted on questionable services. Problems with controlling payments for widely overused procedures continue because HCFA lacks a national strategy to control these payments. HCFA now relies on contractors to focus on procedures where local use exceeds the national average. Although this approach helps reduce local overuse of some procedures, it is not designed to control overuse of a procedure nationwide.
Medicare: Private Payer Strategies Suggest Options to Reduce Rapid Spending Growth (GAO/T-HEHS-96-138, Apr. 30, 1996)	Improvements to Medicare's traditional fee-for-service program could yield much-needed savings. With better management, this program, which now serves about 90 percent of beneficiaries, could run more efficiently while continuing to provide good service to the nation's elderly. This means allowing Medicare to use tools similar to those used by private payers to manage health care costs. Negotiated discounts, competitive bidding, preferred providers, case management utilization reviews—these

	and other tools allow private payers to use market forces to control health care costs. Most, however, are not authorized for general use by HCFA, which runs Medicare. This results in a publicly financed program that pays higher-than-market rates for some goods and services and sometimes pays without question for improbably high bills. Recent HCFA efforts and pending legislation to address these problems appear promising. In addition, HCFA should test the feasibility of applying management strategies in high-cost high-utilization areas. Finally, Congress needs to give HHS the flexibility to make prompt price adjustments.
Medicare: Private-Sector and Federal Efforts to Assess Health Care Quality (GAO/T-HEHS-96-215, Sept. 19, 1996)	HCFA now estimates that 4.3 million Medicare beneficiaries are enrolled in HMOs. Enrollment is believed to be growing at a rate of 100,000 new members per month. This testimony discusses ways to ensure that quality care is provided to the Medicare beneficiaries joining these HMOs. HCFA, which runs Medicare, finds the potential cost savings associated with managed care attractive. Concerns have been raised, however, that the cost control strategies employed by HMOs could undermine the quality of care. This testimony discusses (1) quality assessment methods used by large corporate purchasers of health insurance from HMOs, (2) quality assessment methods used by HCFA in administering the Medicare HMO program, (3) quality assessment methods HCFA plans for the future, and (4) what both corporate purchasers and HCFA are doing to share information about quality with employees and Medicare beneficiaries.
Medicare Transaction System: Strengthened Management and Sound Development Approach Critical to Success (GAO/T-AIMD-96-12, Nov. 16, 1995)	HCFA is developing a critical new claims-processing system, the Medicare transaction system (MTS), to replace the nine systems now used by Medicare. MTS' goal is to better protect program funds from waste, fraud, and abuse; allow better oversight of Medicare contractor operations; improve service to beneficiaries and providers; and cut administrative expenses. The weaknesses in HCFA's development of MTS stem from a lack of a disciplined management process that has as its hallmark managing information systems and technology as investments. Not managing MTS in this way has led to system design and development proceeding despite (1) difficulties in defining requirements, (2) a compressed scheduled containing significant overlap of system-development phases, and (3) a lack of reliable information on costs and benefits. These risks in the development of MTS can be substantially reduced if HCFA adopts some of the best practices that have proven effective in other organizations: managing systems as investment, changing information management

	practices, creating line manager ownership, better managing resources, and measuring performance.
Pharmacy Benefit Managers: Early Results on Ventures With Drug Manufacturers (GAO/T-HEHS-96-85, Feb. 7, 1996)	Recently, some of the largest drug companies have merged or formed alliances with some of the largest PBMs. PBMs manage the prescription drug part of health insurance plans covering millions of Americans. These ventures gained attention not only because of their size but because of concerns that the PBMs would automatically give preference to their manufacturer partners' drugs over those made by competitors. The results of GAO's analysis of PBM formularies—a list of preferred prescription drugs by therapeutic class, often with cost designations—indicate that continued oversight of mergers and alliances between pharmaceutical manufacturers and PBMs is warranted to ensure competition in the marketplace. For example, the changes in Medco's formulary that appear to favor Merck drugs do not necessarily show that Medco automatically gave preference to Merck drugs over those of competitors. However, the formulary changes support the Federal Trade Commission's decision to continue monitoring the Merck/Medco merger and other such ventures.
Prescription Drug Pricing: Implications for Retail Pharmacies (GAO/T-HEHS-96-216, Sept. 19, 1996.)	Congressional hearings during the late 1980s highlighted the fact that the prices that consumers paid for prescription drugs were increasing more rapidly than the rate of inflation. In 1990, Congress tried to control prescription drug expenditures by significantly changing the way that Medicaid pays for outpatient drugs. Vertical integration in the pharmaceutical market later became a concern, particularly mergers between large drug companies and PBMs. This testimony responds to the following three questions: How and why has the process by which drugs get from manufacturers to patients changed? What have been the consequences for retail pharmacies of changes in this process? What general strategies are retail pharmacies undertaking or proposing to respond to an increasingly competitive environment?
Prescription Drugs and the Elderly: Many Still Receive Potentially Harmful Drugs Despite Recent Improvements (GAO/T-HEHS-96-114, Mar. 28, 1996)	GAO's analysis of 1992 data found that 17.5 percent of nearly 30 million Medicare recipients were still being prescribed drugs that were generally unsuitable for their age group. Although this is an improvement over the almost 25 percent reported for 1987 data, the inappropriate use of prescription drugs remains a major health problem for the elderly. Insufficient coordination of patient drug therapies and weaknesses in communication between providers, pharmacists, and patients have compounded the problem. Inappropriate prescribing practices and the

	ensuing drug use have caused many elderly persons to suffer harmful effects that, according to FDA, have resulted in hospitalizations costing $20 billion annually. The costs are partly covered by Medicare and Medicaid. States, advocacy groups, and physician and pharmacy organizations have, however, taken steps to reduce inappropriate drug use. In addition, managed care, pharmacy benefit management, and other coordinated health care systems have features designed to reduce inappropriate prescription drug use among the elderly.
Prescription Drugs: Implications of Drug Labeling and Off-Label Use (GAO/T-HEHS-96-212, Sept. 12, 1996)	Physicians use a drug off-label when they prescribe an FDA-approved drug for treatments other than those specified on the label. GAO testified that off-label prescribing is prevalent and presents various problems for policymakers at different times. As it stands now, the problem is that the drug industry believes that labels overly constrain its ability to promote its products. This problem can be solved either by relying on sources in addition to the label to define appropriate promotion or by improving the process for updating the label. These two options are not necessarily mutually exclusive and both have benefits and drawbacks.
Status of Medicare's Federal Hospital Insurance Trust Fund (GAO/T-HEHS-96-94, Feb. 29, 1996)	This testimony focuses on GAO's ongoing review of the status of Medicare's Federal Hospital Insurance (part A) Trust Fund. GAO discusses (1) when the administration became aware that the trust fund had an operating deficit—that is, cash outlays exceeded cash receipts—of $36 million for fiscal year 1995 and how the information was disseminated and (2) what the status is of current projections regarding the trust fund.

Housing Issues

Housing and Urban Development: Limited Progress Made on HUD Reforms (GAO/T-RCED-96-112, Mar. 27, 1996)	Despite the promise of reform, reinvention, and transformation initiatives aimed at solving problems at the Department of Housing and Urban Development (HUD), much more remains to be done. HUD is very much an agency in limbo, and few of the proposals in its reinvention blueprint have been adopted. This testimony addresses HUD's difficulties in addressing (1) its long-standing management shortcomings, (2) its portfolio of multi-and single-family housing insured by the Federal Housing Administration, (3) budget and management problems plaguing the public

	housing program, (4) the spiraling cost of assisted housing programs, and (5) the need for consensus on HUD reforms.
Housing and Urban Development: Public and Assisted Housing Reform (GAO/T-RCED-96-22, Oct. 13, 1995)	Current federal housing programs are seen as overly regulated and leading to warehousing of the poor, and Congress is asking state and local governments to assume a larger role in defining how the programs work. Congress is now reconsidering the most basic aspects of public housing policy—whom it will house, the resources devoted to it, the amount of existing housing stock that will be retained, and the rules under which it will operate. These statements provide GAO's views on legislation then pending before Congress—S. 1260 and H.R. 2406—that would overhaul federal housing policy. GAO testified that the two bills contain provisions that will likely improve the long-term viability of public housing, such as allowing mixed incomes in public housing and conversion of some public housing to housing vouchers or tenant-based assistance when that makes the most sense. GAO also supports provisions to significantly beef up HUD's authority to intervene in the management of troubled housing authorities, but GAO cautions that questions remain about the reliability of the oversight system that HUD uses to designate these agencies as troubled.
Multifamily Housing: Issues and Options to Consider in Revising HUD's Low-Income Housing Preservation Program (GAO/T-RCED-96-29, Oct. 17, 1995)	HUD's program for preserving low-income housing seeks to maintain the affordable low-income housing that was created mainly under two federal housing programs during the 1960s and 1970s. Under these programs, when owners received HUD-insured mortgages with 40-year repayment periods, they entered into agreements with HUD that imposed affordability restrictions, such as limits on the income level of tenants and on the rents that could be charged at the properties. After 20 years, however, owners had the right to pay off their mortgages in full without prior HUD approval and terminate the affordability restrictions. The preservation program has proven to be complex and costly, prompting recommendations from HUD and others to change or repeal the program. This testimony focuses on (1) how the current preservation program works, (2) the status of preservation eligible projects, (3) concerns that have been raised about the program, and (4) options for revising the program.

Income Security Issues

Financial Management: Interior's Efforts to Reconcile Indian Trust Fund Accounts and Implement Management Improvements (GAO/T-AIMD-96-104, June 11, 1996)

Although the Department of the Interior has brought to a close its project to reconcile the Indian trust funds, tribal accounts were never fully reconciled because of missing records and the lack of an audit trail in Interior's automated accounting systems. In addition, the 1996 report package that Interior provided to each tribe on the reconciliation results did not explain or describe the many changes in reconciliation scope and methodologies or the procedures that had been planned but were not implemented. As a result, the limitations of the reconciliation were not evident. Also, because of cost considerations and the potential for missing records, individual Indian trust fund accounts were not included in the reconciliation project. Indian tribes have raised concerns about the scope and the results of the reconciliation process. The vast majority of tribes have yet to decide whether to accept or dispute their account balances. If Interior cannot resolve the tribes' concerns, a legislated settlement process could be used to settle disputes over account balances. Interior has taken steps during the past 3 years to correct these long-standing problems with the accuracy of the Indian trust fund accounts, but these efforts will take years to complete. Moreover, the existing trust fund management and accounting systems cannot ensure accurate trust fund accounting and asset management. The appointment of a Special Trustee for American Indians was an important step in establishing high-level leadership at Interior for Indian trust fund management.

Supplemental Security Income: Noncitizen Caseload Continues to Grow (GAO/T-HEHS-96-149, May 23, 1996)

Noncitizens are one of the fastest growing groups of recipients of SSI benefits. They represent nearly one-third of aged SSI recipients and about 6 percent of disabled recipients. Although the growth rate for noncitizen caseloads has slowed, it is still higher than that for citizens, and the percentage of noncitizens relative to other SSI recipients continues to rise. About two-thirds of noncitizens recipients—roughly 520,000—live in three states: California, New York, and Florida. On the whole, noncitizens are more likely to receive SSI than are citizens, but this may be primarily true for refugees and asylees. Adult children of aged immigrants and others who say they are willing to financially support them sometimes do not. Eventually, some of these older immigrants receive SSI. Also, some translators have helped noncitizens to fraudulently obtain SSI disability benefits.

Social Security: Disability Programs Lag in Promoting Return to Work (GAO/T-HEHS-96-147, June 5, 1996)	Each week, the DI and SSI programs make more than $1 billion in cash payments to persons with disabilities. Although these payments provide a measure of income security, they do little to enhance the work capacities and promote the economic independence of recipients. Societal attitudes have shifted, and current law, such as the Americans With Disabilities Act, promotes economic self-sufficiency among the disabled. A growing number of private companies are exploring ways to return people with disabilities to the workforce. Moreover, medical advances and new technologies provide greater opportunities for people with disabilities to work. This testimony discusses how the structure of the DI and SSI programs impedes recipients return to work and how strategies used in other disability systems could help restructure the programs to encourage recipients to return to work.
Federal Downsizing: the Status of Agencies' Workforce Reduction Efforts (GAO/T-GGD-96-124, May 23, 1996)	The downsizing of the federal workforce is ahead of the schedule set by the Workforce Restructuring Act. At the same time, the administration has called on agencies to restructure their workforces by reducing management positions. These jobs have yet to be reduced to the extent called for by the National Performance Review. With regard to future workforce reductions, GAO found that in terms of absolute numbers—and given historical quit rates—the remaining employment ceilings called for by the act probably could be achieved governmentwide through attrition. Nevertheless, some agencies may be forced to downsize more than others. In such situations, buyouts or reductions in force (RIF) may be necessary. GAO found that buyouts offer greater savings than RIFs, except when employees affected by a RIF do not bump and retreat and are eligible to retire.
SSA Benefit Statements: Statements Are Well Received by the Public but Difficult to Comprehend (GAO/T-HEHS-96-210, Sept. 12, 1996)	The personal earnings and benefit estimate is a six-page statement produced by SSA that supplies information about a worker's yearly earnings on record at SSA; eligibility for social security retirement, survivor, and disability benefits; and estimates of these benefits. SSA has tried to improve the statement, and the public has found it to be helpful for retirement planning. However, the statement falls short in clearly communicating the complex information that readers need to understand concerning SSA's programs and benefits. For example, the document's design and organization make it difficult for readers to locate important information. Readers are also confused by several important explanations, such as who in their family is also eligible for benefits and how much these family members might receive. SSA is considering redesigning the

	statement, but only if this effort reduces printing costs. This approach overlooks hidden costs, such as (1) inquiries from people who do not understand the statement and (2) the possibility that a poorly designed statement can undermine public confidence.
Supplemental Security Income: Noncitizens Have Been a Major Source of Caseload Growth (GAO/T-HEHS-96-88, Feb. 6, 1996)	Noncitizens are among the fastest growing groups receiving benefits from the SSI program, which provides means-tested benefits to eligible blind, elderly, or disabled persons. Noncitizens represent nearly one-third of aged SSI recipients and 5.5 percent of disabled recipients. About two-thirds of noncitizen SSI recipients live in three states—California, New York, and Florida. On the whole, noncitizens are more likely to receive SSI than citizens, but this may be true primarily for refugees and asylum seekers. Adult children of aged immigrants and others who say they are willing to financially support them sometimes do not. Eventually, many of these aged immigrants receive SSI. Also, some translators help noncitizens to fraudulently obtain SSI disability benefits.
SSA Disability Reengineering: Project Magnitude and Complexity Impede Implementation (GAO/T-HEHS-96-211, Sept. 12, 1996)	Given the high cost and lengthy processing times of SSA's current disability claims process, the agency needs to continue its redesign efforts. SSA's redesign plan is proving to be overly ambitious, however. Some initiatives are also becoming more complex as SSA expands the work required to complete them. The agency's approach is likely to limit the chances for the project's success and has delayed implementation: testing milestones have slipped and support for the redesign effort has waned. In addition, the increasing length of the overall project and specific initiatives heighten the risk of disruption from turnover among key executives. GAO believes that as SSA proceeds with its redesign project it should focus on key initiatives, starting first with those that will quickly and significantly reduce claims processing time and administrative costs.
Social Security Administration: Effective Leadership Needed to Meet Daunting Challenges (GAO/T-OCG-96-7, July 25, 1996)	With a staff of 64,000, SSA runs the largest federal program—Social Security—as well as the largest cash welfare program—SSI. The agency's expenditures totaled $363 billion in fiscal year 1995, almost one-fourth of the $1.5 trillion federal budget. This testimony discussed the difficult challenges facing SSA in the coming decades: taking part in the debate over future financing of Social Security; encouraging disability recipients to return to work; reducing fraud and abuse; and managing workforce and technology investments so that SSA can meet the needs of America's retired, disabled, and poor.

Veterans/DOD Issues

Defense Health Care: TRICARE Progressing, but Some Cost and Performance Issues Remain (GAO/T-HEHS-96-100, Mar. 7, 1996)	DOD's nationwide managed health care program—TRICARE—represents a sweeping reform of the $15 billion per year military health care system. TRICARE seeks to improve access to care and ensure high-quality, consistent health care benefits for the 1.7 million active-duty service members and some 6.6 million nonactive-duty beneficiaries. It also seeks to preserve choice for nonactive-duty beneficiaries by allowing them to choose whether to enroll in TRICARE Prime, which resembles an HMO; use a preferred provider organization; or use civilian health care providers under a fee-for-service arrangement. Despite initial beneficiary confusion caused by education and marketing problems, early implementation of the program is progressing consistent with congressional and DOD goals. Measures may be necessary, however, such as gathering cost and access-to-care data, to help Congress and DOD better assess the program's future success. In addition, retirees, who make up half of those eligible for military health care, remain concerned about TRICARE's effect on their access to medical services.
VA Health Care: Approaches for Developing Budget-Neutral Eligibility Reform (GAO/T-HEHS-96-107, Mar. 20, 1996)	Reforming eligibility for health care benefits offered by VA would pose a major challenge even with unlimited resources. But with Congress and VA facing mounting pressure to limit VA health care spending as part of governmentwide efforts to reduce the deficit, this challenge has become even greater. This testimony discusses (1) the problems that VA's current eligibility and contracting provisions create for veterans and providers, (2) the relationship between inappropriate admissions to VA hospitals and VA eligibility provisions, (3) proposals to reform VA eligibility and contracting rules and their potential impact on the deficit, and (4) options to achieving budget-neutral eligibility reform.
VA Health Care: Efforts to Improve Veterans' Access to Primary Care Services (GAO/T-HEHS-96-134, Apr. 24, 1996)	VA runs one of the nation's largest health care systems, including 173 hospitals and 220 clinics. Last year, VA spent about $16 million serving 2.6 million veterans. This testimony focuses on VA's efforts to increase veterans' access to health care. GAO discusses legal, financial, and equity-of-access issues facing VA managers as they try to establish new access points—a VA clinic or a VA-funded or VA-reimbursed private clinic, group practice, or individual practitioner that is geographically separate from the parent facility. Access points are intended to provide primary

	care to all veterans and refer those needing specialized services or inpatient stays to VA hospitals.
VA Health Care: Opportunities to Increase Efficiency and Reduce Resource Needs (GAO/T-HEHS-96-99, Mar. 8, 1996)	With a fiscal year 1995 appropriation of $16.2 billion, the VA health care system faces mounting pressure to contain or reduce spending as part of governmentwide efforts to reach a balanced budget. This testimony addresses (1) VA's forecasts of future resource needs, (2) opportunities to run the VA system more efficiently, (3) differences between VA and the private sector in terms of initiatives to become more efficient, and (4) recent VA efforts to reorganize its health care system and create incentives to operate more efficiently.
VA Health Care: Opportunities to Reduce Outpatient Pharmacy Costs (GAO/T-HEHS-96-162, June 11, 1996)	VA allows its doctors to prescribe over-the-counter products because concerns have been raised that some veterans may lack the money to buy needed items. VA requires prescriptions as a way to control veterans' access to over-the-counter products in VA pharmacies. In fiscal year 1995, for example, VA pharmacies dispensed analgesics, such as aspirin and acetaminophen, nearly 3 million times. The benefits package that most VA facilities offer for over-the-counter products is more generous than that available from other health plans. VA also provides other features, such as free over-the-counter product mail service and deferred credit for copayments owed, that are not common in other plans. GAO makes several suggestions for reducing the amount of money VA spends to dispense over-the-counter products. First, VA staff could more strictly adhere to statutory eligibility rules. Second, VA could more efficiently dispense over-the-counter products and collect copayments. Third, VA facilities could further reduce the number of over-the-counter products available to veterans on an outpatient basis. Finally, Congress could expand copayment requirements.
Veterans Benefits Modernization: Management and Technical Weaknesses Must Be Overcome If Modernization Is to Succeed (GAO/T-AIMD-96-103, June 19, 1996)	If the Veterans Benefits Administration (VBA) is to reduce operating costs and improve critical service to nearly 27 million veterans and their dependents, it needs to streamline its business processes and take more advantage of information technology. However, VBA is experiencing many of the classic management and technical problems that have prevented federal agencies from reaping the benefits of substantial investment in information technology. This testimony discusses the steps VBA needs to take in the following three areas to improve its chances for success: (1) creating a credible business strategy and supporting an information

	resources management plan; (2) developing a better investment strategy for choosing and managing its portfolio of information technology projects in a more disciplined, businesslike way; and (3) strengthening its technical ability to develop software applications that are critical to its efforts to control costs and improve service to veterans.
Veterans' Health Care: Challenges for the Future (GAO/T-HEHS-96-172, June 27, 1996)	With a budget of $16.6 billion and a network of hundreds of hospitals, outpatient clinics, and nursing homes, VA's health care system provides medical services to more than 26 million veterans. VA was seeking to fundamentally change the way in which it runs its health care delivery and financing systems. It was also seeking authority to significantly expand eligibility for health care benefits and to both buy health care services from and sell them to the private sector. This testimony discusses (1) changes in the veterans population and the demand for VA health care services; (2) how well the existing VA system, and other public and private health benefits programs, meet the health care needs of veterans; (3) steps that could be taken using existing resources and legislative authority to address veterans' unmet health care needs and increase equity of access; (4) how other countries have addressed the needs of an aging and declining veteran population; and (5) approaches for preserving VA's direct delivery system, alternatives to preserving the direct delivery system, and combinations of both.

Appendix III

Ongoing Work as of September 30, 1996, on Issues Affecting Older Americans

At the end of fiscal year 1996, GAO had 32 ongoing assignments that affected older Americans. Of these, 18 were on health, 6 on income security, and 8 on veterans/DOD issues.

Health Issues

Enrollment Bias May Result in Overpayments to Medicare HMOs (code 101369)

Review of Medicare Marketing Practices (code 101381)

Limiting the HMO Enrollment Period to Once a Year for Medicare Beneficiaries (code 101392)

Can Medicare Learn From Private Sector Market-Oriented Purchasing Strategies (code 101398)

Study of Key Factors Contributing to Enrollment in the Medicare Risk Contract Program (code 101400)

Medicare Certification of Home Health Agencies (code 101501)

Medicare Payments for Durable Medical Equipment (code 101502)

Medicare Spending Trends and the Impact of Managed Care (code 101507)

Care Management in Continuing Care Retirement Communities (code 101509)

Long-Term Care Use Spending by Medicare and Medicaid (code 101510)

Review of Lab Service Utilization Rates for Medicare End-Stage Renal Disease Patients (code 106433)

Review of Modern Management Practices That Can Be Implemented in Medicare to Achieve Savings and Improve Operations (code 106437)

Compliance With Federal Loss Ratio Standards in 1994 and 1995 (code 106438)

Review of Medicare Payments for Oxygen Equipment and Supplies (code 108281)

	Skilled Nursing Facilities (code 106432)
	Medicare Diabetes Care (code 106255)
	HMO Enrollment of Chronically Ill (code 106269)
	Epidemiology of Alzheimer's Disease (code 973430)
Income Security Issues	SSI Management Oversight (code 105153)
	SSI/Medicaid Computer Matching (code 106809)
	SSA's 800 Number Telephone Service (code 105936)
	Update on SSA's Challenges (code 105938)
	Report on Retirement Income Issues (code 207444)
	Beneficiary Employability (code 106515)
Veterans/DOD Issues	Military Retirement Alternatives (code 703128)
	Military Retiree Health Issues (code 101491)
	VA Substance Abuse Programs (code 101482)
	VA Hospital Issues (code 406117)
	VA's Disability Rating Schedule (code 105746)
	VA Nursing Home Issues (code 101471)
	VA Health Care Access (code 406125)
	Maximizing Use of VA's Excess Health Care Capacity (code 406126)

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ITEM 22—LEGAL SERVICES CORPORATION

SERVICE TO THE AGING

The Legal Services Corporation (LSC) was created by Congress in 1974 to provide access to civil legal aid to low-income Americans. The Corporation receives an annual appropriation from Congress. In 1996, LSC funded some 275 local legal aid programs across the country, serving every county in the nation.

Legal services clients are as diverse as our nation, encompassing all races and ethnic groups and ages. The problems that bring people to local legal services offices arise out of everyday life. Usually they relate to matters of family law, housing, employment, government benefits, or consumer disagreements. Frequently they represent matters of crisis for clients and their families. The possible consequences may be as serious as the loss of a family's only source of income, homelessness, or the breakup of a family.

In 1996, LSC-funded programs served 152,420 Americans over the age of 60. Older Americans represented 11 percent of the clients served by legal services programs. Because of their special health, income, and social needs, older people often require legal assistance, especially in coping with the government-administered benefits on which many depend for income and health care.

Some local legal services programs have special elderly law units, but every program provides services to the elderly. Most LSC programs are listed in the blue or yellow pages of the phone book, usually listed under "Legal Aid" or "Legal Services." You can also get a referral by calling LSC at (202) 336–8800; going to the LSC web site (www.lsc.gov); or writing to Public Affairs, LSC, 750 First St., NE, Washington, DC 20002.

ITEM 23—NATIONAL ENDOWMENT FOR THE ARTS

SUMMARY OF ACTIVITIES RELATING TO OLDER AMERICANS FISCAL YEAR 1997

INTRODUCTION

The National Endowment for the Arts holds as its guiding principle that the authentic experience of the arts should be available to the broadest public, including people of all ages. Through its grants programming and technical assistance, the Arts Endowment works to ensure the continued involvement of older adults in the arts as artists, teachers, mentors, volunteers, students, patrons and consumers. The wisdom, energy and creative potential that older Americans bring to the arts are part of our cultural heritage.

OFFICE OF ACCESSABILITY

Located in the Endowment's Partnership, Planning and Stabilization Division, the AccessAbility Office is the advocacy and technical assistance arm of the Arts Endowment that works to make the arts fully accessible to older adults, individuals with disabilities and people living in institutions. Through a wide variety of efforts, the Coordinator of this one-person office develops partnerships with grantees, private groups and other Federal agencies to better educate and assist access to the arts for the targeted populations. The focus is inclusion, opening up existing programs, and outreach to citizens who would not otherwise have opportunities to be involved in the arts.

In addition to administering projects featured in this report, the Coordinator organizes and conducts panels and workshops for the arts community and organizations representing older or disabled people to better educate them concerning the value of making the arts accessible. During this reporting period, the Coordinator organized seminars for the National Council on Aging, the American Association of Museums, the Cleveland Arts Festival, Build Boston Conference, Dance Umbrella Festival, and the Southeastern Museum Conference. Further, she traveled to Natchez, Mississippi to assist Signature Works, the largest employer of people who are blind in the country, to assist them in developing ceramic and sculpture programs for its employees with the future possibility of marketing their art as one of its products.

NATIONAL DATABASE ON THE ARTS AND OLDER AMERICANS

As a result of the Arts Endowment's work with the 1995 White House Conference on Aging, this aging supported the creation of the first National Database on the Arts and Older Americans that

was undertaken by the National Council on Aging (NCoA). This unique database should open the way to better communication between networks of arts organizations and aging groups to assist quality arts programming for, by and with older Americans. The database includes 536 agencies and individuals that are administering a wide variety of arts programming involving older adults. Of these, 328 are arts groups and the remainder consist of aging or educational agencies. The listings include program profiles and contact information. NCoA is presently working to post the database through its website.

SENSE AND SENSITIVITY: A REGIONAL SYMPOSIUM ON THE ARTS AND ACCESSIBILITY

The Arts Endowment worked with Arts Midwest in Minnesota, a regional arts group that encompasses a nine state area, to convene a symposium that addressed access to the arts for older and disabled people. Convened in Milwaukee, Wisconsin on September 15–17, 1997, approximately 180 artists and arts administrators participated in the meeting to better educate themselves on making their own activities more available to older and disabled individuals; and educating their constituents about access issues.

Over 35 acknowledged leaders in the arts and accessibility communities led workshops that focused on: design; performing and visual arts; outreach to people in institutions including nursing homes; and technology that is making the arts more accessible such as audio description and assistive listening systems.

For example, Julie Bailey from the Iowa Arts Council presented their highly successful program, I Card, which involves 85 local arts councils and community agencies that work together to provide free or discounted admission for low income individuals and families to attend arts events throughout the state. Further, Patricia O'Mally from the Chicago Department of Aging discussed her agency's Renaissance Court, an arts program in downtown Chicago that includes a first rate gallery which showcases the work of artists over age 55.

This symposium represents the fourth in a series of regional access meetings over the past seven years sponsored by the National Endowment for the Arts.

CAREERS IN THE ARTS FORUM

The Arts Endowment developed a cooperative agreement with the John F. Kennedy Center for the Performing Arts to convene a national forum on "Careers in the Arts" that will take place at the Kennedy Center on June 14–16, 1998. This first-ever forum will bring together 230 artists, art technicians, art administrators, rehabilitation professionals and representatives of government agencies to focus on employment and education issues relating to individuals with disabilities in a wide variety of arts careers.

A 17-member planning committee, composed of select leadership from the fields of the arts, rehabilitation and education, met at the Kennedy Center on September 21–23, 1997 to develop a vision and shape for the forum, as well as, provide invaluable guidance on its objectives and program.

This effort grew out of a series of interagency agreements that the Arts Endowment initiated with the U.S. Department of Education and the U.S. Department of Health and Human Services. The Federal agencies are joining with the Endowment in supporting the Forum to address their common concerns: the need for increased educational and career opportunities in the arts for people of all ages with disabilities; identifying obstacles and strategies to overcome them; and developing recommendations to advance arts careers for people with disabilities.

UNIVERSAL DESIGN

The first collection of 37 Universal Design Exemplars, that represent examples of design excellence in the fields of architecture, graphic design, industrial design, interior design and landscape architecture, was supported by the Arts Endowment as highlighted in last year's report to the Special Committee. Universal design goes beyond codes and standards to create excellent design is usable by everyone throughout their lifespan. The collection is organized in a slide presentation with descriptive text, and is intended to encourage and assist the understanding and practice of this important design concept.

On April 21, 1997, the AccessAbility Office worked with nine Endowment interns to organize and present the collection to staff from eight Federal agencies, including the Department of Justice and the Government Services Administration. Audience members found it to be comprehensive and said that they gained increased understanding concerning universal design and its importance to their respective fields.

The Arts Endowment plans to support a second collection in 1998 that will be disseminated to designers, city planners and others on CD Rom.

ARTS ENDOWMENT FUNDING

Endowment supported programs are aimed at benefitting Americans of all ages. In addition, some projects specifically address older adults. For example:

Dance

The Boston Dance Umbrella of Cambridge, Massachusetts received funding to support the 1997 International Festival of Wheelchair Dance, which took place June 2–14, 1997 in Boston. This unprecedented gathering featured performances, workshops, lecture/demonstrations, seminars, a conference, and a full program of education and community outreach activities. The Festival included both disabled and non-disabled artists who are developing this relatively new art form. Dance Umbrella collaborated with Very Special Arts Massachusetts and Axis Dance Troupe from Oakland, California to plan, implement and evaluate this highly successful project.

Professional Flair Inc. of Cleveland, Ohio received funds to support the expansion of its dance troupe, Cleveland Ballet Dancing Wheels, to accommodate the increased demand for its lecture demonstrations. This pioneering dance company, that showcases dancers with disabilities, will add a second performing troupe of profes-

sional dancers with and without disabilities to present programs geared to a number of different audiences, such as nursing homes, schools, and colleges.

Folk arts

Fellowships

Seven National Heritage fellowships were awarded to artists fifty-five years and older in recognition of their outstanding contributions to the traditional arts. These artists include an acadina spinner & weaver, a North American sarod player & raga composer, two bluegrass musicians, an African American quilt maker, as well as the following:

Charles Brown is a West coast Blues pianist and singer originally from Texas City, Texas. His sophisticated approach blends classical music technique with the blues and jazz. Brown was one of "The Three Blazers," whose sound epitomized the relaxed West Coast piano trio style and integrated a blues quality to the music. He toured with artists such as Fats Domino, Bill Doggett, Roy Brown, and Amos Milburn, and was inducted into the Blues Foundation's Blues Hall of Fame in 1977.

Wenyi Hua, a Chinese Kunqu opera singer, was born in Shanghai, China and lives in Arcadia, CA. Her gesticulation, diction, and beautiful voice earned her many honors. In 1978, she joined the Shanghai Kun Opera Company and later became its director in 1985. In 1986, she received China's highest artistic honor, the Plum Blossom Award for her performance in the play "Yun Zan Ji" (The Jade Hairpin). Chinese opera scholar Dr. Pertel Jain describes her artistry, "Wenyi Hua is a rare theater performer who transcends the boundaries of the form, reaching a profound understanding of dramatic character which is almost spiritual in nature."

Francis Whitaker is a Blacksmith/Ornamental Ironworker from Wodurn, Massachusetts. At sixteen, he dropped out of high school to become an apprentice with a premier ornamental blacksmith, Samuel Yellin, in Philadelphia. Whitaker said,: "The first time I shaped a piece of hot iron, I was hooked. There's magic to it." After working for a general contractor for seven years, he opened his own shop in 1933, during the depths of the Depression. He spent 20 years teaching across the United States and founded the Francis Whitaker Blacksmith School at the Rocky Mountain School. Whitaker received the 1995 Colorado Governor's Award for Excellence in Arts and an Honorary Doctorate in Humane Letters from the University of Colorado.

The Los Reyes de Albuquerque of New Mexico received funding to support a year-long series of performances of traditional New Mexican Hispanic music for children, older people, homeless individuals, and institutionalized people. This non-profit organization is the result of the efforts of the folk group of Los Reyes de Albuquerque which was founded some thirty-three years ago. The purpose of the Los Reyes de Albuquerque Foundation is to preserve, promote and perpetuate the traditional Hispanic music and songs of northern New Mexico and southern Colorado.

Media arts

The Film Arts Foundation of San Francisco, California, received funding to support the production of a documentary film by Allie Light and Irving Saraf about the work of seven imaginative people with physical disabilities. "Dreamwalkers", the film's working title, explores each person's concept of motion through thought, fantasy, and dreams. Combining cinema verite footage of the subjects with dramatizations and visualizations of their thoughts, which have been shared through interviews, the film portrays their lives.

Museum

The Wichita Art Museum of Wichita, Kansas, received funding to support the expanded use of its Art Resource Center, a new museum facility that serves as a lending library of audio-visual materials about the visual arts for teachers, parents and community groups. The Center opened in 1995 and acquired over 13,000 constituents in less than twelve weeks. This Resource Center is the only one of its kind in the state that reaches out to include parents, day care providers, recreation leaders, senior center participants and other community groups in its activities.

Theater

The Stagebridge Theater of Oakland, California received funding to support its intergenerational arts and literacy project, Storybridge, where low-income older adults interact with at-risk children through a program of story telling in the schools and various community venues. Its goal is to develop literacy skills for young and old, particularly at-risk elementary age children and low-income, minority elders. All facets of their programs include curriculum guides and materials. Storybridge presents three inventive programs: The first is entitled, "Grandparents Tales," which features a play performance about grandparents from different cultures and is performed by a multicultural cast of older actors. The second program, "Senior Storytellers in the Schools," recruits and trains older adults to be storytellers in Oakland, Berkeley and San Francisco schools. The third is a storytelling assembly in which Stagebridge tours its experienced "band of elder storytellers" to local schools where students in small groups hear multiple pairs of storytellers.

Visual arts

The Clay Studio of Philadelphia, Pennsylvania received funding to support the circulation of the "Claymobile," a ceramics class in a van that travels to inner city and low income Philadelphia communities. The van goes to specific locations such as cultural centers, programs for older adults, after-school programs, homeless shelters, summer camps and schools. The Claymobile contains a complete stash of equipment and materials necessary to teach a class and transport the finished pieces back to the Clay Studio for firing. This art program broadens access to quality arts classes and increases the participation of many populations who are undeserved in the arts.

The Little City Foundation of Palatine, Illinois received funding to support a two-phase exhibition of artwork created by people with

developmental disabilities in the Chicago metropolitan area. The exhibitions include drawings, paintings, sculptures, prints, and performance works. The purpose of this effort its to bring more public attention to the art of individuals with developmental disabilities. This both increases the market for their work and attracts additional people with disabilities to the Foundation's programs. The project also intends to encourage purposeful discussion about the disability culture and the use of art as an important means of cultural self-expression.

The Grass Roots Arts and Community Efforts (GRACE) of West Glover, Vermont received funding to promote a "Twenty Years of GRACE—An Inside View," a collection of work and biographies of self-taught artists in northern rural Vermont, that will be published in May 1998. This 30-page book will celebrate the work of GRACE's participants as well as interpret its history, philosophy and methods of working for a broad audience. GRACE primarily works with artists who require long-term care. In nursing homes, town halls, day-care centers, and hospitals, participants are encouraged to work independently, exploring their own creative capabilities.

ITEM 24—NATIONAL ENDOWMENT FOR THE HUMANITIES

NATIONAL ENDOWMENT FOR THE HUMANITIES REPORT ON ACTIVITIES AFFECTING OLDER AMERICANS IN FISCAL YEARS 1995 AND 1996

LIFELONG LEARNING

Grants awarded by the National Endowment for the Humanities support teaching, scholarship, and programs for the general public in history, literature, philosophy, and other disciplines of the humanities. The purpose that NEH exists to foster—the transmission of knowledge to succeeding generations, the creation of new knowledge, and the diffusion of cultural opportunity—are really manifestations of the same thing; they express our national commitment to, in the words of the Endowment's authorizing legislation, "progress and scholarship in the humanities." In the American democratic context, that commitment has meant, among other things, ensuring a continuum of possibility for lifelong learning for everyone, of whatever age.

Guaranteeing the availability of lifelong learning opportunities for older Americans in particular has never been a greater national priority than it is now. According to projections of the U.S. Census Bureau, the percentage of the population that is 65 or older, currently 12.5 percent, will rise to 18.5 percent by 2025. Living longer, older Americans are spending more years in retirement and enjoying better health as they do. Not only are older Americans more vigorous, but they are also better educated than ever before; 65 percent of Americans 65 or older have at least a high school diploma, 14 percent have completed four years of college. Of course, the approaching retirement of the Baby Boom generation will only intensify these trends.

Active engagement with learning can make retirement more productive and fulfilling, stimulating continued intellectual growth and interaction with others. But, learning is the task of a lifetime, not just of the retirement years. In a special paper prepared for the President's Committee on the Arts and the Humanities, Ronald J. Manheimer, director of the North Carolina Center for Creative Retirement at the University of North Carolina, Ashville, comments as follows:

> Most of the research findings in the field of gerontology support the "continuity theory of aging," that people not only remain pretty much the same, in terms of taste, interests and choice of activities from earlier in adulthood, they become even more who they were—preferences, like personality traits, intensifying.

School children whose earliest experience of literature will be more memorable because a favorite English teacher has attended a substantive summer study program; undergraduates whose understanding of history is grounded in the most current scholarship because those who teach that subject in America's colleges and universities have access to research fellowships and other opportunities for professional growth; and working adults who can find cultural enrichment in libraries and museums or on television in the communities where they live—these are the ultimate beneficiaries of NEH grant programs that help sustain a continuum of lifelong learning opportunities for everyone. The benefits that Americans derive from these experiences will accrue throughout a lifetime, and not least during the years of retirement.

LIBRARY PROGRAMS

During fiscal years 1995 and 1996, more than 40,000 NEH-supported reading and discussion programs took place in more than 800 libraries and other community-based institutions nationwide. These activities are open to the general public, but the scholars and other specialists who direct them report especially strong participation by older Americans.

Some reading and discussion programs are designed specifically for seniors. For example, in FY 1995 a grant of $70,000 enabled the National Council on the Aging to conduct reading and discussion programs in senior centers, nursing homes libraries, and veterans hospitals throughout the country. The project brought together scholars, veterans, factors and farm workers, teachers, and high school and college students to discuss "Remember World War II." An anthology and discussion guide, developed with grant funds, provided the thematic and chronological focus for each discussion group, and was augmented by activities such as listening to tapes of radio broadcasts during the war. In FY 1996, the National Council on the Aging received $50,000 to conduct programs that encourage seniors to read and discuss literary autobiographies by authors of their own generation. Held at libraries and senior centers in six states and employing instructional materials developed under a previous NEH grant, the programs focused on autobiographical works by Richard Wright, Philip Roth, Maxine Hong Kingston, and Eudora Welty.

Most NEH-supported reading and discussion programs are geared to intergenerational audiences, but all are well suited to the needs of older Americans, based as they are on locally available resources and activities that are intellectually stimulating without being physically demanding. Many of these library-based programs reach urban and rural communities that have few other sources of cultural enrichment. In FY 1996, the American Library Association received $400,000 to conduct a series of library-sponsored, radio call-in programs on Northwest and Southwest regional writing. Developed in coordination with radio stations in Albuquerque and Missoula, the programs were based on regionally significant works by such writers as Mark Twain, Rudolfo Anaya, Denise Chavez, Frank Waters, Lislie Silko, and James Welsh. More than 50 libraries in nine states distributed books and other educational materials to participating readers, who during the regular program broad-

casts conducted live, on-air discussions with studio-based scholars via an 800 number.

MUSEUM EXHIBITIONS

Museum attendance is now one of the most popular recreational activities in the United States. In New York, museums annually generate considerably larger audience figures than do all of the city's professional sports teams combined. That older Americans should be a part of this is not surprising; today's seniors are more active and better educated than ever before. According to a survey commissioned by the National Endowment for the Arts, 16 percent of adults 65 or older visited an art museum at least once during a 12-month period (1992), and 20 percent of the immediate post-retirement cohort aged 65 to 74 did so. Impressive as these figures are, they do not take account of additional numbers of older Americans who may have visited historical and other kinds of museums.

At any time during FY 1995 and FY 1996, between 100 and 150 different, NEH-funded museum exhibitions could be seen at over 400 locations throughout the United States. Exhibitions supported by the Endowment are ideally suited to the needs of retirees living on a fixed income; museums agree as a condition of their NEH grant to set aside at least several admission-free hours each week.

One of these exhibitions available to seniors free of charge was *Splendors of Imperial China,* which attracted 427,000 visitors at its Metropolitan Museum of Art venue in New York, making it the world's biggest museum attraction in 1996. Incorporating approximately 350 objects from among the finest and most famous artworks in the Asian tradition—including paintings and calligraphy, and works in jade, bronze, and lacquer, many of them leaving China for the first time—the show provided a visually stunning and richly interpreted perspective on Chinese history and culture from the Neolithic period to the 18th century. After leaving New York, the show traveled to Washington, DC, Chicago, and San Francisco. In St. Louis, *Meet Me at the Fair: Memory, History, and the 1904 World's Fair Exhibition,* supported with a $300,000 grant to the Missouri Historical Society, employed the family mementos and taped reminiscences of Fair participants, along with photographs, artifacts, and documents to examine the impact of this defining event on St. Louis' civic identity. After *Louis Armstrong: A Cultural Legacy* was shown during 1995 at the Queens Museum of Art in New York, a smaller version of the exhibition, also developed with NEH support and with a Smithsonian SITES grant, traveled during 1996 to seven other cities: Dallas; Chicago; Charleston; New Orleans; Rochester, New York; Savannah; and Washington, D.C.

Seniors who do not happen to live near a major urban center can still see an engaging and thought-provoking exhibition. *Barn Again!,* examines that familiar agricultural structure as functional form, monument on the landscape, and symbol of community and country life. Developed by the Utah Humanities Council in cooperation with the humanities councils in Alabama, Georgia, Oregon, Ohio, West Virginia, Illinois, and Missouri, and with a $115,000 from NEH, the exhibition has been touring 32 small rural museums and historical societies since 1996.

TELEVISION DOCUMENTARIES

Public television reaches virtually every community and home in the United States. During 1995 and 1996, millions nationally watched such NEH-funded documentaries as Ken Burns' 12-hour series, *The West;* the eight-hour series, *The Great War and the Making of the Twentieth Century;* the four-and-a-half-hour series FDR; and Ken Burns' *Baseball,* rebroadcast in 1995 after this fall 1994 premier. For seniors who have limited mobility or who simply prefer to stay home, wholesome, serious viewing choices such as these are an especially welcome alternative to the usual fare of sitcoms and tabloid news offered on commercial television.

CULTURAL TOURISM

More and more Americans are discovering the special places in every region of the United States that attest to the history and cultural uniqueness of the American experience. NEH grants for site interpretation, and the historical and archival research that make it possible, continually reinforce this process of self-discovery, helping Americans make tangible connections with the past that is our common patrimony. Older Americans, the generation that has the biggest stake in the past and the time that the retirement years afford for travel, are enthusiastically joining the burgeoning ranks of cultural tourists. In 1992, according to the NEA-commissioned survey *Arts Participation in America,* 22 percent of American 65 or older visited an historical park at least once, and 29 percent of those between 65 and 74 did so.

A few examples will suffice to show the range of NEH-supported projects underway, in communities large and small, to reclaim our historic places. In FY 1996, an NEH grant of $150,000 enabled the Mississippi River Museum in Dubuque, Iowa, to begin interpretation of the riverfront site of the Dubuque Boat and Boiler Works, where Mississippi riverboats were built and launched for over 100 years. In FY 1995, the Florida Division of Historical Resources received $250,000 to interpret the site of the 17th-century Spanish mission at San Luis de Talimali. Based on more than a decade of work by archaeologists and historians, much of it supported by the Endowment, the fifty-acre historical park includes an audiovisual orientation, living history demonstrations, an interpretive trial through six excavation sites, and an exhibition explaining the current archaeological research. In FY 1995, the Lower East Side Tenement Museum in New York opened an NEH-supported exhibition and tour program that interprets the authentically reconstructed interior of an actual tenement building and documents the lives of the Gumpertz and Baldizzi families, who lived there between 1865 and 1935.

SENIOR SCHOLARS

NEH grants support a number of long-term research projects in the humanities that have been directed and sustained over the years by some of the most eminent scholars in their field. Not a few of these renowned scholars are quite senior; yet despite their emeritus status they cheerfully persevere in the research work they know supremely well. Thus, Endowment support of senior scholars

benefits the public in two ways; it enables uniquely qualified individuals to continue contributing authoritatively to the advancement of humane learning, and it incidentally furnishes the rest of us with inspirational examples of active engagement well past the traditional age of retirement. Anne Frior Scott of Duke University, editor of the Jane Addams papers; independent scholar Frederick Burkhardt, who is compiling an edition of the correspondence of Charles Darwin under the auspices of the American Council of Learned Societies; Dorothy Twohig of the University of Virginia, editor of the papers of George Washington; and Frederic Cassidy of the University of Wisconsin, editor of *Dictionary of American Regional English*—these are among the senior, but-still-active scholars whose work NEH research grants supported during fiscal years 1995 and 1996.

Each year the Endowment chooses an exemplary scholar and teacher to deliver the Jefferson Lecture in the Humanities, the highest honor bestowed by the federal government for intellectual achievement. Not coincidentally, many of the scholars so honored have been among the most senior members of their profession. The 1995 Jefferson Lecturer was Vincent Scully, architectural historian and legendary teacher of generations of undergraduates at Yale University.

NON-DISCRIMINATION

Older scholars have always been eligible to compete for Endowment support on the same basis as all other similarly qualified applicants. Accordingly, no information regarding age is requested from applicants, and funding application are evaluated and grants awarded exclusively on the basis of the merit of the proposed activities. Each year, numerous projects are funded that involve older persons as primary investigators, project personnel, or consultants. Each year, older persons serve on the NEH peer panels that evaluate grant applications for funding.

NEH publications notify the public that the Endowment does not discriminate on the basis of age. The Endowment also has a special telephone number for the deaf and hearing impaired to use in requesting information. Alternative format publications concerning Endowment programs (i.e., audio tapes, large print) are also made available upon request. In addition, the Endowment maintains a site on the world wide web that provides information about current projects and grant application requirements. The Endowment encourages applicants to consider issues related to program as well as architectural accessibility in early planning stages of a project. Costs of exhibition and program accommodations for people with disabilities are generally eligible project costs.

STATE HUMANITIES COUNCILS

In addition to activities benefiting older Americans that the Endowment supports directly, library programs, exhibitions, speakers bureaus, and other programs for the general public—and in many cases, for older audiences in particular—are provided at the local level by the Endowment's affiliates, the state humanities councils. The Federal/State Partnership of the Endowment makes grants to humanities councils in 50 states, Puerto Rico, the Virgin Islands,

the Marianas, and Guam. The special emphasis of the state humanities councils is to make focused and coherent education possible in places and by methods that are appropriate for adults.

ITEM 25—NATIONAL SCIENCE FOUNDATION

NATIONAL SCIENCE FOUNDATION REPORT FOR DEVELOPMENTS IN AGING

The National Science Foundation, an independent agency of the Executive Branch, was established in 1950 to promote scientific progress in the United States. The Foundation fulfills this responsibility primarily by supporting basic and applied scientific research in the mathematical, physical, environmental, biological, social, and engineering sciences, and by encouraging and supporting improvements in science and engineering education. The Foundation does not support projects in clinical medicine, the arts and humanities, business areas, or social work. The National Science Foundation does not conduct laboratory research or carry out educational projects itself; rather, it provides support or assistance to grantees, typically associated with colleges and universities, who are the primary performers of the research.

The National Science Foundation is organized generally along disciplinary lines. None of its programs has a principal focus on aging-related research; however, a substantial amount of research bearing a relationship to aging and the concerns of the elderly is supported across the broad spectrum of the Foundation's research programs. Virtually all of this work falls within the purview of the Directorate for Social, Behavioral, and Economic Sciences and the Directorate for Engineering.

DIRECTORATE FOR SOCIAL, BEHAVIORAL, AND ECONOMIC SCIENCES (SBE)

The Directorate for Social, Behavioral, and Economic Sciences supports research in a broad range of disciplines and interdisciplinary areas through its Division of Social, Behavioral, and Economic Research. For example, sociological research is being supported which examines how the labor force participation and earnings of older Americans have been affected by recent economic trends; how Americans in their 50's cope with the dual pressures of supporting aging parents and grown children; how income distribution differs between the "young old" and the "old old," and how the degree of political activism of older Americans has changed over time in the twentieth century. Projects within anthropology are being supported to examine how economic development affects patterns of caring for dependent elderly, and with cognitive psychology to examine the extent to which knowledge acquired in youth is retained in later life.

The SBE Directorate also supports several large-scale data gathering efforts which can be and have been used to study issues re-

lated to aging, although that is not their sole or even primary purpose. For example the Panel Study of Income Dynamics, which has been tracking a sample of more than 7,000 American families since 1968, provides information on changing household composition, labor force participation, income, assets, and consumption patterns as individual respondents grow older. The General Social Survey, which has carried out sample surveys of the U.S. adult population more or less annually since 1972, contains several attitudinal items dealing with the status of, and care for, the elderly. These surveys enable researchers to examine how attitudes toward the elderly have changed over time and how age groups differ across a wide range of opinion areas. The National Election Survey, which has studied American elections since 1952, provides information on how attitudes regarding candidates and issues vary across age groups. The SBE Directorate is also supporting a project that will make available to researchers in a consistent and readily usable form public use microdata from the U.S. censuses from 1850 through 1990. When completed, this project will make it possible to examine how the status and family relationships of older Americans have changed over the course of a century and a half.

DIRECTORATE FOR ENGINEERING (ENG)

The National Science Foundation's Directorate for Engineering seeks to enhance long-term economic strength, security, and quality of life for the Nation by fostering innovation, creativity, and excellence in engineering education and research. This is done by supporting projects across the entire range of engineering disciplines and by identifying and supporting special areas where results are expected to have timely and topical applications, such as biotechnology and materials processing.

Aging-related research is primarily supported within the Directorate for Engineering through the Biomedical Engineering and Research to Aid Persons with Disabilities programs. Research funded in this program relates to issues of aging and the elderly due to the propensity for the elderly to develop physical disabilities. Projects recently supported by this program include the following studies:

Biophysical mechanisms of cartilage repair and generation;

Mechanisms of drug delivery in the treatment of various diseases, including those associate with aging, such as diabetes;

Simple, noninvasive, quantitative methods to assess postural instability associated with aging;

Investigation of biodegradable polymer matrices to support the growth of bone and the generation of bone-like tissues for application in osteoporosis;

A variety of activities involving joint replacement, including computer assisted design of orthopedic surgery, cementing techniques, failure detection techniques, and the pathophysiology of implant device-related infection;

An image processing system for low vision people such as those with age-related maculopathies;

A visual speech articulation training aid for the hearing impaired; and

Undergraduate projects by student engineers to design and fabricate custom designed devices and software for disabled individuals.

While these projects are not specifically directed toward problems of aging, all of these studies have potential for dealing with conditions prevalent among the elderly.

ITEM 26—PENSION BENEFIT GUARANTY CORPORATION

EXECUTIVE DIRECTOR'S REPORT (1995)

I am pleased to report that the past year has been one of unparalleled success and accomplishment for the Pension Benefit Guaranty Corporation. We made broad advances in the areas of enforcement, customer service, and financial management, restoring the pension insurance program to a level of financial strength unseen in more than 10 years. We have also opened a new era of enhanced service to our corporate customers and our beneficiaries. In the process, PBGC garnered a number of distinctive awards for its programs and achievements.

The agency's financial footing improved dramatically in 1995. The single-employer program deficit now stands at $315 million, its lowest point since 1981. The absence of major terminations and our record investment income of more than $2 billion helped drive our deficit down.

There are ample reasons to remain cautious about the future. Even with a dramatic decline in pension underfunding, billions of dollars of underfunding remain, and a single major termination or drop in interest rates can offset the progress of the past two years. Still, through the efforts of PBGC's dedicated staff, millions of Americans can be assured that their pensions are more secure.

Enforcement

With the passage of its pension reform package, the Retirement Protection Act, the Administration took decisive action to strengthen the private defined benefit pension system and keep retirement secure. PBGC moved quickly to implement the reforms and make use of the new law. Within weeks of enactment, we issued detailed technical bulletins on the reforms to give employers broad guidance to assist them in planning for the new requirements. In this first year, we have issued final rules for the new disclosure notices companies must send to inform workers and retirees in certain underfunded plans about the funding of their plans and for new annual reporting to PBGC required of corporate groups with large pension underfunding. We also issued rules to establish PBGC as a clearinghouse for locating missing participants in terminating fully funded plans beginning in 1996.

We are finding that the reforms are already serving as an incentive to improve pension funding, even though the specific funding provisions may not yet have taken effect. We know of companies that have improved the funding of their plans because of the disclosure and reporting measures. And, PBGC already has begun applying its enhanced lien authority to compel companies to make good on missed contributions.

PBGC's Early Warning Program, which benefited from new tools and authority included in the reforms, also continues to spur companies to add funding and security to protect the pensions of

workers and retirees in underfunded plans. Through the Early Warning Program, PBGC uses the latest information technology and financial analyses to identify its biggest risks, target resources to mitigate these risks, and prevent significant losses for workers, retirees, and the insurance program. In the last three years, this effort has enabled PBGC to negotiate 30 major settlements that provided about $13.5 billion in new pension contributions and protections, strengthening the pensions of about 1 million people.

In recognition of its success, the Early Warning Program received two prestigious awards during the year. It was among the first federal programs to win an Innovations in American Government Award, presented annually by the Ford Foundation and Harvard University's John F. Kennedy School of Government to honor creative government solutions to pressing social and economic problems. The program also was honored with a National Performance Review "Hammer Award" presented by Vice President Al Gore in appreciation for "building a government that works better and costs less!"

Perhaps the best news of the year was that pension underfunding in single-employer plans declined for the first time in more than a decade, falling from the $71 billion reported in 1993 to about $31 billion as of the end of calendar year 1994. To be sure, this improvement largely reflects economic changes beyond the scope of the insurance program, especially the rise in interest rates that led to a decline in the value of corporate pension obligations. But, it is also due in no small part to the effects of the reforms and our enforcement efforts, which are serving to remind companies that funding pensions is a part of doing business and that well-funded plans make good business sense.

Of course, underfunding has not disappeared and can easily rebound with another decrease in interest rates. We will continue to attack the remaining core of underfunding. Workers and retirees should be able to rely on the pensions promised them, and proper funding is the only long-term assurance that these pensions will be paid.

Customer Service

People depend on PBGC for their pensions and top-quality customer service is a priority for PBGC. In the past two years, PBGC undertook a number of initiatives to improve our service to our customers--the workers and retirees whose plans we have taken over and the companies whose plans we insure. These efforts produced very gratifying results in 1995.

We reengineered our insurance operations, instituting more efficient team processing of

plan terminations and participant benefits. We issued some 65,000 benefit determinations, over twice the number issued in 1994. We also substantially improved our telecommunications capability with the opening of our new customer service center in July. People owed benefits by PBGC now can reach us through a nationwide toll-free telephone number, and they can expect swift, sure answers to their questions. Through state-of-the-art technology, PBGC customer service representatives can quickly access most PBGC plan and participant data as well as prepared information covering many common questions.

This year, we began to upgrade our service to our premium payers. Based on discussions with plan representatives, we established standards for our service to plan sponsors and pension practitioners that addressed their major premium concerns. We pledged to provide quicker responses to their inquiries and requests and earlier issuance of our annual premium package. We also appointed a new Problem Resolution Officer exclusively for premium complaints.

In addition to the standards, we looked for ways to provide regulatory relief for the corporate sponsors and administrators of PBGC-insured plans. We revised our penalty policy to provide lower penalties for small companies and for violations that are quickly corrected. We simplified the form for small plans to use in filing notifications of reportable events and established our first negotiated rulemaking committee to assist in developing amendments required for our reportable events regulation. The members of this committee, representing the interests of employers, employees, and pension practitioners who will be affected by the rule, are working with PBGC staff to develop rules that will be fair and acceptable to the private sector.

Management

Through hard work and attention to detail, financial management has become one of PBGC's strengths. In 1995, PBGC continued to build on the achievements of the past few years. This year, PBGC's Inspector General engaged Price Waterhouse LLP to conduct the audit of the Corporation's financial statements. The result remained the same, as we received another unqualified opinion on our financial statements. In addition, the General Accounting Office and, subsequently, the Office of Management and Budget have each removed PBGC from their high-risk lists.

In other areas, we continued our efforts to improve our automated information systems. In addition to implementing our new premium accounting system, we began using three other new systems for managing our litigation and termination cases and participant data. The quality of the

new case administration system, which has been in operation only since early 1995, has already been recognized with a Federal Technology Leadership Award. We also continued to work on integrating our various information systems and improving management controls over data.

A Glance at the Future

We can at last look forward to the future of the pension insurance program with cautious optimism. Our financial foundation is secure and steadily improving. We are at the forefront of technological advances that are enabling us to quickly and substantially improve our service to all of our customers. We have attacked the core of underfunding, although it is still too soon to declare the battle over and the war won.

We now must be careful not to let conditions develop that will foster the growth of new underfunding. Adopting policies unrelated to retirement security can serve only to weaken pension plans in the future. Our Nation's workers and retirees deserve the assurance that their pensions are secure. They look to us for that assurance, and we must not fail them.

Martin Slate, *Executive Director*

PENSION FUNDING

The year saw significant improvement in pension underfunding as rising interest rates decreased pension liabilities and companies made additional contributions, reflecting PBGC's enforcement and the Administration's pension reforms. Despite this progress, the Administration faced a new challenge to pension security embodied in a legislative proposal to allow employers increased freedom to withdraw assets from their pension plans.

Single-Employer Program Exposure

For the first time since 1983, the growth of underfunding in single-employer plans insured by PBGC has reversed. Total underfunding in single-employer plans dropped to $31 billion as of December 31, 1994, from the $71 billion reported for the end of 1993. These underfunded plans, which covered about 8 million workers and retirees, had total assets of $211 billion and total liabilities for vested benefits of $242 billion. Overall, the vast majority of single-employer plans remained fully funded, with assets of all plans totalling about $987 billion compared to liabilities totalling about $853 billion.

In another departure from recent years, the pension underfunding was dispersed across a wide range of industries. However, almost half of the underfunding was found in the steel,

navigation/aeronautical instruments, transportation equipment, airline, and automobile industries. The automobile industry, which accounted for about a third of the underfunding in 1993, accounted for less than 5 percent of the underfunding in 1994.

Underfunding fell primarily because of higher interest rates, which reduce liabilities, and the infusion of additional contributions to pension plans. Companies contributed more than $12 billion above their required payments, much of it due to agreements reached with PBGC under the Early Warning Program or in response to the reforms of the Retirement Protection Act. The overall funding ratio of underfunded plans also improved, increasing from 82 percent to 87 percent during the year.

PBGC's annual listing of the 50 companies with the largest underfunded plans also showed the effect of the general improvement in pension funding. Sixteen companies were removed from the list, in many cases because they contributed more than their required amounts. Other companies that remained on the list also increased their contributions to protect the pensions of their workers and retirees. In all, underfunding in the plans on the list decreased to $13.5 billion from last year's total of $39.7 billion.

In order to measure how much of the current total underfunding may result in future claims, PBGC categorizes underfunding into three loss contingency classifications that follow generally accepted accounting principles and are based on the financial condition of plan sponsors. The classifications are probable, reasonably possible, and remote.

Probable claims are those that are likely to occur in a future year based on conditions that existed at PBGC's fiscal yearend. PBGC estimates and records them as liabilities as they are determined, as required by financial accounting standards.

Total underfunding in the range of $15 billion to $21 billion was in plans maintained by companies that may present risks to the insurance program and to workers and retirees, including companies with below-investment-grade bond ratings as of September 30, 1995. These plans represent PBGC's reasonably possible claims.

The remaining underfunding was in plans categorized as remote claims. Pension underfunding in these plans is not presently a risk to participants or PBGC.

PBGC's estimate of underfunding in single-employer plans may not reflect increases in underfunding that typically occur in plans of troubled companies. In certain cases, the underfunding that PBGC is obligated to make up will have increased substantially by the time an

Pension Reversions

During the 1980's, companies took advantage of the law to withdraw more than $20 billion from the pension funds set aside for their employees' retirement. In 1990, Congress took action to halt this practice, imposing a substantial excise tax that virtually stopped the reversions of pension plan assets. In 1995, Congress proposed a change that would again encourage employers to remove large amounts of pension assets.

The change included in the 1995 Budget Reconciliation Bill as a means to increase tax revenues would allow companies to take money from pension plans that are more than 125 percent funded using PBGC assumptions, without paying any excise tax. According to Congressional and Administration analyses, this legislation could lead to the removal of $15-18 billion of pension assets for non-retirement purposes.

The Administration vigorously opposed the proposal. Led by Secretary of Labor Robert Reich, PBGC's Board of Directors worked with legislators from both parties, underlining the risk of the reversion proposal to pensions and to the pension insurance system. As PBGC has found, overfunded plans can quickly become underfunded as interest rates and financial markets change. A reduction in interest rates of 2 percentage points reduces a plan's funding level from 125 percent to 92 percent. Moreover, companies in financial trouble would have an incentive to strip assets from their pension plans.

The Administration was concerned that the proposal would undo the progress brought by the reforms in the past year. It would also allow long-term retirement savings to pay for current expenses and reduce savings at the very time that savings should be increased to meet the retirement needs of "Baby Boomers" and others. In December, the President vetoed the 1995 budget bill, saying that "People who work hard and save for retirement ought to be able to retire with dignity... This bill would give companies the green light to raid pension funds and put those retirements at risk..."

Financial Forecasts

ERISA requires that PBGC annually provide an actuarial evaluation of its expected operations and financial status over the next five years. PBGC historically has extended these forecasts to cover 10 years.

PBGC's forecasts are subject to significant uncertainty since the amount of PBGC's future claims depends on many factors, including current underfunding among insured plans, any further

erosion in funding, bankruptcies among plan sponsors, and recoveries from these bankrupt sponsors. These factors are influenced by future economic conditions, investment results, and the legal environment that the Congress and the courts create for PBGC's insurance program. Over the longer term, PBGC also will be affected by labor force trends, global trade, and employers' preferences for the variety of pension plans available.

PBGC's current methodology for the 10-year forecasts relies on an extrapolation of the agency's claims experience and the economic conditions of the past two decades. The forecasts do not reflect a full range of economic conditions and do not measure the high degree of uncertainty surrounding PBGC's future claims. To address the limitations of the forecast methodology, PBGC is developing a simulation model, called the Pension Insurance Management System (PIMS), to examine its financial condition under a full range of economic scenarios. Until PIMS is complete, PBGC is continuing to rely on its current methodology.

Ten-Year Forecasts: PBGC has prepared three 10-year forecasts (A, B, and C) of its single-employer program using its current methodology to give a long-term view of the expected status under different loss scenarios. PBGC expects its history of significant annual variations in losses to continue. These forecasts include the significant improvement in PBGC's financial condition expected to result from the Retirement Protection Act but they are less favorable than last year primarily because lower variable-rate premium payments are projected based on the improved pension funding that is already evident. This funding, while reducing PBGC's revenues, also will reduce PBGC's exposure to loss. The forecasts also include an increase in projected claims to reflect lower interest rates.

Forecast A is based on the average annual net claims over PBGC's entire history ($463 million per year) and assumes the lowest level of future losses. Forecast A projects net income that peaks in 1997 and results in elimination of PBGC's deficit and a surplus of $2.4 billion at the end of 2005.

Forecast B, which assumes the mid-level of future losses, is based upon the average annual net claims over the most recent 14 fiscal years ($608 million per year). PBGC began incurring significantly larger claims in 1982. Forecast B projects net income levels that, while lower than Forecast A, still lead to elimination of PBGC's deficit and a surplus of $200 million at the end of 2005.

Forecast C is highly pessimistic and reflects the potential for heavy losses from the largest underfunded plans by assuming that the plans that represent reasonably possible losses will

terminate uniformly over the next 10 years in addition to a modest number of lesser terminations each year. (Reasonably possible losses are discussed in Note 8 to the financial statements.) This forecast assumes $1.39 billion of net claims each year, resulting in steady growth of PBGC's deficit throughout the 10-year period to $11.8 billion.

The 1995 forecasts share several assumptions. Projected claims are in 1995 dollars. The present value of future benefits is valued using actuarial assumptions consistent with assumptions used to value the present value of future benefits in the financial statements as of September 30, 1995. Assets are projected to grow at 6.2% annually. Benefits for plans terminating in the future are assumed to grow at 4.9% annually until termination. Plan funding ratios are assumed to increase at 1.5% per year from historical averages and recoveries from plan sponsors are assumed to be constant at 10% of plan underfunding. The number of participants in insured single-employer plans is assumed to remain constant. The flat-rate portion of the single-employer premium is assumed to remain constant at $19 per participant. Receipts from the variable-rate portion of the premium are projected on the basis of a constant 30-year U. S. Treasury bond rate of 6.0%. Assumed administrative expenses through 2001 are consistent with PBGC's 1997 President's Budget submission and are projected to grow 4.9% each year thereafter.

OPERATIONS

With low losses from terminating underfunded plans, PBGC's single-employer plan insurance program grew stronger. The financial health of PBGC's separate insurance program for multiemployer plans remained stable despite a small financial loss.

Single-Employer Program

The number of American workers and retirees with pensions insured under the single-employer program increased slightly to about 33 million people. At the same time, the number of single-employer pension plans covered by PBGC fell slightly to about 53,000 as small companies continued to end their plans.

Program Finances: The single-employer program experienced two effects of a decline in interest rates--a $1 billion increase in the value of PBGC's benefit obligations, more than offset by $1.2 billion in income from the program's fixed-income assets. With low losses from plan terminations, PBGC's investment and premium income enabled the agency to reduce the deficit of the single-employer program to $315 million, the lowest deficit since 1981.

For the year, improved funding of PBGC-insured plans led to a $117 million decrease in the program's premium revenues to $838 million. By yearend, the single-employer program's assets had increased by 25 percent to nearly $10.4 billion, while liabilities increased by 12 percent, to about $10.7 billion.

Standard Terminations: An employer may end a fully funded plan in a standard termination by purchasing annuities or paying lump sums to participants. Standard terminations are subject to legal requirements governing notifications to participants and to PBGC and payment of benefits. PBGC may disallow standard terminations that do not comply with the requirements.

There were fewer standard terminations in 1995, continuing a decline from the historically high levels reported during the late 1980's. In 1995, PBGC received about 3,870 notices of standard terminations, slightly fewer than were received in 1994 and one-third the number received annually in the years 1987-1990. The Corporation permitted completion of about 1,870 standard terminations and returned or disallowed another 1,810 cases that were incomplete or failed to meet legal requirements.

PBGC audits a statistically significant number of completed terminations to confirm compliance with the law and proper payment of benefits. These audits generally have found few and relatively small errors in benefit payments, which plan administrators are required to correct. In 1995, the audit program resulted in additional distributions totalling nearly $3 million to more than 5,250 people. In addition, in a case found in 1992 through the audit program (Piggly Wiggly Southern, Inc.), PBGC won a court decision confirming PBGC's finding that the company owes its employees additional pension benefits from a terminated plan. PBGC estimates that the amount owed exceeds $1 million.

Distress and Involuntary Terminations: Defined benefit plans that are not able to pay all promised benefits may be terminated either by the plan administrator responsible for the plan or by PBGC. An employer wishing to terminate an underfunded plan generally may do so only if the employer is being liquidated or if the termination is necessary for the company's survival. The employer must first prove to PBGC, or to a bankruptcy court if appropriate, that it and each of its affiliated companies meets one of the financial distress criteria set by law.

An underfunded plan also may be terminated involuntarily by PBGC when necessary to protect the interests of the participants or of the insurance program. PBGC must terminate any plan that does not have assets available to pay current benefits.

The number of underfunded plans completing distress or involuntary termination increased

in 1995, in part due to PBGC's improved management of its case inventory. Terminations during the year included plans from United Press International; Copperweld Steel Company of Ohio; Union City Body Company, Inc., an Indiana manufacturer of truck bodies; and Hamakua Sugar Company, a Hawaiian sugar cane grower. By yearend, PBGC had approved the termination of 124 underfunded plans, in contrast to the 114 plans in 1994. The actual termination date for many of these plans occurred in earlier years.

Although more underfunded single-employer plans terminated in 1995 than in the previous year, most were small plans and losses from underfunded plans remained relatively low. PBGC's annual losses from underfunded single-employer plans have been variable throughout its history, with net losses generally increasing since 1982.

Loss Experience from Single-Employer Plans *
(Dollars in millions)

Year of Termination	Number of Plans	Benefit Liability	Trust Plan Assets	Recoveries From Employers	Net Losses	Average Net Loss per Terminated Plan
1975-1981	824	$ 742	$ 295	$ 129	$ 317	$0.4
1982-1988	797	3,071	936	214	1,920	2.4
1989-1995	463	5,082	2,263	427	2,392	5.2
Subtotal 2,084	8,894	3,495	770	4,629		
Probable terminations	34	2,800	1,348	273	1,179	
Total	2,118	$11,694	$4,843	$1,043	$5,808	

Note: Numbers may not add up to totals due to rounding.
* Stated amounts are subject to change until PBGC finalizes values for liabilities, assets, and recoveries of terminated plans. Amounts in this table are valued as of the date of each plan's termination and differ from amounts reported in the financial statements and elsewhere in the Annual Report, which are valued as of the end of the stated fiscal year.

Trusteed Plans: During 1995, PBGC became trustee of 139 single-employer plans, one-third more than in 1994, which had terminated in either the current or prior years. The agency assumed responsibility for an additional 25,000 people in these plans. At yearend, PBGC was in the process of trusteeing an additional 101 single-employer plans. In all, including 10 multiemployer plans previously trusteed, a total of 2,094 terminated plans were trusteed or were being trusteed as of the end of the year. This total also reflects the changed circumstances of one single-employer plan, which no longer required PBGC trusteeship.

Multiemployer Program

The multiemployer program, which covers about 8.7 million workers and retirees in about 2,000 insured plans, is funded and administered separately from the single-employer program and differs from the single-employer program in several significant ways. The multiemployer program covers only collectively bargained plans involving more than one unrelated employer. For such plans, the event triggering PBGC's guarantee is the inability of a covered plan to pay benefits when

due at the guaranteed level, rather than plan termination as required under the single-employer program. PBGC provides financial assistance through loans to insolvent plans to enable them to pay guaranteed benefits.

The significant reforms enacted in 1980 created several safeguards for the program, including a requirement that employers that withdraw from a plan pay a proportional share of the plan's unfunded vested benefits. These safeguards have permitted PBGC to maintain multiemployer premiums at a constant, reasonably low level.

The program continues in sound financial condition, with assets of $477 million, liabilities totalling $285 million for future benefits and nonrecoverable future financial assistance, and a net surplus of $192 million. The multiemployer program sustained its second consecutive loss, and only the second loss since passage of the 1980 reforms, as a result of an increase in the allowance for nonrecoverable future financial assistance for one plan that covers about 19,000 people. This reflected the withdrawal in early 1995 of substantially all the employers contributing to the plan. However, the new liability was largely offset by the program's premium and investment income, resulting in a net loss for the year of only $5 million.

Plan Underfunding: Based on data as of the beginning of 1993–the most recent information available–multiemployer plans had total assets of $194.6 billion and liabilities of $199.9 billion. PBGC has determined that a small number of these plans were underfunded by a total of about $20 billion. The rest of the multiemployer plans were overfunded by a total of about $15 billion.

Financial Assistance: The multiemployer program has received relatively few requests for financial assistance. Since enactment of the reforms in 1980, PBGC has provided approximately $28 million in total assistance, net of repaid amounts, to only 14 of the 2,000 insured plans. Of this amount, about $4 million went to 9 plans in 1995. PBGC estimates that about $268 million, at present value, will be required to make all nonrecoverable future payments to the 9 plans currently receiving assistance and to other plans expected to require assistance in the near future.

Program Administration: During 1995, the Corporation made several improvements to its automated multiemployer plan financial database, established one year earlier to capture historical data for use in assessing multiemployer plan economic trends. Based on various recommendations made by the U.S. General Accounting Office during the course of its 1994 audit of PBGC's financial statements, PBGC implemented a number of changes, including improved security controls, back-up capabilities, processing controls, and audit trail documentation.

CUSTOMER SERVICE

PBGC dramatically improved its service to its principal customers -- workers and retirees owed benefits. The agency also established its first standards for service to companies that pay federal insurance premiums and began to improve that service as well.

Benefit Processing

PBGC's responsibility for benefit payments begins immediately upon becoming trustee of a terminated plan. Top priority is given to maintaining uninterrupted benefit payments to existing retirees and commencing payments to new retirees without delay. Concurrently, PBGC staff also begin intensive efforts to notify plan participants and to obtain essential data and records on each individual participant, a difficult task frequently complicated by inadequate plan and employer records.

PBGC pays estimated benefits to retirees until it has confirmed necessary data and valued plan assets and recoveries from the plan's sponsor. PBGC then calculates the actual benefit payable to each participant according to the specific terms of that person's plan, statutory guarantee levels, and the funds available from plan assets and employer recoveries. Benefit calculation can be an intricate process since each trusteed plan is different and must be administered separately.

Benefit Payments: About 392,000 participants from single-employer and multiemployer plans rely on PBGC for current and future pension benefits. These include 182,000 retirees receiving pensions and another 210,000 people who are entitled to receive benefits when they retire in the future. Benefit payments during 1995 totalled $763 million.

Service Improvements: PBGC ushered in a new era of faster, more responsive assistance to participants when a new customer service center began operations. The center incorporates state-of-the-art features such as a new toll-free telephone number for inquiries from workers and retirees receiving PBGC benefits and provides fast access to PBGC's automated case administration, participant information, and benefit payment systems. Customer service representatives have extensive information available through their individual computer terminals to enable them to answer most inquiries within a matter of minutes. When future enhancements are completed, the customer service center will be responsible for virtually all general and participant telephone calls to the agency. PBGC projects that the center will handle about 8,000 calls per month with an average response time of about 2 minutes.

PBGC's first formal survey to determine the level of satisfaction of people in plans taken over by the agency provided useful insights. Most of the people who responded indicated that PBGC met or exceeded its published standards, but the survey results also showed that PBGC can enhance its service by improving its timeliness, helpfulness, and responsiveness. In response to the survey, PBGC added two service standards for telephone calls. The new customer service center and a newsletter for people not yet receiving benefits should help resolve many of the concerns expressed. PBGC also began providing customer service training to all agency employees.

As customers of PBGC, you deserve our best efforts. Our first goal, of course, is getting you your benefit check on time each month. We are also committed to always showing you courtesy and respect when you contact us. We pledge that:

- In all correspondence to you, we will give you the toll-free number of our Customer Service Center and the name of a person to contact at PBGC.
- In all communications with you, we will acknowledge your inquiry within one week.
- We will return your initial phone call within 1 workday.
- If we cannot give you an immediate answer, we will tell you when to expect it.
- If it will take us longer than expected to answer your question, we will give you a status report and tell you a new date when to expect an answer.
- If you are receiving a pension check, changes you request (such as address change, direct deposit, tax change) will be made within 30 days, if the request is received by the first of the month. It will take another month if the request is received after the first of the month.

Perhaps the most significant improvement of the year, both for sheer size as well as overall impact on the agency, resulted from the reengineering of PBGC's plan termination and benefit processing operations. Interdisciplinary teams combining the various actuarial, auditing, financial, and benefit processing skills now simultaneously complete both the trusteeship process and the processing of terminated plans. The reengineering makes possible more productive, efficient, customer-oriented service and already has made PBGC a better place to work. Within the first few months of operation, several hundred pending cases were processed or recommended for termination, more than in any prior year, which contributed to the increased terminations the agency is reporting for the year.

The momentum of PBGC's drive to improve customer service carried over to other initiatives with significant results for 1995. One project to accelerate the calculation of benefits helped PBGC issue more than 65,000 individual benefit determinations, a record for one year that more than doubled the number produced just one year earlier.

Optical imaging also reached a peak, as PBGC completed scanning of all available participant documents, about 8 million pages, and began working on plan records. The agency expects to complete imaging of all plan records by mid-1996 and to begin scanning of documents as they are received or created. Optical imaging, which converts documents to computerized images accessible

through personal computers, ensures secure storage and fast retrieval of participant records for the first time in the agency's history.

To improve service to people in larger terminated plans, PBGC has begun to consolidate its field operations into strategically located regional centers. This will reduce operating costs without reducing service to participants.

PBGC also moved quickly to expand its highly successful missing participant program. Over the past two years, this effort has enabled PBGC to find addresses for about 40,000 previously unlocatable workers and retirees from terminated underfunded plans, many of whom may have been unaware they were entitled to benefits. One of the reforms of the Retirement Protection Act established PBGC as the agency responsible for locating workers who are missing from fully funded plans that terminate. The need for such a federal program emerged from discussions with employers, who have long experienced difficulty in making arrangements with insurance companies and banks to ensure that missing participants receive the benefits owed them. PBGC proposed rules for the program in August, finalized the rules in December, and set the program in motion in January 1996.

Participant Outreach: Clear, effective communications with workers and retirees remained a priority in 1995. The agency continued to publish a semiannual Pension Newsletter for retirees to keep them abreast of developments and to hold informational meetings with workers and retirees in large, newly trusteed plans to allay concerns. In 1995, PBGC held 34 such meetings that reached about 4,000 people in locations across the country, tripling the number of meetings held in 1994.

PBGC expanded the "Know Your Pension" information campaign–begun on a pilot basis in 1994 in Ohio and Pennsylvania–to include Illinois, Indiana, Missouri, and Wisconsin. This six-state region has about 15,000 insured plans covering nearly 9 million people, of whom about 2.5 million are in underfunded plans. Through newspaper articles, television and radio messages, posters, and readily accessible pamphlets, the campaign sought to raise awareness of participants in underfunded plans about pensions and PBGC's guarantees. The campaign has achieved striking results in its first two years. Radio and television messages have now been carried on about 150 stations reaching almost 3 million homes. Newspaper columns have appeared in more than 100 newspapers with more than 9 million readers. More than 300,000 pamphlets have been taken, generating about 70,000 requests for additional information.

Appeals of Benefit Determinations

of the appeals are from people disputing benefit determinations. Typically, about 2 percent of all benefit determinations are appealed.

Most appeals are resolved by appeals department and other PBGC staff without full Appeals Board review, as was the situation for 430 cases in 1995. The Board met to decide 120 appeals, 54 of which required changes in benefits primarily as a result of new facts or a different interpretation of plan provisions.

Service to Premium Payers

PBGC's second Customer Service Plan, announced in October 1995, focused on the needs of the companies that support PBGC's pension insurance programs through their premium payments. With the assistance of focus groups of plan representatives, the agency evaluated services and designed a plan that will be communicated to PBGC's premium payers in 1996 as part of the annual premium package mailing.

This is our pledge to you, our premium payers:

- We will mail the PBGC-1 package seven months in advance of each plan's filing date.
- We will return your phone call within 24 hours. If we cannot immediately resolve the issue you called about, we will tell you when you can expect it to be resolved, and we will give you the name and number of the responsible person.
- When you ask for reconsideration of the imposition of a premium penalty, we will acknowledge receipt of your request within one week. We will tell you when to expect a response and include the name and phone number of a contact person.
- We will designate a Problem Resolution Officer to serve as the focal point for complaints from premium payers and their representatives.

In addition to the service plan, PBGC took other steps during the year to improve service for plan sponsors and plan administrators. As part of the Administration's initiative on penalty reform, PBGC revised its policy on penalties for failure to provide required information in a timely manner. The revised policy provides for lower penalties for plans of small businesses and for violations that are quickly corrected. In addition, PBGC issued a simplified one-page form for small plans to use in notifying PBGC of reportable events that may indicate plan or employer financial problems. The new form generally will eliminate the need for more extensive reporting and documentation.

ENFORCEMENT

PBGC negotiators and litigators protected the retirement security of American working men and women across the country, ensuring that employers met their obligations to their pension plans and the insurance program. The Early Warning Program wrested additional funding and security

from plan sponsors to protect the pensions of those in underfunded pension plans, winning national recognition for its success. Within weeks after enactment of the Retirement Protection Act, PBGC provided regulatory guidance on the new law while it began applying the new authority and tools provided by the reforms in specific cases.

Early Warning Program

Through the Early Warning Program, PBGC seeks to identify and address concerns about large underfunded plans at an early stage, when corporate resources are available and companies have the most flexibility to strengthen their pensions. PBGC targets the greatest risks to pensions and the insurance program through the use of sophisticated financial and information technology and develops expertise on individual companies and their industries. When one of these companies restructures or otherwise engages in a major transaction, PBGC is then able to approach the employer and negotiate protection for the pensions tailored to that company and its circumstances. In doing so, we prevent losses before they occur, rather than wait to pick up the pieces when a company is in financial distress.

During the past year, PBGC financial analysts and actuaries closely monitored more than 400 companies with pension plans underfunded by at least $25 million. While these companies represented only 1 percent of all companies maintaining PBGC-insured plans, their plans represented over 80 percent of the total underfunding in single-employer pension plans. Through analysis of company financial statements, government reports, actuarial valuations, and public announcements of major transactions, PBGC staff identified transactions or events that could adversely affect a plan and its participants, evaluated the risks involved, and determined the measures needed to reduce the risks. This information enabled PBGC to negotiate settlements valued at more than $740 million with 14 companies during the fiscal year.

General Motors Corporation: GM fulfilled its 1994 agreement with PBGC to contribute $10 billion to its largest and most underfunded pension plan, covering 600,000 GM workers and retirees, by contributing more than 173 million shares of GM Class E stock, with a value of $6.26 billion, to the plan. The stock contribution took place after the Department of Labor issued an exemption in March authorizing the transaction. GM had previously contributed $4 billion in cash under the terms of the agreement and an additional several billion dollars to the plan during the course of the year. In June, the plan's independent fiduciary sold 21 percent of the GM Class E stock held by the plan, with proceeds of $1.6 billion.

New Valley Corporation (formerly Western Union Corporation): Early in the year,

PBGC action ensured that New Valley's pension plan, which covers 16,000 Western Union workers and retirees, would continue, funded by First Financial Management Corporation (FFMC). At the time, the plan was underfunded by about $400 million and was the tenth most underfunded plan in the country. PBGC's readiness to take legal action to enforce its claims for the plan's underfunding induced FFMC to assume responsibility for the Western Union plan as part of its purchase of Western Union Financial Services, Inc., New Valley's major asset. Since then, FFMC has contributed a total of $199 million, well in excess of mandatory minimum funding requirements.

Trans World Airlines: In January 1993, as part of a bankruptcy reorganization, TWA and PBGC reached an agreement resolving the respective liabilities of the airline and of Carl Icahn, TWA's former owner, for TWA's two substantially underfunded defined benefit plans. As part of that agreement, TWA issued $300 million in notes, secured by its international routes and Kansas City maintenance base, to the pension plans. TWA's payments on the notes were intended to provide at least part of the plans' annual funding requirements, with the balance to be paid by an Icahn company.

In December 1994, as part of a new TWA effort to restructure its debt, PBGC and TWA reached another agreement that reduced the face amount of the airline's notes to $244 million and gave the plans an equity stake in the airline. TWA's payments on the notes were reduced, the notes continued to be secured by the existing collateral, and the Icahn group remained responsible for any shortfall in annual pension contributions. In August 1995, TWA issued the replacement notes, provided the plans with 4.167 million shares of TWA common stock, and completed a general financial restructuring through a successful pre-packaged bankruptcy reorganization. The agreement with PBGC provided TWA with greater flexibility and a better chance of servicing all obligations, including the pension payments.

Woodward & Lothrop Holdings, Inc.: Woodward & Lothrop, which owned department store chains in the Washington, DC, metropolitan area and elsewhere, filed for bankruptcy in January 1994. The company maintained a pension plan that was underfunded by about $30 million. PBGC determined that Woodward & Lothrop's plan of reorganization would break up the controlled group, which had the resources necessary to fund the plan. In August 1995, after several months of negotiations, PBGC reached an agreement with A. Alfred Taubman, the company's chairman and principal shareholder, that protected the full pensions of the company's 10,530 workers and retirees. Under the agreement, The Taubman Investment Company Limited

Partnership (TICLP) will contribute sufficient funds to the plan to pay all pension benefits. The A. Alfred Taubman Trust will guarantee the TICLP promise. Woodward & Lothrop will terminate the plan in a standard termination and distribute benefits to the plan's participants in lump sums or as annuities from a private insurance company.

James River Corporation: James River planned to spin off a substantial portion of its communications paper division as a new corporation, Crown Vantage Inc. As part of the spinoff, 12 pension plans covering 8,000 people, with total underfunding of about $55 million, would be transferred to the new enterprise. The transaction posed risk for PBGC. In August, PBGC and James River reached an agreement under which the company committed to stand behind all 12 plans. James River agreed to either take back the plans or be liable for the underfunding if Crown Vantage is unable to meet their pension promises.

Ampex Corporation: Ampex maintains two pension plans that were underfunded by about $85 million and covered some 6,000 workers and retirees. At the beginning of the year, Ampex's parent, N.H. Holding Inc., was undergoing a reorganization in bankruptcy. The resulting restructuring of Ampex's controlled group threatened to leave Ampex's pension plans less protected. In December, PBGC negotiated an agreement with Ampex, its parent, and its corporate affiliates under which several current and departing members of the controlled group will remain responsible for Ampex's pension plans in the event Ampex is unable to meet its pension obligations in the future. As a result, the plans remained ongoing and the workers, retirees, and PBGC were protected from loss.

Freedom Forge Corporation: When Freedom Forge missed a required $3 million pension contribution early in the year, PBGC used authority granted it under the Retirement Protection Act to file liens against the company in June in order to enforce the company's funding obligation. The Freedom Forge pension plan had underfunding of about $12 million and covered about 540 people. The liens led to a negotiated settlement under which Freedom Forge agreed to a payment schedule designed to increase the overall funding level and improve the liquidity of the company's plans. The contributions are secured by consensual liens on all of the company's assets and properties.

Pitney Bowes, Inc./Dictaphone Corporation: In August, PBGC reached an agreement with Pitney Bowes under which the company will guarantee the pension plan of its Dictaphone subsidiary, which was being acquired by another company through a highly leveraged transaction. The pension plan covers some 4,300 workers and retirees and was underfunded by about $15

million. Pitney Bowes agreed to retain pension responsibility for 1,600 Dictaphone retirees and former workers while the new Dictaphone Corporation would assume responsibility for the pensions of about 2,700 active employees. Pitney Bowes also agreed to guarantee the current underfunding of the portion of the pension plan being transferred to the new corporation.

Litigation

When necessary, PBGC can bring to bear more than 20 years of extensive, independent litigation experience to enforce the law and protect the interests of workers, retirees, and the insurance program. PBGC prefers to negotiate settlements of pension issues with the responsible employers but will not hesitate to take legal action when negotiations fail. PBGC litigators continued to build upon the agency's successful record in federal courts across the country.

At the end of the year, PBGC had 87 active cases in state and federal courts and 705 bankruptcy cases.

Piggly Wiggly Southern, Inc.: Through a routine audit following the 1988 termination of a fully funded Piggly Wiggly pension plan, PBGC determined that the company significantly undervalued participants' lump sum benefits. In particular, PBGC determined that the company failed to use the appropriate interest rate assumptions. As a result of the incorrect valuation, many of the plan participants failed to receive their full benefits and the company was able to recover a $2.7 million reversion of "excess assets" from the plan. The plan covered 2,500 current and former workers of the company. When Piggly Wiggly refused to pay the additional pension benefits owed, PBGC filed suit in district court to enforce its audit findings. In April, the court upheld PBGC's determination that the participants are owed additional pension benefits. PBGC estimates that the amount owed exceeds $1 million. The company's appeal was pending at yearend.

CF&I Steel Corporation: PBGC continued to pursue its claims against the reorganized CF&I for a CF&I plan that was underfunded by about $220 million when terminated in March 1992. In a November 1994 ruling, a district court denied priority to most of PBGC's claims for minimum funding contributions owed CF&I's plan and for the plan's underfunding. The court also remanded the case to the bankruptcy court for reconsideration of the amount of PBGC's underfunding claim, ruling that the bankruptcy court erred in "deferring" to PBGC's interest rate assumption. In November 1995, the bankruptcy court revalued PBGC's claim for unfunded benefit liabilities from $221 million to about $124 million (subject to certain adjustments), based on a "discount rate" that differed from the assumptions prescribed by PBGC's regulation. PBGC intends to appeal this ruling.

White Consolidated Industries, Inc.: White continued to contest PBGC's claims for the estimated $120 million underfunding in pension plans that White transferred to Blaw Knox Corporation in 1985. PBGC is alleging that a principal purpose of White in entering into the transaction was to evade pension liabilities. PBGC has taken over all the Blaw Knox plans either because they ran out of money or because they would have been abandoned after Blaw Knox ceased business and sold its assets in 1994. The case remained pending before a district court at yearend, with trial scheduled for December 1996.

Collins v. PBGC; Page v. PBGC: These consolidated class-action suits were filed by participants in plans that terminated before September 26, 1980, without having been amended to adopt ERISA's minimum vesting standards. The plaintiffs sought a court ruling requiring PBGC to guarantee their benefits as if their plans had been amended. PBGC had determined at the time their plans terminated that only those benefits vested under the express terms of their plans were guaranteeable. After yearend, PBGC and the plaintiffs reached a settlement, which is pending court approval. Under the settlement, people who had 10 or more years of service, or their survivors, generally will receive about 80 percent of the benefits they did not receive at the time their plans terminated. Other people with between five and nine years of service will receive lesser amounts from a separate fund. About 40,000 people may be affected. The overall cost of the settlement is projected at around $100 million.

Rulemaking

PBGC moved quickly to implement the reforms of the Retirement Protection Act (RPA) after enactment in December 1994. Detailed Technical Updates issued in January and February highlighted the major changes made by RPA and provided broad guidance on PBGC's enforcement of the new requirements until specific rules were developed. Another update issued in May alerted companies to the interest and mortality assumptions PBGC would use to calculate unfunded benefits for its 1995 listings of underfunded plans, providing more time for companies to determine if they wished to make additional contributions for the year to reduce underfunding.

RPA requires that participants in underfunded plans be notified annually about the funding status of their plan and the limits on PBGC guarantees. By July, PBGC had finalized rules to implement this requirement, including an easily understood model notice that had been tested for readability by a focus group of workers and retirees. About 1,500 companies with large plans covering about 4 million people were affected by the notice requirement in 1995; many of them had to send their notices by December 15. The notice requirement will be extended in 1996 to

4,000 companies with small plans covering 100 or fewer people. PBGC will monitor companies' compliance with the requirement.

Another RPA reform established new annual reporting requirements for corporate groups with large underfunded pension plans. Under final rules issued in December 1995, these groups will have to provide PBGC with 1995 financial and actuarial reports on the group members and their plans. The first filings will be due in 1996. To ease the reporting burden, PBGC coordinated the reporting requirements with information that generally is already available and eliminated the requirement where the information is publicly available from other federal agencies. Fewer than 100 corporate groups are expected to meet the reporting criteria. PBGC also issued rules implementing the missing participants clearinghouse authorized by RPA.

In addition, the agency established its first negotiated rulemaking advisory committee to develop proposed amendments to PBGC's regulation on reportable events. Through negotiations, members of the committee, representing employers, employees, and pension practitioners who will be affected by PBGC's revised reportable events rules, will attempt to reach a consensus that PBGC will use as a basis for a proposed rule. The committee, whose members receive neither compensation nor expense reimbursement, held its first meeting in October 1995 with the goal of producing a proposed regulation by the spring of 1996.

MANAGEMENT

New technology improved PBGC's automated information systems and eliminated weaknesses remaining in the agency's financial operations. The agency made additional gains in its financial management, as record investment income contributed to the sharp drop in PBGC's deficit. Supporting the agency's focus on customer service, employee development included new customer service training for all PBGC staff as well as training of operations staff in new team-processing approaches.

Information Management

PBGC is rapidly acquiring advanced information technology to administer the insurance programs. The past year saw implementation of new automated premium accounting and case administration systems and substantial progress on new legal management and participant information management systems. These systems augment PBGC's ability to manage growing legal and termination caseloads and participant services.

The new systems operate through networked personal and small multi-user computers, rather than large mainframe computers, to provide flexibility and ease of use. Features such as automatic letter generation, workload monitoring, and system interfaces should markedly increase the effectiveness of internal processes and customer service.

PBGC continued to work toward full integration of its automated information systems and to develop the systems architecture that will assure consistency among current and future systems. During the year the agency completed a corporate data dictionary identifying PBGC's automated information and a corporate data management system to access, compare, and report the information.

Financial Management

Early in 1995, the General Accounting Office recognized PBGC's progress in improving its financial management by issuing an unqualified opinion on PBGC's 1994 financial statements and removing the pension insurance program from GAO's high-risk list. The Office of Management and Budget subsequently removed PBGC from its high-risk list as well. PBGC's 1995 financial statements have received an unqualified opinion from the agency's auditors for the third straight year, again substantiating the strength of PBGC's current financial management. This year, PBGC's Inspector General engaged Price Waterhouse LLP to conduct the audit.

PBGC continued to take corrective actions as needed to address the few remaining internal control weaknesses. A major step completed during the year involved implementation of a new "standard general ledger" to provide an automated reporting system that draws data from the agency's other financial information systems. The standard general ledger replaced labor-intensive personal computer-based applications that required redundant manual entry of data. The new reporting system provides improved quarterly financial information for management.

To ensure that all premiums due the agency are paid, PBGC began conducting field examinations of pension plans to be certain that plans are accurately counting their participants when calculating premium payments. These audits will augment the collection and compliance program that uses automated searches of Internal Revenue Service, Department of Labor, and PBGC pension files to identify nonpayers and plans that underpaid their premiums.

In its previous audits, GAO had expressed concern about PBGC's assessment of the multiemployer program's liability for financial assistance and about PBGC's database of information on the workers and retirees to whom it owes pension benefits. These concerns have now been addressed. Measures adopted during the year include new internal controls and

documentation for the financial database on insured multiemployer plans and new procedures to review and confirm participant data. PBGC also has increased its efforts to collect participant data as soon as possible after taking over a terminated plan in order to ensure the greatest possible accuracy of its records and of the valuation of the agency's benefit liabilities.

Other Initiatives

PBGC was one of only two small federal agencies that met a National Performance Review goal by implementing an electronic procurement system for purchases of $25,000 or less before September 30, 1994. During 1995, PBGC received commendation from the Office of Management and Budget for its success with "electronic commerce," through which PBGC has achieved significant savings by using nationwide electronic bulletin boards to increase competition for small procurements. PBGC also was one of eight agencies that received recognition from the Joint General Services Administration/Sprint Applications and Technology Quality Team, and PBGC's telecommunications manager separately received a Small Agency Award for PBGC's innovative, effective use of telecommunications technology.

In other areas, PBGC established its initial set of corporate performance measures covering specific aspects of its service to workers and retirees. The agency also pressed forward with a comprehensive upgrading of PBGC employee training programs to meet specialized, technical, and management needs, with emphasis on customer-service and team-building.

Investment Program

The Corporation has approximately $10.5 billion of total assets available for investment, consisting of premium revenues accounted for in the Revolving Funds and assets from terminated plans and their sponsors accounted for in the Trust Funds. The Revolving Funds are required to be invested in Treasury securities; PBGC has more discretion in its investment of the Trust Funds. PBGC's investment policy aims for long-term reduction of its deficit by maximizing expected investment returns within prudent, reasonable levels of risk. Assets are primarily invested in high-quality fixed-income securities and equities, with asset allocation designed for sound long-term performance.

Investment Profile: As of September 30, 1995, the value of PBGC's total investments, including cash, was approximately $10.5 billion. The revolving fund value was $6.4 billion and the trust fund value was $4.1 billion.

PBGC's fund allocation remained relatively unchanged during 1995. Cash and fixed-income

securities represented 68 percent of the total fund at the end of the year, as compared to 69 percent at the end of 1994, while the equity allocation stood at 32 percent compared to 30 percent one year earlier. A small portion of the invested portfolio remains in real estate and other financial instruments.

Investment Profile

	September 30, 1995	1994
Fixed-Income Assets		
Average Quality	AAA	AAA
Average Maturity (years)	21.4	23.0
Duration (years)	10.3	9.9
Yield to Maturity (%)	6.6	7.8
Equity Assets		
Average Price/Earnings Ratio	18.0	18.3
Dividend Yield (%)	2.4	2.8
Beta	1.06	1.07

Investment Results: Fiscal year 1995 was a positive year for capital market investments and PBGC's investment program. The broad stock market, as measured by the Wilshire 5000 Index, advanced 29.1%, while PBGC's equity program advanced 30.9%. PBGC's fixed-income program also exhibited a strong return of 22.6% for the year, while the Lehman Brothers Long Treasury Index gained 23% and the Lehman Brothers Aggregate Bond Index gained 14.1%. For the year, PBGC reported income of about $1.3 billion from fixed-income investments and $780 million from equity investments. Other investments, including real estate, experienced a loss of $10 million, for total investment income of slightly more than $2 billion.

Investment Performance
(Annual Rates of Return)

	September 30, 1995	1994	Five Years Ended September 30, 1995
Total Invested Funds	24.1%	-6.4%	15.5%
Equities	30.9	4.5	18.0
Fixed-Income	22.6	-11.2	14.9
Trust Funds	26.8	1.6	16.6
Revolving Funds	22.5	-11.2	15.0
Indices			
Wilshire 5000	29.1	2.5	18.1
S&P 500 Stock Index	29.7	3.7	17.2
Lehman Brothers Long Treasury Index	23.0	-10.7	12.7

EXECUTIVE DIRECTOR'S REPORT (1996)

In 1996, the Pension Benefit Guaranty Corporation reached a milestone sought since its creation in 1974 – a financial surplus. The news that PBGC has eliminated its longstanding deficit stands out in a year of important accomplishments in many areas. We achieved financial strength, proactive enforcement, responsive customer service, and technological advance.

Strengthening Financial Programs and Systems

With a yearend surplus of $869 million for the insurance program for single-employer plans, and a continuing surplus for the multiemployer plan insurance program, we are reporting a positive bottom line for the first time in PBGC history. Strong premium revenues, sustained returns on our equity investments, and low losses from plan terminations were key contributors to the single-employer program's net income of nearly $1.2 billion. Through sound financial management and adherence to strict business standards and procedures, we have a solid foundation for the future.

PBGC's improved financial condition reflects the initial impact of the Retirement Protection Act, which was intended both to improve gradually the funding of underfunded single-employer pension plans and to strengthen PBGC. While pension underfunding persists and, because of the unusually low interest rates, increased during 1995 to $64 billion, the reforms are in place and working to address it.

The funding reforms were designed to reach their full effect over a period of years, with transition rules to ease the initial impact of the reforms on employers. The phase-out of the cap on premiums paid by underfunded plans, particularly at a time when underfunding increased, had an immediate effect, generating increased premium revenues to help keep PBGC sound. New requirements to inform workers about pension underfunding and other compliance reforms also have strengthened PBGC's hand in dealing with the continuing pension underfunding.

Intensive efforts over the past few years have equipped PBGC with highly effective and reliable financial programs and systems. As a result, we have again received an unqualified audit opinion on our financial statements. Major overhaul of PBGC's financial management has been accomplished and we continue to bring new systems online to ensure that our resources and procedures keep pace with the growing demands on the agency.

Maintaining a Proactive Enforcement Program

More and more, companies are finding that addressing pension issues early makes good

business sense. Companies now are approaching PBGC in advance of transactions to structure protections for their pension plans. PBGC is also finding that companies are providing additional funding for their pension plans rather than be subject to the new notice and reporting requirements established by the Retirement Protection Act for significantly underfunded plans.

Under the Early Warning Program, PBGC uses sophisticated information technology and financial analyses to identify and monitor the companies whose underfunded pension plans pose risks to workers and retirees and to the pension insurance program. This information enables PBGC to take early action to prevent losses that could occur if corporate transactions jeopardize pensions. During the past year, this program generated more than $1 billion in additional contributions and other protections for underfunded pensions of nearly 200,000 people. In addition, PBGC took preventive action that shored up the Amalgamated Insurance Fund, a multiemployer pension plan covering 70,000 workers and retirees in the men's suit industry. This was the first agreement of its kind, protecting the pensions of an entire industry.

The agency took further steps throughout the year to implement the reforms. PBGC used a negotiated rulemaking process with the business community and other affected groups for the first time to develop proposed changes in the way companies must report events that may threaten workers' pensions, including several reportable events added by the new law. When the final reportable event rules were issued in December 1996, Vice President Al Gore's National Performance Review awarded another Hammer Award to PBGC, its fourth overall, for the agency's use of negotiated rulemaking.

Providing Responsive Service and Improved Benefit Processing

PBGC staff, using the latest in automated and telecommunication technology, are working harder, faster, and better to provide the answers and pay the benefits on which our customers depend. We assumed the pension obligations of about 50,000 additional people and still achieved greater productivity and customer service through reengineering of insurance operations. We maintained last year's record pace in issuing individual benefit determinations. The Customer Service Center, which began operations as the year began, answered nearly 93,000 telephone inquiries during the year.

PBGC instituted a number of service improvements. Easy access to PBGC press releases, publications, and regulations is now possible through the Internet following our establishment of a World Wide Web Home Page. We began an annual newsletter for people who are owed a benefit by PBGC but have not yet started to collect it, much like our semiannual newsletter for retirees, to

keep them informed about actions of the insurance program that affect them. We also issued a new booklet called "Divorce Orders & PBGC," to help attorneys and others who prepare domestic relations orders in a divorce or legal separation to divide pension benefits payable by PBGC.

The Pension Search Program took on new responsibilities as PBGC continued to find thousands of previously unlocatable people owed benefits from terminated underfunded plans. The agency started a missing participant clearinghouse for companies terminating fully funded plans, which had been authorized by the Retirement Protection Act, and located addresses for several hundred of the nearly 1,000 missing persons identified by more than 120 companies. Then, shortly after the year ended, the U.S. Department of Labor and PBGC unveiled the Pension Search Directory to link the hardest-to-find people with their benefits. The directory, which listed 2,700 people owed about $10 million in benefits, is available on the Internet and from organizations and unions that are partners in the search.

PBGC also received a Hammer Award for its efforts to reinvent customer service to better inform, reassure, and respond to workers and retirees about their pensions. The award highlighted the agency's information outreach to increase pension awareness among people in underfunded plans; townhall-style informational meetings that reached nearly 8,000 people in plans newly taken over by PBGC; and the new Customer Service Center.

Closing Thoughts

During 1996, PBGC made substantial progress in preparing the pension insurance program to meet the needs of the coming century. For the first time in the agency's history, both PBGC insurance programs are fully funded, with assets that exceed benefits owed to more than 440,000 people.

This year's financial gains mark a significant step forward but by no means assure that PBGC is financially secure at last. Tens of billions of dollars of underfunding remain in plans covering millions of people and PBGC remains vulnerable to substantial losses from plan terminations, losses that could mean the return of the agency's deficit.

As millions of Americans approach their retirement years, our nation's working men and women need to be assured that the pensions they labored long and hard to attain will be there for them. This Administration's commitment to retirement security, and PBGC's progress in building a financially strong insurance program, provide hope for the future.

Martin Slate, *Executive Director*

INSURANCE OPERATIONS

The single-employer plan insurance program posted its first yearend financial surplus as losses from terminations of underfunded plans remained low despite an increase in completed plan terminations. PBGC's third five-year study of its separate insurance program for multiemployer plans found the program financially strong and recommended an increase in the program's benefit guarantee to offset the effect of wage inflation since 1980 on the value of the guarantee.

Single-Employer Program

Through its single-employer program, PBGC oversees the terminations of fully funded plans and guarantees payment of basic pension benefits when underfunded plans must be terminated.

Standard Terminations: An employer may end a fully funded plan in a standard termination by purchasing annuities or paying lump sums to participants. Standard terminations are subject to legal requirements governing notifications to participants and to PBGC and payment of benefits. PBGC may disallow standard terminations that do not comply with the requirements.

The number of standard terminations filed with PBGC declined again in 1996, to slightly more than 3,800. The agency permitted completion of nearly 3,100 standard terminations.

PBGC audits a statistically significant number of completed terminations to confirm compliance with the law and proper payment of benefits. These audits generally have found few and relatively small errors in benefit payments, which plan administrators are required to correct. The errors primarily are due to the use of incorrect interest-rate assumptions in valuing lump-sum distributions to plan participants.

Distress and Involuntary Terminations: Defined benefit plans that are not able to pay all promised benefits may be terminated either by the company responsible for the plan or by PBGC. An employer wishing to terminate an underfunded plan generally may do so only if the employer is being liquidated or if the termination is necessary for the company's survival. The employer must first prove to PBGC, or to a bankruptcy court if appropriate, that it and each of its affiliated companies meets one of the financial distress criteria set by law.

An underfunded plan also may be terminated involuntarily by PBGC when necessary to protect the interests of the participants or of the insurance program. PBGC must terminate any plan that does not have assets available to pay current benefits.

The reorganization of insurance operations, in conjunction with a change in PBGC's

approach to termination of troubled underfunded plans, has enabled PBGC to shorten the time needed to complete the termination of underfunded plans. Under the new organizational structure, PBGC has dedicated more resources specifically to examining troubled plans and determining whether termination is justified. As a result, PBGC is moving more quickly to terminate underfunded plans requiring such action and the agency completed the termination of 255 underfunded plans during 1996, more than twice as many as were terminated the previous year. The vast majority were involuntary terminations by PBGC, generally because the sponsoring employer had gone out of business. Many of these plans had been under consideration for termination for a period of time and their actual termination dates occurred in earlier years, when the circumstances leading to their termination first arose.

Terminations during the year included large plans from such diverse companies as Foster Grant, Inc., a Massachusetts manufacturer of sunglasses; Gulf USA, Inc., a company in Idaho with interests in mining and natural resources; McLouth Steel Products Corporation, a Michigan steelmaker; and United Merchants and Manufacturers, Inc., of New Jersey, a manufacturer and distributor of brand-name clothing.

Trusteed Plans: During 1996, PBGC became trustee of 233 single-employer plans, many of which had termination dates in earlier years. The agency assumed responsibility for an additional 50,000 people in these plans. At yearend, PBGC was in the process of becoming trustee of an additional 122 single-employer plans. In all, including 10 multiemployer plans previously trusteed, a total of 2,348 terminated plans were trusteed or were being trusteed as of the end of the year. This total also reflects the elimination of one single-employer plan included in last year's total, which no longer required PBGC to become trustee.

Multiemployer Program

The multiemployer program, which covers approximately 8.6 million workers and retirees in about 2,000 insured plans, is funded and administered separately from the single-employer program and differs from the single-employer program in several significant ways. The multiemployer program covers only collectively bargained plans involving more than one unrelated employer. For such plans, the event triggering PBGC's guarantee is the inability of a covered plan to pay benefits when due at the guaranteed level, rather than plan termination as required under the single-employer program. PBGC provides financial assistance through loans to insolvent plans to enable them to pay guaranteed benefits.

The significant reforms enacted in 1980 created several safeguards for the program,

including a requirement that employers that withdraw from a plan pay a proportional share of the plan's unfunded vested benefits. These safeguards have permitted PBGC to maintain multiemployer premiums at a constant, reasonably low level.

The program continued to be financially healthy, with assets of $505 million, liabilities totaling $381 million for future benefits and nonrecoverable future financial assistance, and a net surplus of $124 million. The surplus reflected a net loss of $68 million for 1996 that stemmed from an increase in the allowance for nonrecoverable future financial assistance. This increase resulted from PBGC's estimate of the future costs of its agreement to assume a portion of the liabilities of the Amalgamated Insurance Fund if the plan is unable to meet statutory funding requirements in the future. Despite this year's loss, the program is strong and expected to remain so.

Plan Underfunding: Based on data as of the beginning of 1994 – the most recent information available – multiemployer plans had total assets of $202.8 billion and liabilities of $223.8 billion. Underfunding among these plans totaled about $30 billion; the underfunded plans had an average funding ratio of 81 percent, virtually the same as in the previous year. Overfunding among multiemployer plans totaled about $9 billion. The amount of underfunding reflected the low interest rates that prevailed in 1993, which substantially increased the value of plans' benefit liabilities, and does not capture subsequent changes in many plans' funding levels since 1993.

Financial Assistance: The multiemployer program has received relatively few requests for financial assistance. Since enactment of the reforms in 1980, PBGC has provided assistance to only 16 of the 2,000 insured plans, with a total value of approximately $33 million net of repaid amounts. In 1996, only 12 of these plans were still receiving assistance of about $5 million annually.

Program Administration: The 1980 reforms require PBGC to conduct a study of the multiemployer insurance program every five years to assess whether changes in the program's guarantee or premium level are necessary. PBGC's third study, sent to the Congress in June 1996, showed that the program is financially sound and is projected to maintain a surplus, with no change in premium level, under a wide range of economic scenarios. This confirmed similar findings in the two earlier studies.

The study also found that the real value of the program's modest benefit guarantee, which has remained unchanged since it was set in 1980, has been severely eroded by wage inflation and recommended that the Congress increase the guarantee for plans that become insolvent in the

future. Under the program's current guarantee, the benefits of less than 1 percent of all workers and retirees would be fully insured by PBGC if their plan runs out of money. With the recommended change, nearly 75 percent of covered participants would receive their full benefits through PBGC's insurance. The guarantee increase would require no change in the multiemployer premium rate. The higher guarantee level was included in pension reform legislation submitted during the year by the President, but no legislative action was taken on the recommendation in 1996.

DEFINED BENEFIT PENSIONS

The growing financial strength of the pension insurance program, reforms to improve pension funding, and the aging of "baby boomers" draw attention to the value of defined benefit pension plans. Defined benefit plans offer the advantage of a predictable retirement income backed by federal insurance. They also can contribute to employee motivation, productivity, and retention, a plus for plan sponsors.

The number of insured pension plans has decreased from more than 112,000 in 1985 to 47,500 in 1996. This decline primarily reflects small plan terminations and plan mergers. The number of large plans (5,000 or more participants) has increased from 928 in 1985 to 1,124 in 1996. The total number of participants covered by the insurance program has increased from about 39 million to 42 million over the same period.

The growth of defined benefit plan participation has been affected by the reduction in employment in areas that have traditionally favored these plans (large firms, manufacturing sector, union workers). As the work force continues to age, the popularity of these plans may increase. PBGC plays an important role in encouraging defined benefit plans by providing security for participants' benefits.

Single-Employer Program Exposure

As of the end of 1995, the vast majority of single-employer plans -- about two-thirds -- remained fully funded, with assets of all plans totaling about $1.13 trillion compared to vested liabilities totaling about $1.09 trillion. Pension underfunding of about $64 billion persisted although many of the underfunded plans, which had total assets of $415 billion and total liabilities of $479 billion for vested benefits, were sponsored by financially healthy firms.

While a core of pension underfunding persists, a major difference is that reforms of the Retirement Protection Act are in place to address the underfunding over time. Also, in removing

the cap on premiums paid to PBGC by underfunded plans, the reforms provided an immediate response to the increased underfunding so that PBGC would remain strong.

PBGC determines pension underfunding based on interest and mortality assumptions that would have been used to purchase an annuity at the end of the year. Because of the filing and collection dates, the latest available information on pension underfunding is for the prior year. Underfunding rose from $31 billion largely because the interest rate PBGC used to determine the underfunding fell from 7.15% at the end of 1994 to 5.3% at December 31, 1995. This was the lowest yearend rate and the largest one-year decline in interest rates in PBGC's history. This interest rate reflects both the Treasury rate and other factors that make up the cost of an annuity on the market.

Pension underfunding in 1995 remained spread across all industries. The steel industry accounted for 16 percent of the underfunding, and another 16 percent was found in the automobile and transportation equipment industries. Underfunded plans covered about 15 million workers and retirees, some 7 million of whom were in plans that were funded 90 percent or more. Many of these plans had been fully funded and were drawn into the underfunding category by the abnormally low interest rate.

To measure how much of the current total underfunding may result in future claims, PBGC categorizes underfunding into three loss contingency classifications that follow generally accepted accounting principles and are based on the financial condition of plan sponsors. The classifications are probable, reasonably possible, and remote.

Probable claims are those that are likely to occur in a future year based on conditions that existed at PBGC's fiscal yearend. PBGC estimates and records them as liabilities as they are determined, as required by financial accounting standards. Since the estimated losses on these claims already have been recorded, the claims are not included as part of the current underfunding.

PBGC's reasonably possible claims arise from underfunded plans maintained by companies that may present risks to the insurance program and to workers and retirees, including companies with below-investment-grade bond ratings as of September 30, 1996. Total underfunding in these plans ranged from $22 billion to $26 billion.

The remaining underfunding was in plans categorized as remote claims. Pension underfunding in these plans is not presently a risk to participants or PBGC.

Financial Forecasts

ERISA requires that PBGC annually provide an actuarial evaluation of its expected operations and financial status over the next five years. PBGC historically has extended these forecasts to cover 10 years.

PBGC's forecasts are subject to significant uncertainty since the amount of PBGC's future claims depends on many factors, including current underfunding among insured plans, any further erosion in funding, bankruptcies among plan sponsors, and recoveries from these bankrupt sponsors. These factors are influenced by future economic conditions, investment results, and the legal environment that the Congress and the courts create for PBGC's insurance program. Over the longer term, PBGC also will be affected by labor force trends, global trade, and employers' preferences for the variety of pension plans available.

PBGC's current methodology for the 10-year forecasts relies on an extrapolation of the agency's claims experience and the economic conditions of the past two decades. The forecasts do not reflect a full range of economic conditions and do not measure the high degree of uncertainty surrounding PBGC's future claims. To address the limitations of the forecast methodology, PBGC is developing a simulation model, called the Pension Insurance Modeling System (PIMS), to examine its financial condition under a full range of economic scenarios. Until PIMS is complete, PBGC is continuing to rely on its current methodology.

Ten-Year Forecasts: PBGC's annual losses from underfunded single-employer plans have been variable and unpredictable throughout its history, with the largest losses tending to accompany large plan terminations. As a result, net losses have been higher in the most recent 10-year period, during which a number of major plan terminations occurred, than in the prior 12-year period.

PBGC has prepared three 10-year forecasts (A, B, and C) of its single-employer program using its current methodology to give a long-term view of the expected status under different loss scenarios. PBGC expects its history of significant annual variations in losses to continue. These forecasts include the significant improvement in PBGC's financial condition expected to result from the acceleration of plan funding and increase in PBGC's variable-rate premium receipts provided under the Retirement Protection Act. The improvements to plan funding over the long term, while reducing PBGC's revenues, also will reduce PBGC's exposure to loss.

Forecast A is based on the average annual net claims over PBGC's entire history ($481 million per year) and assumes the lowest level of future losses. Forecast A projects steady

improvement in PBGC's financial condition, although the rate of improvement declines over time, and a surplus of $3.7 billion at the end of 2006.

Forecast B, which assumes the mid-level of future losses, is based upon the average annual net claims over the most recent 10 fiscal years ($571 million per year). It reflects the impact on PBGC's claims experience from the provisions of the Single-Employer Pension Plan Amendments Act of 1987, which significantly modified the requirements for termination of an underfunded plan. Forecast B projects net income levels that, while lower than Forecast A, still lead to a surplus of $2.5 billion at the end of 2006.

Forecast C is highly pessimistic and reflects the potential for heavy losses from the largest underfunded plans by assuming that the plans that represent reasonably possible losses will terminate uniformly over the next 10 years in addition to a modest number of lesser terminations each year. (Reasonably possible losses are discussed in Note 9 to the financial statements.) This forecast assumes $2.1 billion of net claims each year, resulting in the return and steady growth of PBGC's deficit throughout the 10-year period to $21.8 billion.

The 1996 forecasts share several assumptions. Average annual net claims and projected claims are in 1996 dollars. The present value of future benefits is valued at 6.55% and using other actuarial assumptions consistent with assumptions used to value the present value of future benefits in the financial statements as of September 30, 1996. PBGC's assets are projected to earn 6.55% annually. Benefits for plans terminating in the future are assumed to grow at 5.25% annually until termination. Plan funding ratios are assumed to increase at 1.5% per year from historical averages and recoveries from plan sponsors are assumed to be constant at 10% of plan underfunding. In a change of methodology, Forecast B was based on the average annual net claims over the most recent 10 fiscal years rather than upon average annual claims since 1982. The number of participants in insured single-employer plans is assumed to remain constant. The flat-rate portion of the single-employer premium is assumed to remain constant at $19 per participant. Receipts from the variable-rate portion of the premium are projected on the basis of a constant 30-year U. S. Treasury bond rate of 7.03%. Assumed administrative expenses through 2002 are consistent with PBGC's 1998 President's Budget submission and are projected to grow 5.25% each year thereafter.

RESPONSIVE SERVICES

Reassurance. Clear and complete answers to questions, without delay. Quick calculation of, and notification about, guaranteed benefits. Timely payments without interruption. These are the basic needs of the people to whom PBGC owes benefits, needs that PBGC is working to satisfy. PBGC significantly improved productivity and service with reengineered plan termination and benefit processing operations.

Benefit Processing

PBGC's responsibility for benefit payments begins immediately upon becoming trustee of a terminated plan. Top priority is given to maintaining uninterrupted benefit payments to existing retirees and commencing payments to new retirees without delay. Concurrently, PBGC staff also begin intensive efforts to notify plan participants of PBGC's trusteeship and to obtain essential data and records on each individual participant, a difficult task frequently complicated by inadequate plan and employer records.

PBGC pays estimated benefits to retirees until it has confirmed necessary data and valued plan assets and recoveries from the plan's sponsor. PBGC then calculates the actual benefit payable to each participant according to the specific terms of that person's plan, statutory guarantee levels, and the funds available from plan assets and employer recoveries. Benefit calculation can be an intricate process since each trusteed plan is different and must be separately administered.

By the end of the year, PBGC was responsible for the current and future pension benefits of about 441,000 participants from single-employer and multiemployer plans. These include nearly 200,000 retirees who received benefit payments totaling $792 million.

Yet, even with a 13 percent increase in the number of people to whom it owes benefits, PBGC continued to provide individual benefit determinations on the accelerated pace set in 1995. In 1996, PBGC issued nearly 66,000 benefit determinations, slightly exceeding the number issued one year earlier.

Appeals of Benefit Determinations: PBGC's Appeals Board reviews appeals of certain PBGC determinations. Almost all of the appeals are from people disputing benefit determinations. Due to PBGC's increased production of benefit determinations, the agency received more than 1,400 appeals in 1996, a record total. Typically, about 2 percent of all benefit determinations are appealed. Most appeals are resolved by appeals department and other PBGC staff without full Appeals Board review, as was the situation for 700 cases in 1996. The Board met to decide 212

appeals, 84 of which required changes in benefits primarily as a result of new facts, correction of calculation errors, or a different interpretation of plan provisions.

Customer Service

New systems and procedures put in place in the past year are enabling the agency to provide more and better information more quickly to more people.

The Customer Service Center, implemented at the beginning of the year, is both a symbol of this progress and a key factor in PBGC's improved service. In the center's first year of operation, each customer service representative handled about 10,000 calls. With information readily available from PBGC's various automated databases, response times averaged less than 90 seconds per call. During the year, PBGC enhanced the Customer Service Center's telephone system to allow staff to transfer a call immediately to one of PBGC's regional benefit offices, thereby assuring that the caller receives direct assistance from the office responsible for that person's benefit without additional telephone calls.

Service Improvements: The Customer Service Center, with its toll-free telephone number, was the first step in making PBGC more accessible to the people it serves. The agency implemented additional measures during the year to make information more widely available. PBGC opened a Home Page on the Internet's World Wide Web, making up-to-date agency information and materials available electronically to anyone with a personal computer that can use Internet browser software. The Home Page, which can be found at **http://www.pbgc.gov**, provides users with access to important agency information and materials. These include publications, press releases, regulations, and other materials such as frequently asked questions about the pension insurance program, technical information on interest rates, and interpretations of recent legal changes. PBGC also began sending an annual newsletter to people who have not yet begun receiving their benefit payments to let them know their promised pensions remain safe with PBGC and to give them information that will assist them in reaching the agency when they change their address or are ready to retire.

PBGC published a new informational booklet, entitled "Divorce Orders & PBGC," to help those who prepare domestic relations orders dividing PBGC-paid pension benefits in a divorce or legal separation. The new booklet reviews ERISA's requirements for qualified domestic relations court orders, discusses treatment of the alternate payees who may receive some of the benefit under such an order, and provides two types of model orders that may be used to draft domestic relations

orders for submission to PBGC.

PBGC's rapid progress in improving service has been made possible by developments in the agency's technological base. The new automated optical imaging, participant record, and case administration systems provide PBGC staff with modern computerized systems that allow rapid access to needed documents and information on each person and pension plan under PBGC administration.

The agency's field operations have benefitted from this technological progress. Over the years, PBGC has made arrangements to open a number of small offices across the country to provide service to local concentrations of participants from larger terminated plans. Installation of a nationwide data communications network provided each office with direct links to PBGC's primary automated systems and data, ensuring efficiency and speed of service throughout the agency's operations. Each office also has its own optical imaging equipment. PBGC has been working to consolidate the field offices into strategically located regional centers to reduce operating costs without reducing service to participants. The second regional center, which began operation shortly after the year ended, is also being set up for disaster recovery with duplicate computerized plan and participant files in case the originals in Washington become lost or destroyed.

Pension Search Program: PBGC's ongoing efforts to find people missing from plans taken over by the agency continued to show success as the agency also began assuming payment obligations from employers for workers who are missing from terminating fully funded plans. In the past year, the agency located the addresses for another 16,000 previously unlocatable workers and retirees in terminated underfunded plans that PBGC now administers, bringing the total number found to more than 55,000 since PBGC initiated the original program four years ago.

PBGC initiated new programs in 1996 to broaden the search for missing workers. The first involved the new clearinghouse authorized by the Retirement Protection Act and established in January 1996 to assist employers who are terminating fully funded plans. These terminations cannot be completed until all benefits are distributed, and employers have long experienced difficulty in making arrangements with insurance companies and banks to ensure that missing participants receive the benefits owed them. The people who have been missed often have had no idea where to look for their benefits. Now, companies and their workers can turn to PBGC's Pension Search Program. In the first year of the clearinghouse's operation, 124 companies asked PBGC to find nearly 1,000 missing people, 750 of whom are due nearly $1.4 million in benefits.

The other 200 people are covered by annuity contracts that will pay their benefits when they are found. By yearend, PBGC had found addresses for nearly 400 of the missing people, and 21 had returned benefit applications to the agency.

In a complementary effort, announced in December 1996, the Department of Labor and PBGC issued a "Pension Search Directory" that lists missing people who not even PBGC has been able to find and identifies the companies that had sponsored their pension plans and the dates the plans terminated. The directory may be viewed on the Internet at **http://www.dol.gov** or at **http://search.pbgc.gov** and is being publicized nationwide with the assistance of more than 20 organizations and unions. The initial directory provided information on 2,700 people who had worked for 565 companies and earned more than $10 million in benefits. In the first week after the announcement of the directory, the Internet listing received more than 60,000 "hits" and PBGC logged nearly 8,000 telephone inquiries through which it matched more than 180 callers to names in the directory. The directory will be updated with new names quarterly on the Internet.

PROACTIVE ENFORCEMENT

The Early Warning Program remained the centerpiece of PBGC's nationwide efforts to ensure that companies fund their pensions and honor their pension promises to their employees. When necessary, PBGC has continued to go to court to protect the retirement security of America's working men and women.

Early Warning Program

The Early Warning Program, which proactively prevents pension losses, continued to produce valuable settlements as the agency broadened the program's reach. Over the past year, PBGC financial analysts and actuaries closely monitored more than 500 companies with pension plans underfunded by at least $25 million. When they identified transactions or events that could jeopardize the pensions, they worked with the company involved to structure an agreement that would protect the interests of the company, its workers, and the pension insurance program. Through these efforts PBGC negotiators obtained settlements valued at more than $1 billion with 11 companies, providing contributions and other protections for the pensions of nearly 200,000 workers and retirees.

New reporting requirements imposed by the Retirement Protection Act already have strengthened the program. Several of the settlements achieved in 1996 resulted from information

obtained through advance reports of certain transactions that now must be submitted by privately held or foreign companies with more than $50 million in underfunding. In other cases, companies contributed tens of millions of dollars to their plans to raise their funding above the underfunding threshold and avoid the reporting requirements.

During 1996, PBGC broadened the program's scope to include additional single-employer plans as it began monitoring about 200 companies with pension plans that are underfunded between $5 million and $25 million and widened its focus to include plan mergers and spinoffs as well as corporate transactions.

Michelin North America, Inc.: Michelin's subsidiary, Uniroyal Goodrich Tire Company, had eight pension plans that covered some 28,000 workers and retirees and were underfunded by more than $450 million. Under an agreement reached in November 1995, Michelin added $380 million in cash to the Uniroyal Goodrich pension plans and will make additional contributions according to a six-year funding schedule. The company also planned to merge the eight Uniroyal Goodrich plans with another overfunded pension plan, producing a single plan covering more than 42,000 people that would be fully funded for vested benefits. In return for the additional contributions, PBGC agreed to release Michelin from certain of the advance reporting requirements.

Gulfstream Aerospace Corporation: Gulfstream planned a public offering of common stock and substantial new debt to raise capital with which to redeem the company's existing preferred stock and bank debt. The company's three pension plans, which covered more than 5,600 workers and retirees, were underfunded by about $50 million. PBGC received advance notice of the transaction and stepped in to ensure that the leveraged company provided funding for its pension obligations. Under a preliminary agreement concluded in early October 1996, Gulfstream will accelerate funding of its plans by adding $120 million over five years, making the plans fully funded for vested benefits.

Century Aluminum Company (Ravenswood Aluminum Corporation): For four years, Ravenswood had headed PBGC's annual listing of the 50 companies with the largest underfunded plans, with the poorest funding level of any of the companies listed. Ravenswood's two pension plans, covering about 2,700 people, had combined underfunding of about $100 million and enough assets to pay only about 29 percent of the total benefits owed. Under the April 1996 agreement, the company will add nearly $100 million to its pension plans over four years, $40 million of which is above the normal funding requirement. PBGC will hold a first security interest in all of

Ravenswood's real property, plant facilities, and equipment until the pension underfunding is less than $10 million or its parent corporation, Century Aluminum, meets certain financial tests. In return for the negotiated pension protections, Century Aluminum's corporate parent, Glencore, was able to sell more than 20 percent of its interest in Century Aluminum to the public, thereby releasing the parent from future responsibility for Ravenswood's pensions.

Hayes Wheels International, Inc./Motor Wheel Corporation: Hayes Wheels and Motor Wheel planned a merger for the summer of 1996 that PBGC believed would unreasonably increase its risk of loss from the companies' severely underfunded pension plans. In June 1996, the companies agreed to add a total of $54 million in cash to their plans over three years, and $6 million more to the Motor Wheel pensions each subsequent year, to protect the pensions of their 5,200 workers and retirees. Hayes Wheels has provided letters of credit to guarantee these contributions. After three years, the Hayes Wheels pensions will be almost fully funded and the Motor Wheel pensions will be almost 70 percent funded.

Keystone Consolidated Industries, Inc.: Keystone required PBGC's permission to borrow funds for an acquisition of DeSoto, Inc., because of debt limitations imposed on Keystone when it received a minimum funding waiver from the Internal Revenue Service in 1985. In August 1996, PBGC agreed to allow Keystone to increase its indebtedness for the merger with DeSoto in return for the companies' agreement to consolidate four Keystone pension plans underfunded by more than $80 million with an overfunded DeSoto pension plan. The companies also agreed to make additional contributions to the consolidated plan covering 9,700 people should that plan's underfunding increase. The consolidation will reduce Keystone's underfunding to less than $30 million while the combined pensions will be 90 percent funded, resulting in a better pension arrangement overall.

Amalgamated Insurance Fund: The Amalgamated Insurance Fund, a multiemployer plan covering about 70,000 workers and retirees, had been under strain for several years as business failures in the men's suit industry reduced the number of employers contributing to the plan from 575 in 1986 to just 200 in 1996. The plan was underfunded by about $250 million. With the contraction of the industry, the funding obligations were increasingly burdensome and the remaining employers were considering a mass withdrawal from the plan. In such an event, PBGC would be required to assume financial responsibility for the plan. Under an agreement reached at yearend, the plan will continue with employers making annual contributions at their current rate. If those contributions fail to support the plan, PBGC will separate out and assume responsibility

for the liabilities of the bankrupt employers, while solvent employers will continue to fund the remaining portion of the plan at the current rate. Employers who continue with the plan will have limitations on their liability if problems occur in the future. As a result of the agreement, workers will continue to earn benefits, retirees will collect full retirement benefits, and funding of the plan will improve, reducing the potential loss for the insurance program each year that the plan continues.

Litigation

Many pension issues can be settled through negotiations but others require resolution by the courts. At the end of the year, PBGC had 81 active cases in state and federal courts and 788 bankruptcy cases.

Piggly Wiggly Southern, Inc.: Through a routine audit following the 1988 termination of a fully funded Piggly Wiggly pension plan, PBGC determined that the company significantly undervalued participants' lump sum benefits by using inappropriate interest rate assumptions. As a result of the incorrect valuation, many of the 2,500 plan participants failed to receive their full benefits and the company was able to recover a $2.7 million reversion of "excess assets" from the plan. When Piggly Wiggly refused to pay the additional pension benefits owed, PBGC filed suit in district court to enforce its audit findings. The district court ruled in favor of PBGC, Piggly Wiggly appealed, and, in March 1996, an appellate court affirmed the lower court's ruling. The litigation was concluded in July when the appellate court denied the company's petition for rehearing by the full court. PBGC estimates that the amount owed is $1.5 million.

Smith Corona Corporation: Smith Corona, in bankruptcy reorganization since July 1995, asked the bankruptcy court in August 1996 to allow termination of its salaried and hourly pension plans, each of which was underfunded by about $15 million. PBGC opposed the company's request before both the district and bankruptcy courts. PBGC's opposition in court, which included evidence demonstrating that the salaried plan could be maintained by the company, led to a negotiated agreement in December that will end the litigation. Under the agreement, which is subject to court approval, the reorganized Smith Corona will continue the salaried plan and PBGC will terminate and take over the plan for hourly workers. Nearly all of the company's 4,700 workers and retirees will receive their full benefits, either under the pension plan continued by the company or from PBGC's guarantee.

Collins v. PBGC; Page v. PBGC: These consolidated class-action suits were filed on

behalf of participants in plans that terminated before December 31, 1981, without having been amended to adopt ERISA's minimum vesting standards. The plaintiffs sought a court ruling requiring PBGC to guarantee their benefits as if their plans had been amended. PBGC had determined at the time their plans terminated that only those benefits vested under the express terms of their plans were guaranteeable. PBGC's settlement with the plaintiffs was announced in December 1995 and received final court approval the following summer. Under the settlement, people who had 10 or more years of service, or their survivors, generally will receive about 80 percent of the benefits they did not receive at the time their plans terminated. Other people with between five and nine years of service will receive lesser amounts from a separate fund. About 40,000 people may be affected. The overall cost of the settlement, including administrative costs, is projected at around $100 million.

Copperweld Steel Company: PBGC continued to pursue bankruptcy claims to recover amounts due PBGC and Copperweld's three terminated pension plans, which covered about 3,000 workers and retirees. In October 1995, Copperweld sold its assets as part of a confirmed plan of reorganization that required the company to establish a full cash reserve against PBCC's $8.8 million unpaid minimum funding contribution claims and a partial reserve against PBGC's $52 million unfunded benefit liabilities claims. The company's liquidation trustee contests the extent to which PBGC's minimum funding contribution claims made on behalf of pension plans are entitled to priority under the Bankruptcy Code and whether the factors prescribed in PBGC's regulations appropriately measure PBGC's unfunded benefit liabilities claims for terminated pension plans that are trusteed by PBGC. These issues are central to PBGC's ability to recover its losses from bankrupt employers. PBGC and the liquidation trustee have filed and argued summary judgment motions in the bankruptcy court and are awaiting the court's decision. Trial on any outstanding issues is expected to take place during 1997.

CF&I Steel Corporation: PBGC continued to pursue its claims against the reorganized CF&I for a CF&I plan that was underfunded by about $221 million when terminated in March 1992. In a November 1994 ruling, a district court denied priority to most of PBGC's claims for minimum funding contributions owed to CF&I's plan and for the plan's underfunding. The court also remanded the case to the bankruptcy court for reconsideration of the amount of PBGC's underfunding claim, ruling that the bankruptcy court erred in "deferring" to PBGC's interest rate assumption. The bankruptcy court subsequently revalued PBGC's claim for unfunded benefit liabilities from about $221 million to about $123 million based on a "discount rate" that differed

from the assumptions prescribed by PBGC's regulation. PBGC has appealed this ruling to the district court.

White Consolidated Industries, Inc.: White continued to contest PBGC's claims for the estimated $120 million underfunding in pension plans that White transferred to Blaw Knox Corporation in 1985. PBGC is alleging that a principal purpose of White in entering into the transaction was to evade pension liabilities. PBGC has taken over all the Blaw Knox plans either because they ran out of money or because they would have been abandoned after Blaw Knox ceased business and sold its assets in 1994. The case remained pending before a district court at yearend, with trial scheduled for March 1997.

Rulemaking

As part of the President's Regulatory Reinvention Initiative, PBGC clarified and simplified its regulations to make them easier to use, in the process reducing the volume of regulations by 20 percent. The agency eliminated a number of obsolete regulations and renumbered the remaining regulations to track the statutory sections they implement.

The Retirement Protection Act identified four new corporate events that must be reported to PBGC by all companies, and PBGC added two more under authority given it by the new law. The agency's first use of negotiated rulemaking quickly developed the necessary changes to reporting rules on events that may jeopardize workers' pensions and the pension insurance program. A 14-member committee representing employers, workers, retirees, pension practitioners, and PBGC negotiated proposed amendments to address the new requirements and to provide some reporting relief. PBGC also developed optional reporting forms that simplify companies' initial information filings. With negotiated rulemaking, PBGC was able to publish the proposed amendments in July 1996 and issue final rules in December.

Another Retirement Protection Act reform established a new requirement for annual submission of financial and actuarial reports by corporate groups with severely underfunded pension plans. PBGC published final rules implementing this requirement in December 1995. During that same month, the agency issued other final regulations implementing the new missing participants program.

The agency also published final rules in 1995 to implement the new requirement that participants in underfunded plans be notified annually about the funding status of their plan and the limits on PBGC guarantees. The notice requirement applied only to large plans for 1995 and

was extended in 1996 to companies with small plans covering 100 or fewer people. PBGC began monitoring companies' compliance with the requirement through a random survey of about 600 companies with large underfunded plans, which confirmed that the notices were being sent, and also required companies to certify compliance as part of their annual premium filing to PBGC.

TECHNOLOGY AND MANAGEMENT

PBGC worked to strengthen programs and operations in all areas of the agency through improved automation and training while it adopted refinements to further improve financial management.

Technology Advances

New automated systems for participant information management, premium accounting, and legal management began operations during the year, significantly upgrading PBGC's ability to rapidly process and retrieve critical information. The participant information management system incorporates innovative software for automated creation of correspondence and forms that PBGC will be seeking to patent. An optical imaging system converts documents to computerized images and marks a profound advance in the agency's record management. PBGC has scanned more than 10 million pages of documents and has begun scanning new documents as they are received.

PBGC also moved to improve service at its field benefit offices by installing a special data communications network that links each of the offices with the agency's headquarters location in Washington, DC. The Wide Area Network provides each office with direct high-speed access to the same systems and data available to PBGC headquarters staff. It also allows video teleconferencing and virtually instantaneous exchange of data and images between the field offices and PBGC headquarters.

The quality of the premium accounting system has been recognized through a Technology Excellence Award presented by the Interagency Committee on Information Resources Management to PBGC Chief Financial Officer N. Anthony Calhoun. For the second year in a row, PBGC and the agency's telecommunications manager received awards from the General Services Administration in recognition of improved telecommunications systems.

PBGC took additional steps to develop the systems and applications architecture that will ensure consistency among current and future systems. By the end of the year the agency had completed disaster recovery tests on significant elements of its information systems, furthering its

effort to implement a comprehensive continuity-of-operations plan.

Employee Development

PBGC continued to strengthen its employee training programs. Because many PBGC positions require specific skills for which training by others is not available, the agency has tapped in-house expertise to create customized courses in four training areas: common needs, supervisory and management skills, new employee orientation, and specialized or technical training. The curriculum now has some 130 courses taught in an eight-classroom Training Institute that offers videoconferencing and other electronic capabilities for groups ranging from small seminars to large audiences.

Financial Management

Sound, consistent financial management is now a hallmark of PBGC. For the fourth year in a row, PBGC's financial statements have received an unqualified opinion from the agency's auditors. The 1996 audit was again performed by Price Waterhouse LLP under the direction and oversight of PBGC's Inspector General.

Record premium income of nearly $1.2 billion, augmented by investment income totaling more than $900 million, enabled PBGC to erase the longstanding deficit in the single-employer program. The automated capabilities of PBGC's new premium accounting system, in combination with the agency's premium compliance program, have significantly enhanced PBGC's ability to promptly collect premiums due the agency. PBGC's escalating program of field examinations of pension plans is proving highly effective in ensuring that premium payments are accurately calculated and paid, having collected about $3 million in additional premium amounts owed at a cost of only $400,000.

Shortly after the year ended, PBGC also announced a new two-tier premium penalty structure designed to encourage voluntary correction of any errors in premium payments. Under the new penalty policy, employers who pay any unpaid amount before receiving a PBGC notification regarding an actual or possible delinquency will be charged a penalty rate of 1 percent of the unpaid amount per month. Those who pay after PBGC issues a premium notice will still be charged the current penalty rate of 5 percent per month.

Investment Program

The Corporation has approximately $12.2 billion of total assets available for investment, consisting of premium revenues accounted for in the Revolving Funds and assets from terminated

plans and their sponsors accounted for in the Trust Funds. The Revolving Funds are required to be invested in fixed-income securities; current policy is to invest these funds only in Treasury securities. PBGC has more discretion in its investment of the Trust Funds, which are primarily invested in high-quality equities, with asset allocation designed for sound long-term performance.

The Revolving Fund monies are invested solely in U.S. Treasury securities, which PBGC uses to earn a competitive return and partially offset changes in its benefit liabilities. The agency's investment in equities provides overall portfolio diversification and a higher long-term expected return, within prudent levels of risk. PBGC uses institutional investment management firms to invest its assets subject to PBGC oversight. PBGC's investment portfolio is structured to improve PBGC's financial condition in a stable manner over the long term. PBGC continually reviews its investment strategy to ensure that the agency maintains an investment structure that is consistent with its long-term objectives and responsibilities.

Investment Profile: As of September 30, 1996, the value of PBGC's total investments, including cash, was approximately $12.2 billion. The Revolving Fund's value was $7.2 billion and the Trust Fund's value was $5.0 billion.

PBGC's fund allocation further shifted toward equities during 1996 due primarily to strong equity returns. Cash and fixed-income securities represented 63 percent of the total fund at the end of the year, as compared to 68 percent at the end of 1995, while the equity allocation stood at 36 percent of all investments compared to 32 percent one year earlier. A very small portion of the invested portfolio remains in real estate and other financial instruments.

Investment Profile

	September 30, 1996	1995
Fixed-Income Assets		
Average Quality	AAA	AAA
Average Maturity (years)	22.6	21.4
Duration (years)	10.1	10.3
Yield to Maturity (%)	7.2	6.6
Equity Assets		
Average Price/Earnings Ratio	19.7	18.0
Dividend Yield (%)	2.0	2.4
Beta	1.08	1.06

Investment Results: Fiscal year 1996 was a favorable year for capital market investments and PBGC's investment program. The broad stock market, as measured by the Wilshire 5000 Index that most closely reflects PBGC's equity portfolio, advanced 18.9%, while PBGC's equity

program advanced 19.7%. PBGC's fixed-income program returned 2.2% for the year, while the Lehman Brothers Long Treasury Index gained 2.3%. For the year, PBGC reported income of $202 million from fixed-income investments and $695 million from equity investments. Other investments, including real estate and insurance contracts, produced a small gain of $30 million, for total investment income of $927 million.

Investment Performance
(Annual Rates of Return)

	September 30, 1996	1995	Five Years Ended September 30, 1996
Total Invested Funds	8.5%	24.1%	12.3%
Equities	19.7	30.9	15.6
Fixed-Income	2.2	22.6	10.6
Trust Funds	18.6	26.8	14.5
Revolving Funds	2.3	22.5	11.2
Indices			
Wilshire 5000	18.9	29.1	15.3
S&P 500 Stock Index	20.3	29.7	15.2
Lehman Brothers Long Treasury Index	2.3	23.0	9.1

ITEM 27—POSTAL SERVICE

PROGRAMS AFFECTING OLDER AMERICANS

VOTE BY MAIL

Many states have arranged for voting through the mail. This allows voters who are unable to visit a polling place, such as the elderly and physically impaired, to enjoy the convenience and security of voting through the mail.

CARRIER ALERT PROGRAM

Carrier Alert is a voluntary community service provided by city and rural delivery letter carriers who watch participants' mailboxes for mail accumulations that might signal illness or injury. Accumulations of mail are reported by carriers to their supervisors, who then notify a sponsoring agency, through locally developed procedures, for follow-up action. The program completed its 15th year of operation in 1997 and continues to provide a lifeline to thousands of elderly citizens who live alone.

DELIVERY SERVICE POLICY

The Postal Service has a long-standing policy of granting case-by-case exceptions to delivery regulations based on hardship or special needs. This policy accommodates the special needs of the elderly, handicapped, or infirm customers who are unable to obtain mail from a receptacle located some distance from their home. Information on hardship exceptions to delivery receptacles can be obtained from local postmasters.

SERVICES AVAILABLE FROM YOUR RURAL CARRIER

Rural carriers continue to provide their customers with the retail services they have come to expect from the rural "post office on wheels." Some of the retail services provided by rural carriers are registered and certified mail, accepting parcels for mailing, taking applications for money orders, and providing their customers with receipts for these services.

Retail services are available to all customers served by rural carriers but are most beneficial to those individuals who are elderly or have a physical handicap which limits their ability to go to the post office for these important services. Rural carriers provide their customers with almost all retail services available from the post office 302 days per year.

PARCEL DELIVERY POLICIES

For customers who are unavailable to receive parcels, but who normally are at home, we automatically redeliver the article on the following day. Additionally, if the mailer requests, uninsured parcels are left at customers' homes or businesses provided there is reasonable protection from the weather and theft. Both of these policies make it easier for customers to receive mail, and minimize the need for trips to the post office.

ACCESSIBILITY

The Postal Service is subject to the Architectural Barriers Act of 1968. The resulting standards for the design, construction, and alteration of leased and owned facilities, are published in the Postal Service Handbook RE–4, *Standards for Facility Accessibility by the Physically Handicapped.*

Significant progress continues to be made to increase the accessibility of the 36,000 Postal Service facilities. In Fiscal Year 1997, approximately $16 million were invested in accessibility projects, with most of it spent on retrofitting historic facilities. Also, 823 new facilities meeting the highest access standards were opened. Our commitment to barrier-free facilities is apparent as over $300 million has been spent in the last 10 years on accessibility projects. The Postal Service values its elderly customers and feel they will benefit from our efforts to make facilities more accessible.

CONSUMER EDUCATION AND FRAUD PREVENTION

The Postal Inspection Service endeavors to alert consumers and businesses to current crimes by attracting media attention to postal crime trends, publicizing positive law enforcement accomplishments, circulating media releases and hosting crime prevention presentations.

In February 1997, the Inspection Service joined with the American Association of Retired Persons (AARP) and the Attorney General's Office of the State of New Mexico in a continuing public education initiative aimed at preventing telemarketing fraud. Volunteers from the Albuquerque area AARP, state and local consumer protection agencies, the New Mexico Attorney General's Office, and the Postal Inspection Service worked together to turn the tables on crooked boiler room operators. Using lists of previous victims of telemarketing fraud and names of seniors gleaned from commercial phone lists, volunteers telephoned 1,500 New Mexico residents to warn them of the dangers of telemarketing fraud.

This same tactic, on a somewhat larger scale, was attempted with great media interest in Los Angeles in February 1998. Postal Inspectors teamed with FBI Special Agents and AARP members in a "reverse boiler room" operation underwritten by CellularOne of Los Angeles. Approximately 5,000 previous victims were contacted by phone and warned of possible renewed attempts by con artists to contact them by phone or mail.

In New Jersey and Massachusetts, inspectors and local AARP volunteers formed partnerships to educate senior citizens about some of the fraudulent promotions which target the elderly through direct mail and telemarketing schemes. Senior volunteers were re-

cruited to participate by collecting all questionable or suspicious unsolicited promotional mailings received during a specific period of time. Volunteers also kept a log of all unsolicited telemarketing calls received. Everything collected by the volunteers was turned over to inspectors for examination and follow-up attention. The results of the seniors' collection effort and the inspectors' preliminary investigations were publicized with media cooperation. This served to highlight drmatically the quantity of fraudulent solicitations which target senior citizens.

At a joint press conference in September 1997, the Chief Postal Inspector, and members of the AARP, FTC and the Attorneys General Offices of Massachusetts and Arizona, via satellite, announced Operation Mailbox. This cooperative effort focused attention on unsolicited mailings received by seniors, including suspicious prize offerings, sweepstakes promotions and requests for charitable contributions. Senior volunteers collected hundreds of unsolicited mailings which were displayed dramatically at the press conference. Inspectors have been working with the other agencies to review the mail collected through Operation Mailbox and identify offers or solicitations which may require follow-up investigation.

Senior victimization also was the topic of a Dateline NBC story which featured the Inspection Service's efforts to stop the flood of illegal foreign lottery mailings entering the United States. The story focused on the success inspectors have achieved in identifying illegal mailings at border entry points, with the assistance of the U.S. Customs Service, which has led to the seizure and destruction of over 4.5 million pieces of foreign lottery mail. The story also explored the sad tales of financial ruin suffered by many elderly victims of these schemes who seem easy prey to the allure of promised multi-million dollar jackpots.

INJUNCTIONS AND OTHER CIVIL POWERS

In addition to the investigation of individuals or corporations for possible criminal violations, the Inspection Service can protect consumers from material misrepresentations through the use of several statutes. In less severe cases, operators of questionable promotions agree to a Voluntary Discontinuance. This is an informal promise to discontinue the operation of the promotion. Should the agreement be violated, formal action against the promoter could be initiated. In certain cases where a more formal action is better suited, a Consent Agreement is obtained. Generally, a promoter signs a Consent Agreement to discontinue the false representations or lottery charged in a complaint. If this agreement is violated, the Postal Service may withhold the promoter's mail pending additional administrative proceedings.

The Postal Service (Judicial Officer) is empowered under 39 U.S.C. (b)(2) to issue a Cease and Desist (C&D) Order which requires any person conducting a scheme in violation of Section 3005 to immediately discontinue. C&D orders are issued as part of a False Representation order and, as a matter of course, are agreed to as a part of a Consent Agreement. Violators of C&D orders may be subject to civil penalties under 39 U.S.C. 3012. When more immediate relief to protect the consumer is warranted, the Postal Service has a number of effective enforcement options available.

Title 39 U.S.C. 3003 and 3004 enables the Postal Service, upon determining that an individual is using a fictitious, false, or assumed name, title, or address in conducting or assisting activity in violation of 18 U.S.C. Sections 1302 (Lottery), 1341 or 1342 (Mail Fraud), to withhold mail until proper identification is provided and the person's right to receive mail is established.

In those instances where a more permanent action is necessary, 39 U.S.C. 3007 allows the Postal Service to seek a Temporary Restraining Order detaining mail. By withholding service to the suspected violator, the extent of victimization is limited while an impartial judge reviews the facts and makes a final determination. If the judge decides that all mail pertaining to the promotion should be returned, then a False Representation Order, authorized under 39 U.S.C. 3005 is issued. In addition, U.S. District Judges may hold a hearing on alleged fraudulent activity, and issue a permanent injunction regarding the operation pursuant to 18 U.S.C. 1345.

By requesting the court to withhold mail while a case is argued, Postal Inspectors have been successful in many cases in limiting the extent of victimization. Action under these statutes does not preclude criminal charges against the same target.

CUSTOMER ADVISORY COUNCILS

In October 1988, the Postal Service introduced the concept of Customer Advisory Councils (CACs). The council concept was developed to encourage community interaction with local postal officials. CACs provide one more way for the Postal Service to listen to its customers. In 1995 the number of active councils grew to 1,778 nationwide, and almost 2,000 in Fiscal Year 1996.

CAC membership usually includes up to 10 individuals who are representative of their community; small business owners, local government officials, university/college students, homemakers, and retired persons. Retired persons play an integral role in many of the council efforts, including "mystery shopping" where members "shop" the various post offices, stations and branches to rate the cleanliness of the facility, clerk knowledge, courtesy, and other related aspects of our retail services. The valuable feedback received from councils is often used by local postal officials to improve service.

NATIONAL CONSUMERS WEEK

The Postal Service has sponsored an annual Consumer Protection Week since 1977. Since 1980, the Postal Service has scheduled its observance to coincide with the National Consumers Week sponsored by the U.S. Office of Consumer Affairs. Postmasters and facility managers are urged to sponsor special activities to educate customers about postal products and services as well as Postal Inspection Service efforts to protect consumers from perpetrators of fraudulent schemes and other postal crimes. In conjunction with open houses and special gatherings scheduled during National Consumers Week, brochures are distributed to warn consumers about mail fraud and misrepresentations of products and services sold by mail. Helpful information about proper addressing of mail, packaging parcels correctly, temporary address changes, sending valuables

through the mail, and how to report service problems are made widely available through planned events. As medical fraud and work-at-home schemes have traditionally ranked at the top of fraudulent promotions, the focus of material distributed is frequently directed toward alerting senior citizens of these other schemes.

STAMPS BY AUTOMATED TELLER MACHINE (ATM)

Stamps by ATM is one of the Stamps to Go Services and a convenient way to purchase stamps at a bank's automated teller machine. A specially designed sheetlet of 18 First-Class stamps is dispensed at the touch of a button. The cost is debited from your checking or savings account, treated like a cash withdrawal. Because many ATMs are accessible 24 hours a day, our customers are able to do banking and buy postage stamps at their convenience.

STAMPS BY MAIL

Stamps by Mail is another one of the Stamps to Go Services that allows postal customers to purchase postal products such as booklets, sheets, coils, postal cards, and stamped envelopes, by ordering through the mail.

The Stamps by Mail program benefits a wide variety of people and is particularly beneficial to elderly or shut-in customers who cannot travel to the post office. Stamps by Mail provides order forms incorporated in self-addressed postage-paid envelopes to customers for their convenience in obtaining products and services without having to visit a Postal Service retail unit. The form is available in lobbies or from the customer's letter carrier. The customer fills out the order form and returns it to the carrier or drops it in a collection box. Orders are normally returned to the customer within 2 or 3 business days.

STAMPS BY PHONE

Stamps by Phone is a convenient program that is intended to target business, professional, and household customers who are willing to pay a service charge for the convenience of ordering by phone and paying by credit card (VISA or Master Card) to avoid trips to the post office. The customer calls the (1–800–STAMPS–24) toll-free number, 24 hours a day, 7 days a week, and orders from a menu of postal products. There is no minimum amount and customers will receive their order within 3 to 5 business days.

WINDOW AUTOMATION AT RETAIL FACILITIES

The Postal Service is installing automated retail systems called Point of Service One at the service windows in retail facilities in all medium to large cities. These terminals use video screens to display information about each transaction for the customer. The screens show mailing options, value added services, required mailing forms, total amount due, and change from the amount tendered. The display of this type of information is useful to many customers with hearing impairments, including some older Americans.

ALTERNATE POSTAL RETAIL SITES

Alternate postal retail sites include contract Postal Units, and stamp consignment outlets (grocery stores, etc.). By providing retail services at alternate sites, the Postal Service allows customers to combine postal errands with other errands "one-stop" shopping. This is particularly advantageous to the elderly.

Contract postal units provide more convenient locations available for our customers to purchase stamps, which generally means less wait time for them to obtain these retail services. Purchasing stamps and postal money orders, registering a letter, and other postal errands, can be combined with a trip to the neighborhood shopping center. This is particularly advantageous to the elderly.

STAMPS ON CONSIGNMENT

The Postal Service consigns stamps to supermarkets, drug stores, and other large retail chains for resale to customers at no more than face value. This provides our customers who need stamps an alternative to window service. This is especially convenient for our elderly customers who may have limited access to transportation and can purchase stamps while at the grocery or drug store.

ITEM 28—U.S. RAILROAD RETIREMENT BOARD

ANNUAL REPORT ON PROGRAM ACTIVITIES FOR THE ELDERLY—FYS 1995 AND 1996

The U.S. Railroad Retirement Board is an independent agency in the executive branch of the Federal Government, administering comprehensive retirement-survivor and unemployment-sickness benefit programs for the Nation's railroad workers and their families under the Railroad Retirement and Railroad Unemployment Insurance Acts. The Board also has administrative responsibilities under the Social Security Act for certain benefit payments and railroad workers' Medicare coverage.

Under the Railroad Retirement Act, the Board pays retirement and disability annuities to railroad workers with at least 10 years of service. Annuities based on age are payable at age 62, or at age 60 for employees with 30 years of service. Disability annuities are payable before retirement age on the basis of total or occupational disability. Annuities are also payable to spouses and divorced spouses of retired workers and to widow(er)s, divorced, or remarried widower(er)s, children, and parents of deceased railroad workers. Qualified railroad retirement beneficiaries are covered by Medicare in the same way as social security beneficiaries.

Under the Railroad Unemployment Insurance Act, the Board pays unemployment benefits to railroad workers who are unemployed but ready, willing and able to work and pays sickness benefits to railroad workers who are unable to work because of illness or injury.

BENEFITS AND BENEFICIARIES

During fiscal year 1996, retirement and survivor benefit payments under the Railroad Retirement Act amounted to almost $8.1 billion, $54 million more than the prior year. The number of beneficiaries on the retirement-survivor rolls on September 30, 1996, totaled 765,000. The majority (86 percent) were age 65 or older.

At the end of the fiscal year, 344,000 retired employees were being paid regular annuities averaging $1,187 a month. Of these retirees, 162,000 were also being paid supplemental railroad retirement annuities averaging $43 a month. In addition, approximately 188,000 spouses and divorced spouses of retired employees were receiving monthly spouse benefits averaging $471 and, of the 243,000 survivors on the rolls, 205,000 were aged widow(er)s receiving monthly survivor benefits averaging $708. Some 9,000 retired employees were also receiving spouse or survivor benefits based on their spouse's railroad service.

About 699,000 individuals who were receiving or were eligible to receive monthly benefits under the Railroad Retirement Act were covered by hospital insurance under the Medicare program at the end of fiscal year 1996. Of these, 684,000 (98 percent) were also enrolled for supplementary medical insurance.

Gross unemployment and sickness benefits paid under the Railroad Unemployment Insurance totaled $97.7 million during fiscal year 1996, while net benefits totaled $65.6 million after adjustments for recoveries of benefit payments, some of which were made in prior years. Total gross and net payments increased by approximately $4.8 million and $4.1 million, respectively, from fiscal year 1995. Unemployment and sickness benefits were paid to 36,000 railroad employees during the fiscal year. However, only about $0.02 million (less than 1 percent) of the benefits went to individuals age 65 or older.

FINANCING

At the end of fiscal year 1996, the net position of all of the Railroad Retirement Board trust funds was $14.8 billion, with revenues for the year exceeding expenditures by $564.4 million. Investment earnings of $1.1 billion during the year, including a capital gain of $148.9 million on the sale of investments, were a major portion of the increase in the net position of the trust funds.

The Board's 1996 railroad retirement financial report to Congress, which addressed railroad retirement financing during the next 25 years, was generally favorable and reflected a continuing improvement over the previous 2 years. It concluded that, barring a sudden, unanticipated, large decrease in railroad employment, no cash-flow problems arise over the entire 25-year projection period. However, like previous reports over the last decade, the 1996 report also indicated that the long-term stability of the system, under its current financing structure, is still dependent on future railroad employment levels.

The Board's 1996 railroad unemployment insurance financial report was also favorable, indicating that experience-based contribution rates will keep the unemployment insurance system solvent, even under the most pessimistic employment assumption.

The Board's reports consequently did not recommend financing changes for the railroad retirement or unemployment insurance systems.

LEGISLATION

Legislation enacted on March 29, 1996, provided an increase in the social security earnings limits. As a result, railroad retirement annuitants ages 65–69 who work after retirement can earn more without a reduction in their benefits.

Legislation enacted on October 9, 1996, increased the railroad unemployment and sickness insurance daily benefit rate and revised the formula for indexing future benefit rates. It also reduced the waiting period for initial benefit payments and eliminated duplicate waiting periods in continuing periods of unemployment and sickness. In addition, the legislation applied an earnings tests to claims for unemployment and reduced the duration of extended benefit periods for long-service employees. The provisions of the

legislation were based on joint recommendations to Congress negotiated by rail labor and management in order to update the railroad unemployment insurance system so that its provisions are more comparable to those of most State programs.

SERVICE AND ADMINISTRATIVE IMPROVEMENTS

The Railroad Retirement Board has continued to improve agency operations and better serve its customers. An agency-wide reorganization effected in fiscal year 1995 was developed further in 1996 to achieve greater flexibility and economies of scale by combining like functions, eliminating organizational barriers, reducing layers of management, improving supervisory ratios, and developing more consistent policy and procedures. During 1996, the Board also closed a number of its field offices as part of a continuing restructuring of its field operations. The Board, nonetheless, through greater utilization of telephone and itinerant service, continued to maintain its high level of beneficiary service.

The Board's fiscal year 1996 performance in terms of its Customer Service Plan standards for responding to correspondence and paying lump-sum death benefits and unemployment and sickness claims improved over the previous year while performance in other areas declined. These dips in performance are not believed to be indicative of a trend.

During 1996, the Board completed its 5-year management improvement plan, at less cost than anticipated after successfully meeting or exceeding every goal, many ahead of schedule. The plan, based on an agreement with the White House Office of Management and Budget, required the Board to reduce claims processing backlogs, enhance debt collection activities, expand fraud controls, improve tax accounting operations, enhance automated claims processing systems, and make other improvement in its administrative management operations.

Consistent with its desire to provide easier access to internal policies, the Railroad Retirement Board completely revised its 10 Consolidated Board Orders which served as the basic management policies of the agency. The 10 orders of 334 pages were reduced to 5 orders of 69 pages. The revision of these orders was also in accord with Executive Order 12861, which required each agency to reduce by at least 50 percent its internal management regulations.

Initiatives designed to improve operations included the development of an information technology capital plan as well as a plan to renovate mainframe systems to incorporate new date standards which will function properly beyond the year 2000. An interagency agreement with the Social Security Administration allows direct system-to-system access to that agency's benefit and wage databases, and allows Social Security Administration systems direct access to Board databases in future phases of this initiative. Cost containment initiatives included plans to covert ground floor space at the agency's Chicago headquarters facility into retail developments and the move of the Chicago office of the National Railroad Adjustment Board to the Railroad Retirement Board's headquarters.

OFFICE OF INSPECTOR GENERAL

During fiscal year 1996, the Office of Inspector General continued its efforts to assist management in increasing the efficiency of agency programs. Twenty-three audits and evaluations issued during the year contained findings for improvement in both administrative and program operations. Investigative activities resulted in 135 criminal convictions, 66 indictments/informations, 50 civil judgments and $4.1 million in court ordered restitutions, fines, recoveries and prevention of overpayments. From these activities, about $701,000 was returned to the agency trust funds and $64,000 to the Medicare trust funds in fiscal year 1996.

PUBLIC INFORMATION ACTIVITIES

The Board maintains direct contact with railroad retirement beneficiaries through its 53 field offices located across the country. Field personnel explain benefit rights and responsibilities on an individual basis, assist railroad employees in applying for benefits and answer any questions related to the benefit programs. The Board also relies on railroad labor groups and employers for assistance in keeping railroad personnel informed about its benefit programs.

At informational conferences held for railroad labor union officials, Board representatives describe and discuss the benefits available under the railroad retirement-survivor, unemployment-sickness and Medicare programs, and the attendees are provided with comprehensive informational materials. During 1996, 2,000 railroad labor union officials attended 42 informational conferences held in cities throughout the United States. In addition, railroad labor unions frequently request that a Board representative speak before their meetings, seminars and conventions. In 1996, the Labor Member's Office of the Railroad Retirement Board was represented at 34 union gatherings attended by 4,421 railroad labor officials. Field personnel addressed 84 local union meetings with 4,794 members in attendance.

At seminars for railroad executives and managers, Board representatives review programs, financing, and administration, with special emphasis on those areas which require cooperation between railroads and Board offices. The Board also conducts informational seminars on benefit programs for employees at the request of railroad management. During 1996, the Management Member's Office of the Railroad Retirement Board conducted 17 seminars for railroad officials. It also conducted 13 pre-retirement counseling seminars attended by railroad employees and their spouses, and 16 benefit update presentations.

The Board's headquarters is located at 844 North Rush Street, Chicago, Illinois 60611–2092, phone (312) 751–4500. In addition, the Board maintains an Office of Legislative Affairs in Washington, DC as a liaison for dealing with Members of Congress on matters involving the Railroad Retirement and Unemployment Insurance Acts and legislative issues that affect the Board. The Office of Legislative Affairs is located at 1310 G Street, NW, Suite 500, Washington, DC 20005–3004, phone (202) 272–7742.

ITEM 29—SMALL BUSINESS ADMINISTRATION

The SBA continues to create, implement and deliver technical and financial assistance programs for the benefit of the Nation's small business community. We currently do not have a program that gives specific focus to older Americans.

However, the SBA is the sponsoring Federal agency for the Service Corps of Retired Executives (SCORE) program. SCORE is an organization of nearly 12,000 business men and women who volunteer their time and expertise to provide management counseling and training to small business owners and people just starting a new business. They have extensive business experience, either as entrepreneurs and business owners or as former corporate executives. SCORE counseling is confidential and free of charge and is provided at more than 700 locations in the United States and its territories.

ITEM 30—SOCIAL SECURITY ADMINISTRATION

PROGRAMS ADMINISTERED BY THE SOCIAL SECURITY ADMINISTRATION—CALENDAR YEARS 1995 AND 1996

The Social Security Administration (SSA) administers the Federal old-age, survivors, and disability insurance (OASDI) program (title II of the Social Security Act). OASDI is the basic program in the United States that provides income to individuals and families when workers retire, become disabled, or die. The basic idea of the cash benefits program is that, while they are working, employees and their employers pay Social Security taxes; the self-employed also are taxed on their net earnings. Then, when earnings stop or are reduced because of retirement in old-age, death, or disability, cash benefits are paid to partially replace the earnings that were lost. Social Security taxes are deposited to the Social Security trust funds and are used only to pay Social Security benefits and administrative expenses of the program. Amounts not currently needed for these purposes are invested in interest bearing obligations of the United States. Thus, current workers help to pay current benefits and, at the same time, establish rights to future benefits.

SSA also administers the Supplemental Security Income (SSI) program for needy aged, blind, and disabled people (title XVI of the Social Security Act). SSI provides a federally financed floor of income for eligible individuals with limited income and resources. SSI benefits are financed from general revenues. In about 54 percent of the cases, SSI is reduced due to individuals' having countable income from other sources, including Social Security benefits.

SSA shares responsibility for the black lung program with the Department of Labor. SSA is responsible, under the Federal Coal Mine Health and Safety Act, for payment of black lung benefits to coal miners and their families who applied for those benefits prior to July 1973 and for payment of black lung benefits to certain survivors of miners.

Local Social Security offices process applications for entitlement to the Medicare program and assist individuals with questions concerning Medicare benefits. Overall Federal administrative responsibility for the Medicare program rests with the Health Care Financing Administration, HHS.

Following is a summary of beneficiary data and selected administrative activities for calendar year 1996.

I. OLD-AGE, SURVIVORS, AND DISABILITY INSURANCE BENEFITS AND BENEFICIARIES

At the beginning of 1996, about 96 percent of all jobs were covered under the Social Security program. It is expected that, under

the present law, this percentage of jobs will increase slightly through the end of the century. The major groups of workers not covered under Social Security are Federal workers hired before January 1, 1984 and State and local government employees covered under a retirement system for whom the State has not elected Social Security coverage.

At the end of December 1996, 43.7 million people were receiving monthly Social Security cash benefits. Of these beneficiaries, 26.9 million were retired workers, 3.4 million were dependents of retired workers, 6.1 million were disabled workers and their dependents, 7.4 million were survivors of deceased workers and 653 were persons receiving special benefits for uninsured individuals who reached age 72 some years ago.

The monthly amount of benefits being paid at the end of December 1996 was $29.4 billion. Of this amount, $21.3 billion was payable to retired workers and their dependents, $3.4 billion was payable to disabled workers and their dependents, $4.7 billion was payable to survivors, and $0.1 million was payable to uninsured persons who reached age 72 in the past. (The cost of these special benefits for aged uninsured persons is financed from general revenues, not from the Social Security trust funds.)

Retired workers were receiving an average benefit at the end of December 1996 of $745, and disabled workers received an average benefit of $704.

During the 12 months ending December 1996, $347 billion in Social Security cash benefits were paid. Of that total, retired workers and their dependents received $232.9 billion, disabled workers and the dependents received $44.2 billion, survivors received $69.8 billion, and uninsured beneficiaries over age 72 received $1.4 million.

Monthly Social Security benefits were increased by 2.6 percent for December 1995 (payable beginning January 1996) to reflect a corresponding increase in the Consumer Price Index (CPI).

II. SUPPLEMENTAL SECURITY INCOME BENEFITS AND BENEFICIARIES

In January 1996, SSI payment levels (like Social Security benefit amounts) were automatically adjusted to reflect a 2.6 percent increase in the CPI. From January through December 1996, the maximum monthly Federal SSI payment level for an individual was $470. The maximum monthly benefit for a married couple both of whom were eligible for SSI, was $705.

As of December 1996, 6.6 million aged, blind, or disabled people received Federal SSI or federally administered State supplementary payments. Of the 6.6 million recipients on the rolls during December 1996, about 2.1 million were aged 65 or older. Of the recipients aged 65 or older, about 678,000 were eligible to receive benefits based on blindness or disability. About 4.5 million recipients were blind or disabled and under age 65. During December 1996, Federal SSI benefits and federally administered State supplementary payments totaling slightly over $2.4 billion were paid.

For calendar year 1996, $28.3 billion in benefits (consisting of $25.3 billion in Federal funds and $3.0 billion in federally administered State supplementary payments) were paid.

III. BLACK LUNG BENEFITS AND BENEFICIARIES

Although responsibility for new black lung miner claims shifted to the Department of Labor (DOL) in July 1973, SSA continues to pay black lung benefits to a significant, but gradually declining, number of miners and survivors. (While DOL administers new claims taken by SSA under part C of the Federal Coal Mine Health and Safety Act, SSA is still responsible for administering part B of the Act.)

As of December 1996, about 131,000 individuals (102,000 age 65 or older) were receiving $53 million in black lung benefits which were administered by the Social Security Administration. These benefits are financed from general revenues. Of these individuals, 21,000 miners were receiving $9 million, 86,000 widows were receiving $37 million, and 24,000 dependents and survivors other than widows were receiving $6 million. During calendar year 1996 SSA paid out black lung payments in the amount of $655 million. About 21,000 miners and 86,000 widows and wives were age 65 or older.

Black lung benefits increased by 1.8 percent effective January 1996. The monthly payment to a coal miner disabled by black lung disease increased from $427.40 to $435.10. The monthly benefit for a miner or widow with one dependent increased from $641.10 to $652.70 and with two dependents from $748.00 to $761.50. The maximum monthly benefit payable when there are three or more dependents increased from $854.40 to $870.20.

IV. COMMUNICATION AND SERVICES

SSA's public information initiatives are aimed at more than 44 million Social Security beneficiaries, more than six million SSI recipients and about 148 million workers currently paying into the system. SSA seeks to ensure that current and future beneficiaries are aware of programs, services, and their rights and responsibilities.

In 1995 and 1996, SSA planned public information outreach activities to help educate the public about Social Security. A public service campaign was conducted in conjunction with SSA's 60th anniversary in 1995. The campaign was promoted through print media, as well as radio and television, and informed the public about Social Security's disability and survivors benefits programs. The media donated more than $4 million in advertising space.

Subjects covered through public information messages included changes in the law affecting drug addicts and alcoholics, welfare recipients and disabled children. Messages were placed in the form of news releases, radio and television public service announcements and publications such as *Social Security Today,* a newsletter distributed to national organizations.

SSA produces a wide range of publications on all Social Security programs. More than 100 consumer booklets and fact sheets keep the public informed about the programs and policies affecting them. Many publications also are available in Spanish. All are available through the agency's FAX Catalog, as well as on the Internet at SSA's web site, http://www.ssa.gov. Also, SSA's Public

Information Distribution Center provides materials directly to external groups and organizations.

The agency released several new videos designed to inform the public about Social Security. One, "The Evolution of Social Security," highlights the history of the program. Another video was produced to accompany the SSA Teacher's Kit, which was marketed directly to more than 17,000 secondary schools. In addition to these video products, SSA spends a package of radio public service announcements on Social Security themes to 5,000 radio stations once a year.

SSA also conducted a series of focus groups around the country to assess the public's knowledge of the Social Security program and to obtain their opinions on ways to increase public understanding and confidence.

V. SUMMARY OF LEGISLATION THAT AFFECTS SSA, 1995-96

P.L. 104–103 (H.R. 2924), An Act to Guarantee the Timely Payment of Social Security Benefits in March 1996, signed on February 8, 1996

Provides the Secretary of the Treasury authority to issue obligations of the United States equal to the aggregate monthly Social Security benefits payable in March 1996. Because such obligations would not be subject to the debt ceiling, the Secretary could issue new Federal debt obligations in order to obtain the cash necessary to cover Social Security benefits payments in March. The exemption terminated on March 15, 1996.

P.L. 104–115 (H.R. 3021), An Act to Guarantee the Continuing Full Investment of Social Security and Other Federal Funds in Obligations of the United States, signed on March 12, 1996

Extended, from March 15, 1996, through March 30, 1996, the authority (enacted in P.O. 104–103) to issue obligations of the United States equal to the aggregate monthly Social Security benefits payable in March 1996.

P.L. 104–121 (H.R. 3136), the Contract With America Advancement Act of 1996 (Includes the Senior Citizens' Right to Work Act of 1996), signed on March 29, 1996

Denial of disability benefits to drug addicts and alcoholics

Prohiits disability insurance (DI) and Supplemental Security Income (SSI) eligibility to individuals whose drug addiction and/or alcoholism (DAA) is a contributing factor material to the finding of disability. This provision applies to individuals who file for benefits on or after the date if enactment. For beneficiaries who, as of March 29, 1996, were already receiving DI and/or SSI benefits based on DAA materiality, this provision became effective on January 1, 1997, SSA was required to: 1) notify DAA beneficiaries of new provisions by June 27, 1996; and 2) complete new medical determinations by January 1, 1997, for affected beneficiaries who requested such a determination within 120 days after the date of enactment.

Applies special representative payee requirements to DI or SSI beneficiaries who have a DAA condition, as determined by the

Commissioner, and who are incapable of managing benefits. SSA is to refer these individuals to the appropriate State agency for treatment. In addition, allows certain organizational payees to collect a $50 monthly fee from beneficiaries who have a DAA condition.

Provided an additional appropriation of $50 million for each of fiscal years 1997 and 1998 to carry out on a priority basis activities relating to the treatment of drug and alcohol abuse under section 1933 of the Public Health Service Act.

Continuing Disability Reviews

Authorizes additional funds to SSA for fiscal years 1996 through 2002 for the purpose of conducting Social Security disability insurance continuing disability reviews (CDRs) and SSI CDRs and disability redeterminations. This would be accomplished by increasing the amount of funds available for appropriations under the discretionary spending cap in the Budget Enforcement Act.

Directs the Commissioner of Social Security to ensure that the funds made available pursuant to this provision are used, to the greatest extent practicable, to maximize the combined savings to the old-age, survivors, and disability insurance (OASDI), SSI, Medicare, and Medicaid programs.

Requires the Commissioner to report annually, for fiscal years 1996 through 2002, to Congress on the amount of money spent on CDRs, the number of reviews conducted (by category), the disposition of such reviews (by program), and the estimated savings over the short-, medium-, and long-term for OASDI, SSI, Medicare, and Medicaid programs from CDRs which result in cessations, and the estimated present value of such savings.

Chief actuary

Establishes by statute in the Social Security Administration the position of Chief Actuary, to be appointed by, and report directly to, the Commissioner, and be subject to removal only for cause.

Dependency test for stepchildren

Provides that a stepchild has to be receiving at least one-half support from the stepparent when the child's claim is filed to get benefits. (The option for finding dependency based on the child's living-with the stepparent was eliminated.) This provision is effective for benefits of individuals who become entitled for months after June 1996.

If the natural parent and the stepparent of an entitled stepchild divorce, benefits to the stepchild based on the work record of the stepparent would terminate the month after the month in which such divorce becomes final. This provision is effective for final divorces occurring after June 1996.

Increase in the earnings test annual exempt amount

Gradually raises, beginning in 1996, the earnings limit for the retirement earnings test (RET) for beneficiaries who have attained normal retirement age to $30,000 by 2002 (compared with $14,640 for 2002 under prior law, based on the assumptions in the President's FY 1998 Budget). The applicable 1996 exempt amount under

prior law was $11,520. Exempt amounts under P.L. 104–121 (exempt amounts under prior law are also shown) are:

Year	Exempt amount under Public Law 104–121	Estimated exempt amount under prior law
1996	$12,500	$11,520
1997	13,500	12,000
1998	14,500	12,600
1999	15,500	12,960
2000	17,000	13,560
2001	25,000	14,040
2002	30,000	14,640

After 2002, the annual exempt amount will be indexed to growth in average wages.

The substantial gainful activity (SGA) amount applicable to individuals who are statutorily blind is no longer linked to the RET exempt amount for individuals ages 65 to 69. Instead, the SGA amount for blind people will continue to be adjusted annually as under present law, i.e., based on the national average wage index.

Benefit and tax statements

Requires SSA to conduct a pilot study of the efficacy of providing title II beneficiaries with information about their Social Security benfits and taxes. The study will involve a sample of retirement beneficiaries whose entitlement began in or after 1984 and continued for a period of at least 5 years. SSA will send each beneficiary one statement with estimates of the aggregate covered earnings of the insured person, the aggregate Social Security taxes (including the employer share paid on those earings), and the total amount of benefits paid on the insured person's record.

Requires the study to be conducted within a 2-year period beginning as soon as practicable in 1996 and a report on its results be provided to Congress within 60 days of its completion.

Investment of Social Security and Medicare trust funds

Prohibits the Secretary of the Treasury from refraining from investing Social Security and Medicare trust fund monies in Federal securities, and from redeeming securities held by the trust funds, to avoid increasing or reducing outstanding public debt obligations. Effective March 29, 1996.

Professional staff for the Social Security Advisory Board

Authorizes the Social Security Advisory Board to appoint three professional staff employees, one of whom is to be appointed from among individuals approved by Advisory Board members who do not belong to the political party represented by the majority of the Board.

Review of Federal regulations

Requires that when Federal agencies promulgate certain regulations, including some of those issued by SSA, the agency must prepare a final regulatory flexibility analysis. The agencies must also provide the Chief Counsel for Advocacy of the Small Business Administration information on the potential impacts of the proposed

rule on small entities and the type of small entities that might be affected. This provision does not apply to any proposed or final rule if the head of the agency cerifies that the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities. The statute also provides for judicial review of agency compliance with this provision.

P.L. 104–134 (H.R. 3019), the Omnibus Consolidated Rescissions and Appropriations Act of 1996, signed on April 26, 1996

Debt collection

Provides SSA with permanent debt collection authorities, including administratively offsetting other Federal benefit payments, offsetting Federal salaries, administrative garnishment of employees' pay, reporting delinquent debt to credit bureaus, using private collection agencies, and assessing late charges. The first $9000 per year of an individual's Federal benefit payments are exempt from administrative offset.

Authorizes the collection of debts owed to the Federal Government by administrative offset against black lung benefits and benefits under title II of the Social Security Act.

Electronic funds transfer (EFT)

Requires recurring Federal payments, including Social Security and SSI benefits, to persons who begin to receive them after July 1996 to be paid by EFT. However, the head of each agency can waive the requirement for recipients who certify that they do not have a bank account or payment agent.

All recurring Federal payments made after January 1, 1999, will be made by EFT, except that the Secretary of the Treasury may waive the requirement in certain circumstances.

P.L. 104–188 (H.R. 3448), the Small Business Job Protection Act of 1996 and the Minimum Wage Increase Act of 1996, signed on August 20, 1996

Crews of fishing boats

Treats crew members as self-employed (rather than employees) if (1) the crew of a vessel was normally composed of no more than 10 members, determined on the basis of the average size of the crew during the preceding four calendar quarters, and (2) under limited circumstances, the crew members received cash pay of not more than $100 per trip. The provision was effective January 1, 1994. It also applies to the period 1985–1994, unless the remuneration had been treated as wages when paid.

Employer-provided educational assistance

Resinstates a provision that expired January 1, 1995, under which certain employer-provided educational assistance was excluded for Social Security and income tax purposes. The extension is extended, but only for courses that began before January 1, 1997. However, with respect to graduate level education, the exclusion does not apply to expenses relating to courses beginning after June 30, 1996.

Retired members of the clergy

Excludes from Social Security tax the rental value of a parsonage (or the parsonage allowance) and benefits from a church plan (as defined in the Internal Revenue Code) received by a retired member of the clergy. Applies to years beginning before, on, or after December 31, 1994.

Newspaper deliverers

Defines persons engaged in the business of distributing newspapers or shopping news as direct sellers for Social Security and income tax purposes—i.e., independent contractors (self-employed). Applies to services performed beginning January 1, 1996.

Work opportunity tax credit

Replaces the targeted jobs tax credit with the work opportunity tax credit for employers hiring individuals from one or more targeted groups. This includes disabled individuals referred to an employer upon completion of (or while receiving) rehabilitation services pursuant to an individualized written plan under a State plan for vocational rehabilitation services approved under the Rehabilitation Act of 1973.

The provision applies to individuals who begin work for the employer after September 30, 1996.

P.L. 104–193 (H.R. 3734), the Personal Responsibility and Work Opportunity Reconciliation Act of 1996, signed on August 22, 1996

LIMITED ELIGIBILITY OF NONCITIZENS

Social Security benefits

Prohibits the payment of Social Security benefits to any noncitizen in the U.S. who is not lawfully present in the U.S. (as determined by the Attorney General), unless the payment is made pursuant to a totalization agreement or treaty obligation.

Applied for benefits based on applications filed on or after December 1, 1996.

SSI benefits

Prohibits SSI eligibility for all qualified noncitizens except:[1] Refugees (eligibility limited to the 5-year period after their arrival in the United States); asylees (eligibility limited to the 5-year period after the date they are granted asylum); noncitizens who have had deportation withheld under INA section 243(h) (eligibility limited to the 5-year period after the date their deportations are withheld; certain active duty Armed Forces personnel, honorably discharged veterans, and their spouses and dependent children; and lawful permanent residents who have earned 40 quarters of coverage for Social Security purposes. An individual under the age of 18 would be credited with all quarters of coverage earned by his or her parent, and a married individual (including widow(er)) generally would be credited with all quarters of coverage earned by his or her

[1]This definition was amended by P.L. 104–208 (see description in section titled "Provisions Related to Noncitizens"). Further significant changes were made by P.L. 105–33.

spouse during the marriage. However, for quarters earned after December 31, 1996, a quarter would not count as one of the required 40 if the noncitizen or person whose quarters are being credited to the noncitizen received federally funded public assistance during the quarter the work was done.

In addition, with certain exceptions, noncitizens who enter the U.S. as lawful permanent residents after August 22, 1996, are ineligible for any Federal means-tested benefits (including SSI) for 5 years.

Effective upon enactment. However, with regard to individuals on the SSI rolls at the time of enactment, requires the Commissioner to redetermine the eligibility of all noncitizens who may not meet the new eligibility categories within 1 year after enactment. If a qualified noncitizen is not in one of the new categories, his or her eligibility would end as the date of the redetermination.

Required the Commissioner to notify all potentially affected beneficiaries on the SSI rolls of the provision by March 31, 1997.

Deeming of sponsors' incomes and resources

For purposes of eligibility under SSI, deems the sponsors' (and sponsors' spouses') incomes and resources to the noncitizen until citizenship with the following exception:

> Deeming ends before citizenship in the case of lawful permanent residents who earn 40 quarters of coverage. Deeming for children and spouses of workers also could end before citizenship if they are credited with 40 quarters, i.e., an individual under the age of 18 is credited with all quarters of coverage earned by his or her parent, and a married individual (including widow(er)) generally is credited with all quarters of coverage earned by his or her spouse during the marriage. However, for quarters earned after December 31, 1996, a quarter will not count as one of the required 40 if the noncitizen or person whose quarters are being credited to the noncitizen received federally funded public assistance during the quarter the work was done.

Effective for sponsored noncitizens who are admitted into the country under new, legally enforceable affidavits of support.

Requirements for affidavits of support for sponsorship

Makes affidavits of support legally enforceable against the sponsor until the noncitizen becomes a U.S. citizen. The affidavit is enforceable for a period of 10 years after the noncitizen last received public assistance benefits, including SSI.

Requires the agency that provides assistance to a noncitizen to request reimbursement from the sponsor for the assistance it provided. If the sponsor does not respond or is unwilling to make reimbursement within 45 days after the agency's request, the agency may take legal action against the sponsor. Allows the agency to hire individuals to collect reimbursement.

Requires the Attorney General, in consultation with the Secretary of State and the Secretary of Health and Human Services, to develop a standard affidavit of support within 90 days after the date of enactment. Also requires—effective with a date specified by the Attorney General which would be no earlier than 60 and no

later than 90 days after development of the standard affidavit—that all newly signed affidavits be legally enforceable.

Reports to INS

Requires the Commissioner to furnish to INS the name, address, and other identifying information of any individual that SSA knows is unlawfully in the United States. Such reports are required at least four times a year and upon request of INS. Also requires the Commissioner to ensure that State supplementary program agreements with States include provisions for the State also to furnish such information to INS at such times on persons whom the State knows are unlawfully in the United States.

Effective upon enactment.

CHILDHOOD DISABILITY

SSI eligibility based on childhood disability

Eliminates the comparable severity standard and provides instead that a child under age 18 be considered under a disability if he/she has a medically determinable physical or mental impairment which results in marked and severed functional limitations and which can be expected to result in death or which has lasted or can be expected to last for a continuous period of not less than 12 months.

Directs SSA to eliminate references to maladaptive behavior in the domain of personal/behavioral function in specified sections of the Listing of Impairments for children and to discontinue the use of an individualized functional assessment in evaluating a child's claim for benefits.

These provisions are applicable to any individual who applies for SSI benefits based on disability, or whose claim is finally adjudicated, on or after the date of enactment, without regard to whether implementing regulations have been issued.

Current recipients

Required SSA to notify recipients eligible for SSI benefits based on disability on enactment date and whose ligibility may be affected by the new childhood disability eligibility criteria, no later than January 1, 1997.

Required SSA to redetermine the eligibility of such recipients, using the new childhood disability eligibility criteria, no later than 1 year after the date of enactment.

Benefits for those recipients who did not meet the new childhood disability eligibility criteria terminated for the month beginning on or after the later of July 1, 1997, or the date of the redetermination.

Eligibility redeterminations and continuing disability reviews (CDRs)

Requires CDRs: once every 3 years for recipients under age 18 with impairments that are considered likely to improve; and not later than 12 months after birth for children for whom low birth weight is a contributing factor material to the determination of disability.

Requires the representative payee of a recipient whose continuing eligibility is being reviewed to present evidence that the recipient is receiving treatment which is considered medically necessary and available, unless SSA determines that providing evidence of such treatment would be inappropriate or unnecessary. If the representative payee refuses, without good cause, to cooperate, SSA may change the payee if it is in the best interests of the child.

Requires an eligibility redetermination, using the adult initial eligibility criteria, during the 1-year period beginning on a recipient's 18th birthday.

Applies to benefits for months beginning on or after the date of enactment, without regard to whether implementing regulations have been issued.

Repeals the requirement in the Social Security Independence and Program Improvements Act of 1994 (Public Law 103–296) that SSA (1) redetermine, using the adult eligibility criteria, the eligibility of one-third of the recipients who attain age 18 in or after May 1995 in each of fiscal years 1996 through 1998 and (2) submit a report regarding these reviews to the House Committee on Ways and Means and the Senate Committee on Finance not later than October 1, 1998.

Medical improvement review standard

Makes conforming changes in the medical improvement review standard to reflect the new definition of disability for children who file for SSI benefits.

Applicable with respect to benefits for months beginning on or after the date of enactment, without regard to whether implementing regulations have been issued.

Funding

Authorized the appropriation of an additional $150 million in fiscal year 1997 and $100 million in fiscal year 1998 for the costs of processing CDRs and redeterminations.

Regulations

Required SSA to issue regulations implementing the changes relating to benefits for disabled children within 3 months after enactment date.

Directs SSA to submit final regulations pertaining to a child's eligibility for SSI disability benefits to the Congress at least 45 days before such regulations become effective.

Reports

Required SSA to report to the Congress, not later than 180 days following the date of enactment, on its progress in implementing the changes in the SSI disabled children's provisions.

Requires GAO, not later than January 1, 1999, to study and report on the impact of the changes made by this Act on the SSI program and the extra expenses incurred by families of children receiving SSI benefits that are not covered by other Federal, State, or local programs.

OTHER SSI CHANGES

Prisoner reporting

Provides for incentive payments from SSI program funds to State and local penal institutions and mental hospitals for furnishing information (date of confinement and certain identifying information) to SSA which results in suspension of SSI benefits ($400 for information received within 30 days of confinement or $200 for information received from 31 to 90 days after confinement).

Applies to individuals whose period of confinement commences on or after the first day of the seventh month beginning after the month of enactment.

Exempts SSI reporting agreements under which incentive payments are made from the computer matching provisions of the Privacy Act of 1974, as amended.

Required the Commissioner to study and report to Congress (within 1 year of enactment) on the feasibility of prisoner reporting by courts and mandatory electronic reporting by correctional facilities and other institutions having incentive payment agreements with SSA for purposes of carrying out the suspension of benefits under the SSI program.

Requires SSA to provide Congress (not later than October 1, 1998) with a list of the institutions that are, and are not, providing information on inmates to SSA under the incentive payment provision.

Authorizes SSA to provide, on a reimbursable basis, information obtained pursuant to SSI reporting agreements under which incentive payments are made to any Federal or Federally-assisted cash, food, or medical assistance program for eligibility purposes.

Modify the effective date of applications

Provides that an individual's application for SSI benefits is effective on the first day of the month following the date on which the application is filed, or following the date on which the individual first becomes eligible, whichever is later. The amendment, in effect, eliminates prorated payments for the month of application by providing that the first month for which benefits can be paid is the month after the month in which the application is filed.

Permits the issuance of an emergency advance payment in the month the application is filed to an individual who is presumptively eligible and has a financial emergency.

Requires that the emergency advance payment be repaid through proportional reductions in the individual's SSI benefits over a period of not more than 6 months.

Effective for applications filed on or after the date of enactment.

Reduction in cash benefits payable to institutionalized individuals whose medical costs are covered by private insurance

Limits to not more than $30 a month SSI cash benefits payable to children under age 18 who are in medical institutions receiving payments (with respect to that individual) under any health insurance policy issued by a private provider of such insurance.

Effective with respect to benefits for months beginning 90 or more days after the date of enactment.

Installment payments of large past-due SSI payments

Requires SSA to pay in installments retroactive SSI benefit amounts that equal or exceed 12 times the monthly Federal benefit rate (FBR) plus the monthly State supplemental level. Payments are to be made in no more than three installments at 6-month intervals. The first and second installment generally cannot exceed 12 times the FBR ($5,640 based on 1996 rates) plus any Federally administered State supplement. Any remaining retroactive benefits will be paid in the third installment.

Provides that where an individual has incurred debts for food, clothing, shelter, or medical expenses or has current or anticipated expenses for medical needs or the purchase of a home, the maximum amount of an installment payment may be increased by the total amount of these debts and expenses.

Provides that the installment payment requirements do not apply to an individual who is terminally ill or who is currently ineligible for benefits and likely to remain so for the next 12 months.

Effective with respect to past-due benefits payable after the third month following the month of enactment.

Dedicated savings accounts

Requires the representative payee of a disabled or blind child to establish a bank account to maintain retroactive SSI benefits that exceed 6 times the FBR (smaller retroactive benefit amounts may also be placed in such accounts once established).

Allows funds in the account to be used only for the following expenses: medical treatment, education or job skill training; or, if related to child's impairment, personal needs assistance, special equipment or housing modifications, therapy or rehabilitation, other items or services related to the child's impairment which SSA determines appropriate.

Provides that unauthorized expenditures constitute misapplication of benefits and are recoverable by SSA from the child's representative payee.

Requires SSA to establish an accountability system to monitor these accounts under which payees are required to report on the use of these funds.

Provides that these accounts are excluded from resource counting and that interest earned is excluded from income.

Effective with respect to payments made after the date of enactment.

Denial of benefits for fugitive felons and probation and parole violators/exchange of information with law enforcement officers

Denies eligibility for SSI with respect to any month during which an individual is fleeing to avoid prosecution for a felony, fleeing to avoid custody or confinement after conviction of a felony, or violating a condition of probation or parole imposed under State or Federal law.

Requires SSA to provide upon written request of any appropriate agency, the current address, SSN, and photograph (if applicable) of any SSI recipient, provided that the requesting law enforcement officer furnishes the name of the recipient and other identifying information and notifies SSA that the recipient: is fleeing to avoid

prosecution for a felony, or custody or confinement after a felony conviction; or is violating a condition of probation or parole; and has information that is necessary for the officer of the agency to conduct the officer's official duties and the location or apprehension of the recipient is within the officer's official duties.

Effective upon enactment.

Denial of SSI benefits for 10 years to individuals who have misrepresented residence in order to obtain benefits in two or more states

Denies SSI benefits for a period of 10 years to an individual convicted in Federal or State court of having made a fraudulent statement or representation with respect to his or her place of residence in order to receive benefits simultaneously in two or more States.

Effective upon enactment.

Annual report on the SSI program

Requires the Commissioner to report to the President and Congress regarding the SSI program, not later than May 30 of each year, including: a comprehensive description of the program; historical and current data on allowances and denials, including number of applications and allowance rates for initial determinations, reconsideration determinations, administrative law judge hearings, appeals council reviews, and Federal court decisions; historical and current data on characteristics of recipients and program costs, by recipient group (aged, blind, disabled adults, and disabled children); historical and current data on prior enrollment by recipients in public benefit programs, including State programs funded over Part A of title IV of the Social Security Act and State general assistance programs; projections of future numbers of recipients and program costs, through at least 25 years; information on the number and outcomes of redeterminations and continuing disability reviews, utilization of work incentives, administrative and other program costs, State supplementation program operations; summaries of relevant research; and a historical summary of statutory changes to the SSI law.

Provides that each member of the Social Security Advisory Board be permitted to include their views on the SSI program in the annual report.

Effective upon enactment.

USE OF SOCIAL SECURITY NUMBERS

Social Security card

Required the Commissioner of Social Security to develop a prototype of a counterfeit-resistant Social Security card that: is made of durable, tamper-resistant material (e.g., plastic); employs technologies that provide security features (e.g., magnetic stripe); and provides individuals with reliable proof of citizenship or legal resident alien status.

Required the Commissioner of Social Security to study and report on different methods of improving the Social Security card application process, including: evaluation of the cost and workload implications of issuing a counterfeit-resistant Social Security card

for all individuals over a 3-, 5-, and 10-year period; evaluation of the feasibility and cost implications of imposing a user fee for replacement cards and cards issued to individuals who apply for such a card prior to the scheduled 3-, 5-, and 10-year phase-in options.

Required the Commissioner to submit the report and a facsimile of the prototype card to the Congress within 1 year of the date of enactment.

Expansion of the Federal Parent Locator Service

Requires HHS to transmit to SSA, for verification purposes, certain information about individuals and employers maintained under the Federal Parent Locator Service in an automated directory to be known as the National Directory of New Hires. SSA is required to verify the accuracy of, correct, or supply to the extent possible, and report to HHS the name, SSN, and birth date of each individual regarding whom HHS maintains information for purposes of the Federal Parent Locator Service and the employer identification number of each such employer. SSA will be reimbursed by HHS for the cost of this verification service.

Effective upon enactment.

Collection and use of SSNs for use in child-support enforcement

Provides that State child support enforcement procedures require that the SSN of any applicant for a professional license, commercial driver's license, occupational license, or marriage license be recorded on the application. The SSN of any person subject to a divorce decree, support order, or paternity determination or acknowledgement will be placed in the pertinent records. SSN's also must be placed in the records relating to the death and recorded on death certificates.

Effective upon enactment.

Earned Income Tax Credit (EITC)

Provides that, in order to be eligible for the EITC, an individual must include on his or her tax return a Social Security number assigned to the individual which was not assigned solely for nonwork purposes as well as, where applicable, a Social Security number meeting the aforementioned requirement for his or her spouse.

Effective for taxable years beginning after 1995.

P.L. 104–208 (H.R. 3610), An Act Making Omnibus Consolidated Appropriations for FY 1997, signed on September 30, 1996

This omnibus budget bill includes six FY 1997 appropriations measures and contains SSA's FY 1997 appropriation. The bill also includes the Illegal Immigration Reform and Immigrant Responsibility Act of 1996. Included in the immigration reform section of H.R. 3610 were the following provisions of interest to SSA:

PROVISIONS RELATED TO NONCITIZENS

Definition of "qualified alien"

Amends section 431 of P.L. 104–193 to add to the list of six specific immigration categories that comprise the definition of "qualified alien," the following new category:

Aliens and their children who have been battered or subjected to extreme cruelty by a spouse or parent or a member of the spouse's or parent's family living in the same household as the alien if the alien has a petition for adjustment of immigration status approved or pending and the Attorney General determines that there is a substantial connection between such battery or cruelty and the need for benefits. A noncitizen would not be considered to be a qualified alien for any month in which the noncitizen lives in the same household as the individual responsible for the battery or extreme cruelty.

NOTE.—In order to be eligible for SSI, a "qualified alien" would also have to meet the noncitizen SSI eligibility criteria under P.L. 104–193.

Sponsorship deeming

Amends section 421 of P.L. 104–193 to add the following two exceptions to sponsor-to-immigrant deeming:

Requires that if a noncitizen is indigent and the agency makes a determination for a 12-month period that without SSI benefits the noncitizen is unable to obtain food and shelter taking into account the noncitizen's income and cash, food, housing, and other assistance provided by any individual including the sponsor, then only the amount of income and resources *actually provided* the noncitizen by the sponsor is counted for deeming purposes. In all cases in which such determinations are made, the agency is required to report the names of the noncitizens and their sponsors to the Attorney General.

Provides that deeming would not apply for a 12-month period if noncitizens or their children have been battered or subjected to extreme cruelty by family members. The deeming exemption period (with regards to the sponsor batterers income and resources only) is extended if the battering or cruelty has led to an order from a judge, an Administrative Law Judge (ALJ), or the Immigration and Naturalization Service (INS), and the benefit-paying agency determines that the need for benefits has a *substantial connection* to the battery or cruelty. The deeming exemption does not apply for any month in which the noncitizen lives in the same household as the person responsible for the battery or extreme cruelty.

These provisions are effective for noncitizens whose sponsors execute legally enforceable affidavits of support (see below).

Affidavits of support

Replaces the affidavit of support provisions in P.L. 104–193 with the following:

Requires that affidavits of support be made contracts under which the sponsor agrees to provide support at an annual income that is not less than 125 percent of the poverty line. Affidavits of support are made legally enforceable against the sponsor by the sponsored immigrant, and the Federal, State, local governments, or other entity which provide the sponsored noncitizen any means-tested public benefit. These affidavits are required to include the sponsors' agreement to support the noncitizens until they become U.S. citizens or until they (or,

under certain conditions, their spouses or individuals who claimed them as dependents on their income tax return) have worked 40 quarters in the United States, whichever is earlier.

Requires the agency to request reimbursement from the sponsor for assistance provided the noncitizen. If 45 days after the reimbursement request, the sponsor is unresponsive or unwilling to make reimbursement, the agency has 10 years to take legal action against the sponsor. Allows the agency to hire individuals to collect reimbursement.

The Attorney General, in consultation with the Secretary of Health and Human Services (HHS), was required to develop a standard affidavit of support within 90 days after enactment and the provision was effective no earlier than 60, and no later than 90, days after enactment.

Study of noncitizens who are not "qualified aliens" receiving SSI on another's behalf

Required that the General Accounting Office within 180 days of enactment submit a report to Congress and the Department of Justice on the extent to which means-tested benefits are being paid to noncitizens acting as representative payees who are not "qualified aliens".

Reports of earnings of noncitizens not authorized to work

Effective beginning with FY 1996, requires the Commissioner to report to Congress, no later than 3 months after the end of each fiscal year, the aggregate number of Social Security numbers (SSNs) issued to noncitizens not authorized to work, but under which earnings were reported.

Required the Commissioner to transmit to the Attorney General, within 1 year of enactment, a report on the extent to which SSNs and Social Security cards are used by noncitizens for fraudulent purposes.

Maintaining information on noncitizens

Authorizes the Attorney General to require any noncitizen to provide his/her SSN for purposes of inclusion in any record maintained by the Attorney General or INS. Effective on the date of enactment.

Ineligibility of noncitizens not lawfully present for social security benefits

Prohibits payment of Social Security benefits to any noncitizen in the U.S. for any month during which the noncitizen is not lawfully present in the U.S. (as determined by the Attorney General).

Effective for benefits based on applications filed on or after the first day of the first month that begins at least 60 days after the date of enactment.

IMPROVEMENTS IN IDENTIFICATION-RELATED DOCUMENTS

Birth certificate requirements

Prohibits Federal agencies from accepting copies of domestic birth certificates that do not conform to standards set forth in Federal regulations. The President was to select one or more Federal

agencies to develop appropriate standards for birth certificates and include them in a final regulation to be promulgated no later than 1 year after the date of enactment. The regulation shall: provide for certification by the issuing agency; provide for use of safety paper, the seal of the issuing agency, and other features designed to resist tampering, counterfeiting, and duplicating for fraudulent purposes; not require a single design to be used by all States; and accommodate the differences between States in the manner and form in which birth records are stored and birth certificates are produced.

The restriction on the acceptance of birth certificates by Federal agencies applies to birth certificates issued after the day that is 3 years after promulgation of the regulation.

Requires the Department of Health and Human Services (HHS) to provide grants: to encourage States to develop the capability to match birth and death records, within each State and among the States, and to note the fact of death on the birth certificates of deceased persons (fosucing first on individuals born after 1950); and for projects in 5 States to demonstrate the feasibility of a system by which State vital statistics records will reflect in-State deaths within 24 hours of that office's acquiring death information from persons required to report such information.

Required HHS to submit a report to Congress within 1 year of enactment on ways to reduce birth certificate fraud, including any use of a birth certificate to obtain an SSN or State or Federal identification or immigration document.

Effective upon enactment.

Driver's license requirements

Prohibits Federal agencies from accepting for any identification-related purpose a driver's license, or comparable identification document, issued by a State, unless the license: has an application process that requires the presentation of such evidence of identity as is required by regulations published by the Secretary of Transportation within 1 year of enactment; is consistent with regulations that require security features designed to limit tampering, counterfeiting, photocopying, and use of the license or document by imposters; and contains the SSN which can be read visually or by electronic means. (This requirement does not apply if the State does not require the SSN to appear on the license; requires every applicant for a license to submit his/her SSN; and requires State verification with SSA that the SSN is valid.)

The restriction on acceptance of drivers licenses by Federal agencies would be effective beginning October 1, 2000.

Development of prototype of counterfeit-resistant social security card

Required the Commissioner of Social Security, within 1 year of enactment, to develop a prototype of a counterfeit-resistant Social Security card that: is made of durable, tamper-resistant material (e.g., plastic); employs technologies that provide security features (e.g., magnetic stripe); and provides individuals with reliable proof of citizenship or legal resident noncitizen status.

Requires the Commissioner of Social Security and the Comptroller General each to study and report to Congress on different meth-

ods of improving the Social Security card application process, including: evaluation of the cost and workload implications of issuing a counterfeit-resistant Social Security card for all individuals over a 3-, 5-, and 10-year period; and evaluation of the feasibility and cost implications of imposing a user fee for replacement cards and cards issued to individuals who apply for such a card prior to the scheduled 3-, 5-, and 10-year phase-in options.

OTHER PROVISIONS

Employment verification

Requires three specific pilot programs to begin no later than 1 year after enactment and end no later than 4 year after the pilot begins.

Provides for employers to participate voluntarily in any one of the pilots.

Basic Pilot—employers in five of the seven States with the highest estimated population of noncitizens not lawfully present are to confirm, through a toll-free telephone line or other electronic media system established by the Attorney General, the identify and employment eligibility of the individual based on SSN and immigration document (if applicable).

Citizen Attestation Pilot—an employer would not confirm identify or work authorization for individuals attesting that they are citizens. This pilot would operate only in States with a driver's license that contains a photograph and has been determined by the Attorney General to have security features/reliable means of identification.

Machine-readable Document Pilot—an employer would confirm an individual's identify and work authorization by means of a machine-readable SSN on a driver's license. This pilot would apply to individuals who do not attest citizenship and would operate only in States with a driver's license that contains a photograph and has been determined by the Attorney General to have security features/reliable means of identification.

Requires SSA to advise whether the name and SSN match SSA records and whether the SSN is valid for employment. In cases of tentative non-confirmation, the Attorney General in consultation with SSA and the INS must provide a secondary verification process to confirm (or not) the validity of the information provided.

Verification of alien student eligibility for post-secondary federal student financial assistance

Required the Secretary of Education and the Commissioner of Social Security jointly to submit to Congress within 1 year of enactment of the legislation a report on the Department of Education computer matching program for student loan, grant, or work assistance purposes. The report was to include: an assessment of the effectiveness of the computer matching program, and a justification for such assessment; the ratio of successful matches under the program to inaccurate matches; and such other information as the Secretary and the Commissioner jointly consider appropriate.

ITEM 31—DEPARTMENT OF VETERANS AFFAIRS

ACTIVITIES ON BEHALF OF OLDER VETERANS FOR FISCAL YEAR 1995

I. INTRODUCTION

The Department of Veterans Affairs has the potential responsibility for a beneficiary population of more than 26 million veterans whose median age is approximately 57 years. Over thirty-three percent of the veteran population is age 65 and older. By the year 2005, over four and a half millions veterans will be 75 years or older.

This demographic trend will require VA to redistribute its resources to meet the different needs of this older population. Historically, older persons are greater users of health care services. The number of physician visits, short-term hospital stays, and number of days in the hospital all increase as the patient moves from the fifth to seventh decade of life.

VA has developed a wide range of services to provide care in a variety of institutional, non-institutional, and community settings to ensure that the physical, psychiatric and socioeconomic needs of the patient are met. Special projects, a variety of innovative, medically-proven programs and individual VA medical center (VAMC) initiatives have been developed and tested that can be used for veteran patients and adapted for use by the general population.

VA operates the largest health care system in the Nation, encompassing 173 hospitals, 131 nursing home care units, 39 domiciliaries, and 391 outpatient clinics. Veterans are also provided contract care in non-VA hospitals and in community nursing homes, fee-for-service visits by non-VA physicians and dentists for outpatient treatment, and support for care in 77 State Veterans Homes in 39 States. As part of a broader VA and non-VA network, affiliation agreements exist between virtually all VA health care facilities and nearly 1,000 medical, dental, and associated health schools. This affiliation program with academic health centers results in almost 109,000 health profession students receiving education and training in VAMCs each year.

In addition to VA hospital, nursing home and domiciliary programs, VA is increasing the number and diversity of non-institutional extended care programs. The dual purpose is to facilitate independent living and keep the patient in a community setting by making available the appropriate supportive medical services. These programs include Hospital-Based Home Care, Community Residential Care, Adult Day Health Care, Psychiatric Day Treatment and Mental Hygiene Clinics, and Homemaker/Home Health Aide Services.

The need for both acute and chronic hospitalization will continue to rise as older patients experience a greater frequency and severity of illness, as well as a different mix of diseases, than younger patients. Cardiovascular diseases, chronic lung diseases, cancers, psychiatric, and mental disorders, bone and joint diseases, hearing and vision disorders, and a variety of other illnesses and disabilities are all more prevalent in those persons age 65 and older.

II. Geriatrics and Extended Care Programs

VA nursing home care

Nursing Home Care Units (NHCU), which are based at VA medical centers, provide skilled nursing care and related medical services. An inter-disciplinary approach to care is employed, which encourages diverse professional staff, working together, to meet the multiple physical, social, psychological, and spiritual needs of the patients. Nursing home patients typically require a prolonged period of care and/or rehabilitation services to attain and/or maintain optimal functioning.

In fiscal year 1995, more than 33,000 veterans were treated in 131 VA nursing homes, generating a total average daily census (ADC) of almost 13,600.

VHA is continuing to offer NHCU staff educational programs to enhance the care of the mentally ill nursing home patient. Interest in the use of the Patient Assessment Instrument (Minimum Data Set) remains high. While the use of this instrument is not mandated, many facilities have reported plans to adopt it.

Community nursing home care

This is a community-based, contract program for veterans who require skilled or intermediate nursing care when making a transition from a hospital setting to the community. Veterans who have been hospitalized in a VA facility for treatment, primarily for a service-connected condition, may be placed at VA expense in community facilities for as long as they need nursing care. Other veterans may be eligible for community placement at VA expense for a period not to exceed 6 months. Selection of nursing homes for a VA contract requires the prior assessment of participating facilities to ensure they meet our standards of care. Follow-up visits are made to veterans by teams from VA medical centers to monitor patient programs and quality of care.

In September, 1995, VA issued a request for proposals (RFP) to corporate level, multi-state nursing home providers for bids to provide nursing home care to veterans with a minimum level of guaranteed expenditures. Responses to the RFP were received in January, 1996. Up to six multi-state contracts are expected to be established by mid-1996. This initiative is expected to result in reduced administrative costs (and potentially per diem costs), improvement of VA's access to nursing home beds, and more consistent quality of care.

In fiscal year 1995, 27,000 veterans were treated in the program. The number of nursing homes under contract was 3,500 and the average daily census of these homes was 8,300.

VA DOMICILIARY CARE

Domiciliary care in VA facilities provides necessary medical and other professional care for eligible ambulatory veterans who are disabled by disease, injury, or age and are in need of care but do not require hospitalization or the skilled nursing services of a nursing home.

The domiciliary offers specialized interdisciplinary treatment programs that are designed to facilitate the rehabilitation of patients who suffer from head trauma, stroke, mental illness, chronic alcoholism, heart disease and a wide range of other disabling conditions. With increasing frequency, the domiciliary is viewed as the treatment setting of choice for many older veterans.

Implementation of rehabilitation-oriented programs has provided a better quality of care and life for veterans who require prolonged domiciliary care and has prepared increasing numbers of veterans for return to independent or semi-independent community living.

Special attention is being given to older veterans in domiciliaries with a goal of keeping them active and productive as well as integrated into the community. The older veterans are encouraged to utilize senior citizens and other resources in the community where the domiciliary is located. Patients at several domiciliaries are involved in senior center activities in the community as part of VA's community integration program. Other specialized programs in which older veterans are involved include Foster Grandparents, Handyman Assistance to senior citizens in the community, and Adopt-A-Vet.

In fiscal year 1995, 18,100 veterans were treated in 40 VA domiciliaries resulting in an average daily census of 5,713. Of these numbers, approximately 3,410 veterans and an average daily census of more than 1,300 were admitted to the domiciliaries for specialized care for homelessness. This latter group had an average age of 43 years, while the overall average age of domiciliary patients was 59 years.

STATE HOMES

The State Home Program has grown from 10 homes in 10 states in 1888 to 77 state homes in 39 States. Currently, a total of 22,510 beds is authorized by VA to provide hospital, nursing home, and domiciliary care. VA's relationship to state veterans homes is based upon two grant programs. The per diem grant program enables VA to assist the states in providing care to eligible veterans who require domiciliary facilities. The other VA grant program provides up to 65 percent federal funding to states to assist in the cost of construction or acquisition of new domiciliary and nursing home care facilities, or the expansion, remodeling, or alteration of existing facilities.

HOSPICE CARE

VA has developed programs that provide pain management, symptom control, and other medical services to terminally ill veterans, as well as bereavement counseling and respite care to their families. The hospice concept of care is incorporated into VA medical center approaches to the care of the terminally ill. All VA medi-

cal centers have appointed a hospice consultation team, which is responsible for planning, developing, and implementing the hospice program.

HOSPITAL-BASED HOME CARE

This program provides in-home primary medical care to veterans with chronic illnesses. The family provides the necessary personal care under the coordinated supervision of a hospital-based interdisciplinary treatment team. The team prescribes the needed medical, nursing, social, rehabilitation, and dietetic regimens, and provides the training of family members and the patient in supportive care.

Seventy-five VA medical centers are providing hospital-based home care (HBHC) services. In fiscal year 1995, home visits were made by health professionals to an average daily census of 5,000 patients.

ADULT DAY HEALTH CARE

Adult Day Health Care (ADHC) is a therapeutically-oriented ambulatory program that provides health maintenance and rehabilitation services to veterans in a congregate setting during the daytime hours. ADHC in VA is a medical model of services, which in some circumstances may be a substitute for nursing home care. VA operated 13 ADHC centers in fiscal year 1995, with an average attendance of 450 patients. VA also continued a program of contracting for ADHC services at 83 medical centers. The average daily attendance in contract programs was 419 in fiscal year 1995.

COMMUNITY RESIDENTIAL CARE

The Community Residential Care home program provides residential care, including room, board, personal care, and general health care supervision to veterans who do not require hospital or nursing home care but who, because of health conditions, are not able to resume independent living and have no suitable support system (e.g., family, friends) to provide the needed care. All homes are inspected by a multidisciplinary team prior to incorporation of the home into the VA program and annually thereafter. Care is provided in private homes that have been selected by VA, at the veteran's own expense. Veterans receive monthly follow-up visits from VA health care professionals. In fiscal year 1995, an average daily census of 9,200 veterans was maintained in this program, utilizing approximately 2,100 homes.

HOMEMAKER/HOME HEALTH AIDE SERVICES (H/HHA)

In fiscal year 1995, VA initiated a pilot program of health-related services for veterans needing nursing home care, implementing provisions of Public Law 101–366. These services are provided in the community by public and private agencies under a system of case management provided directly by VA staff. For the purpose of the initiative, health-related services are defined as homemaker/home health aide services only.

One hundred eighteen VAMCs were purchasing H/HHA services in fiscal year 1995 for approximately 4,200 veterans.

GERIATRIC EVALUATION AND MANAGEMENT PROGRAM (GEM)

The Geriatric Evaluation and Management (GEM) Program includes inpatient units, outpatient clinics, and consultation services. A GEM Unit is usually a functionally different group of beds (ranging typically in number from 10 to 25 beds) on a medical service or an intermediate care unit of the hospital where an interdisciplinary health care team performs comprehensive geriatric assessments. The GEM unit serves to improve the diagnosis, treatment, rehabilitation, and discharge planning of older patients who have functional impairments, multiple acute and chronic diseases, and/or psychosocial problems. GEM clinics provide similar comprehensive care for geriatric patients not in need of hospitalization as well as provide follow-up care for older patients to prevent their unnecessary institutionalization. A GEM program also provides geriatric training and research opportunities for physicians and other health care professionals in VA medical centers. Currently, there are 130 GEM Programs.

Results from a controlled, randomized study of GEM efficacy that was conducted at the VA Medical Center Sepulveda, CA, and published in the New England Journal of Medicine in 1984, showed significant benefits such as improved survival, decreased rehospitalization rates, improved functional status, and decreased nursing home placement following admission to GEM units.

CARE OF THE ACUTE AND CRITICALLY ILL ELDERLY

In 1995, VA Headquarters completed its third printing of a supplemental guide for medical center staff who care for the acutely-ill veteran (Geriatric Pocket Pal). This guide is used by residents, nurses, and allied health personnel in all VA medical centers. Many requests have been received from non-VA clinical staff for this popular VHA publication, developed by VA Headquarters and field staff. The Geriatric Pocket Pal was revised in November, 1994, to include updated reference materials and incorporate additional information.

RESPITE CARE

Respite Care provides planned, periodic, short-term care for a disabled person in order to temporarily relieve the caregiver from the physical and emotional burden of providing the needed care and supervision. VA provides respite care by admitting a veteran to a hospital or nursing home bed for up to thirty days a year. This institutionally-based program not only supports this caregiver's role in caring for the veteran at home, but also provides an opportunity for VA staff to evaluate and treat the veteran's health care needs and offer guidance to the caregiver in the home treatment plan.

ALZHEIMER'S DISEASE AND OTHER DEMENTIAS

VA's program for veterans with Alzheimer's disease and other dementias is decentralized throughout the medical care system, with coordination and direction provided by the Office of Geriatrics and Extended Care. Veterans with these diagnoses participate in all aspects of the health care system including outpatient programs,

acute care programs and extended care programs. Approximately 56 medical centers have established specialized programs for the treatment of veterans with dementing illnesses. Policy guidance concerning a continuum of dementia services to be provided in VA's health care networks is currently under development.

In order to advance knowledge about the care for veterans with dementia, VA investigators conduct basic biomedical, applied clinical and health services research, much of which occurs at VA's Geriatric Research, Education and Clinical Centers (GRECCs), and which is supported through the Office of Research and Development. Rehabilitation Research and Development Service develops and evaluates new technologies and techniques designed to minimize disability associated with dementia. Continuing education for staff is provided through training classes sponsored by GRECCs and VA's continuing education field units.

VA Headquarters has disseminated a variety of dementia patient care educational materials in the form of publications and videos to all VA medical centers. In fiscal year 1990, all VA libraries received a revised edition of guidelines for diagnosis and treatment of dementia, a series of 21 dementia caregiver education pamphlets developed by the Minneapolis GRECC, and 3 videotapes on Alzheimer's disease developed by the Bedford Division of the Boston GRECC. In fiscal year 1993, VA libraries received a series of 3 geriatric health care videotapes that are relevant to dementia patient care. In addition, a comprehensive instructional program, "Keys to Better Care," was made available to all VA medical centers through regional audiovisual delivery sites. This 14-part training package for health care providers caring for patients with Alzheimer's Disease and other dementias addresses a wide range of issues related to quality care and it is being used extensively by VA staff. Also, an audiovisual videotape on rehabilitation of the cognitively-impaired patient, produced by the Northeast VA Learning Resources Service, was made available at all VA libraries.

During 1990 and 1991, VA Headquarters surveyed a sample of VA medical centers with established inpatient units for patients with dementia. A summary report of these dementia unit site visits was published by VA in September, 1993, and has been disseminated widely throughout the VA system and to the non-VA community. The report details the organization and delivery of inpatient services to dementia patients from admission to discharge. Results of these site visits will aid in planning future dementia programs and services, with information addressing such issues as dementia unit staffing patterns, programming, and overall organization.

In fiscal years 1994 and 1995, VA conducted teleconferences that featured national experts on Alzheimer's disease. Presented were state-of-the-art strategies for diagnosis and treatment of this devastating disease from a primary care perspective. Staff at both VA and non-VA sites, including State Veterans Homes, participated in these educational teleconferences.

As a further development, a joint VA/University Health System Consortium (UHC) technical advisory group has been working since July, 1995, on an updated clinical guideline for the identification and assessment of dementia. The guideline, which will empha-

size the role of primary care clinicians in the diagnostic process, will be distributed throughout the VA and UHC systems.

Also, in fiscal year 1995, a comprehensive Center for Alzheimer's Disease and Other Neurodegenerative Disorders was begun at the Oklahoma City VA Medical Center. The goal of the Center is to develop and evaluate a rural health model for the coordinated care of patients with Alzheimer's disease or other degenerative neurological disorders in the state of Oklahoma. Using an interdisciplinary, case-management approach, the Center provides patient services, including outpatient diagnosis, treatment and follow-up care, as well as support for family and other caregivers of veterans with these disorders. The use of telemedicine technology is being explored to enhance communication among providers in distant settings. Collaborative relationships between VA, state and local community organizations will be coordinated to meet the community service needs of these patients and their families. Relevant staff education, training, and research activities will also be developed.

GERIATRIC RESEARCH, EDUCATION, AND CLINICAL CENTERS (GRECCS)

The Geriatric Research, Education, and Clinical Centers (GRECCs) assume an important role in further developing the capability of the VA health care system to provide cost-effective and appropriate care to older veterans. First implemented in 1975, GRECCs are designed to enhance the system's capability to develop state-of-the-art care in geriatrics through research, education, and clinical care. The goals of the GRECCs are to develop new knowledge regarding aging and geriatrics, to disseminate that knowledge through education and training to health care professionals and students, and to develop and evaluate alternative models of geriatric care.

GRECCs have developed many innovative approaches to educate and train VA clinical staff who care for elderly veterans. GRECC staff have continued to expand their outreach education and training to provide expertise to VA staff, particularly in the area of geriatric evaluation and management. Also, GRECCs have developed individual topic-specific education programs for the networks they serve and have collaborated with other GRECCs to present this information to clinical staff in other networks as well. This provides a significant number of clinical staff with the state-of-the-art information on specific issues concerning care of the elderly.

Each GRECC has developed an integrated program of basic and applied research, education, training, and clinical care in selected areas of geriatrics. Current focal areas include cardiology and prevention of cardiovascular disease; cognitive and motor dysfunction and neurobiology; endocrinology, swallowing disorders, metabolism and nutrition; geropharmacology; immunology, cancer and infectious diseases; osteoporosis and arthritis; falls; exercise physiology; geriatric rehabilitation; sensory impairment; depression; bio-ethical aspects of medical decision-making in the elderly; and cost-effective and quality of geriatric care. Using an integrated approach, the GRECCs are developing practitioners, educators, and researchers to help meet the need for training health care professionals in the field of geriatrics; providing information for, as well as establishing models on, cost-effective approaches to care of the elderly; and re-

searching better methods to diagnose and treat health care problems of the older person, as well as finding answers to fundamental questions on the processes and consequences of aging.

At present there are 16 GRECCs. They are located at the following VA medical centers: Ann Arbor, MI; Baltimore, MD; Bedford and Brockton/West Roxbury, MA (2 divisions); Durham, NC; Gainesville, FL; Little Rock, AR; Madison, WI; Miami, FL; Minneapolis, MN; Palo Alto, CA; San Antonio, TX; St. Louis, MO; Salt Lake City, UT; Seattle/American Lake, WA (2 divisions); Sepulveda, CA; and West Los Angeles, CA. Public Law 99–166, "Veterans Administration Health Care Amendments of 1985," increased from 15 to 25 the maximum number of facilities that the VA Secretary may designate for GRECCs.

III. Office of Clinical Programs

PRIMARY CARE

As VHA transitions from an acute, inpatient-based system of care to an outpatient, primary case-based system of care, opportunities for collaboration between geriatrics and primary care are being maximized. Most physicians in geriatrics come from an internal medicine background with a strong emphasis on primary care and an interdisciplinary team approach to patient care. As medical centers implement primary care, one of the primary care teams is in the area of geriatrics. Development of geriatric primary care is one of the goals now being highlighted and encouraged as special training teams are assisting medical centers in implementing primary care.

Two VHA publications, Sharing Innovations Among VA Clinicians and VA Innovations in Ambulatory Care, have been distributed to VHA providers. They highlight new ways of improving patient care and satisfaction. These books contain specific information about geriatric-aged patients and new techniques to meet their needs.

MEDICAL SERVICE

Medical Service in VAMCs serves as the primary source of physicians for the care of all veterans, including elderly patients. Due to the aging of the population, Medical Service is increasingly involved in all aspects of the delivery of health care to the aged. Acute and intermediate medical wards, coronary and intensive care units, nursing homes and outpatient clinics are all seeing an increased proportion of elderly patients with acute and chronic illnesses. While some care is provided specifically by geriatricians, as the population ages, all internists are seeing an older veteran population.

Some subspeciality areas are particularly impacted, such as cardiology, endocrinology (diabetes), rheumatology and oncology. Medical Service provides necessary subspecialty care in inpatient and outpatient settings in addition to participating in Geriatric Fellowship Training, GRECCs, Geriatric Evaluation and Management (GEM) Programs, Hospice, Respite, Nursing Home, and Hospital-Based Home Care. The specialized care that is required by the elderly has been recognized by Medical Service at a number of medi-

cal centers, by their establishment of a Geriatric Medicine Section, which emphasizes clinical care, as well as coordinating research and education efforts related to geriatrics.

Age alone is less frequently used as a determinant of an individual patient's care. Geriatric patients undergo invasive diagnostic procedures as well. For example, the Sunbelt is experiencing an increasingly heavy cardiac catheterization workload. The average age of patients treated in coronary and intensive care units is increasing, producing a concomitant demand for cardiac rehabilitation and physical fitness programs that are targeted to the frail elderly and the physically handicapped of all ages. The special interest and involvement of Medical Service in geriatrics has also resulted in participation by internists in such programs as Adult Day Health Care, as well as in research problems in nutrition and treatment by hypertension.

Smoking cessation has been shown to benefit even elderly patients. Thus, the role of Preventive Medicine for this patient population has expanded. The Medical Service has been active in implementing preventive strategies in smoking cessation, immunization (influenza and pneumococcal vaccines), and colorectal screening (for cancer). Lipid control is an emerging area that may benefit this population.

Participation in evaluation and treatment of elderly patients by interdisciplinary teams during intermediate-length hospital stays will be an increasingly important role for the physicians of the Medical Service.

SOCIAL WORK SERVICE

Meeting the biopsychosocial health care needs of an aging population of veterans and caregivers continues to be a major priority of Social Work Service and the Veterans Health Administration. The need to be competitive in a challenging and changing health care environment, as well as cost-effective and efficient in addressing the social components of health care, has led to a re-examination of social work priorities and their relevance to the VA health care mission, with special reference to the needs of chronically ill, older veterans. Without a support network of family, friends, and community health and social services health care gains would be lost and VHA acute care resources would be over-burdened. It is frequently not the degree of illness that determines the need for hospital care, but rather the presence or absence of family and community resources.

The expansion of homemaker/home health aide services is evidence of the importance of non-institutionalized support networks in maintaining the veteran in the community. Social workers continue to coordinate discharge planning and to serve as the focal point of contact between the VA medical center, the veteran patient, family members, and the larger community health and social services network. The veteran and family members have, in many respects, become the "unit of care" for social work intervention. It is this "customer" focus which will undergird social work programming for vulnerable populations, including older veterans who are demanding that VHA be more responsive and sensitive to their psychosocial needs and those of their caregivers.

The role of the caregiver as a member of the VA health care team and as a key player in the provision of health care services continues to be a major area of social work practice and will continue to be in the immediate future. This is consistent with the recognition that 80 percent of nursing care is provided in the home by family, neighbors, etc., and that the family, ordinarily the veteran's spouse, is the key decision-maker concerning health insurance issues, and, most probably, access to health and community support services.

As VHA transitions from an acute care to a primary care/community interactive health care delivery system, Social Work Service has placed increased emphasis on its pivotal role in community services coordination, development, and integration. The development of a "seamless garment of care," with case management services as its centerpiece, is being given increased emphasis by Social Work Service and its National Committee. The National Committee functions in an advisory capacity concerning social work and systems issues, priorities, and practice concerns. While case management services have been a central component of social work practice in VHA, this service modality is being "re-discovered" by the VA health care system as an essential component of services provided to "at-risk" veterans and their caregivers. Case management, also known as "care coordination," was identified in veterans' discussion groups as a very important ingredient in meeting the veterans' health care needs and those of their caregivers. During 1995 and beyond, VHA, and particularly Social Work Service, will be challenged to expand case management services in concert with other community providers and to provide a perspective that addresses this critical ingredient of care in terms of its absolute relevance to successful health care outcomes. In a revitalized and reconfigured VA health care system, issues of coordination, access, cost, and appropriateness of VA and community services will be determined not only by the needs of the customers, but also by the experience and expertise of the providers.

Older veterans, including those from some minority groups such as Native Americans, are at significant risk for the development of health care problems related to geographic isolation, economic deprivation, and cultural barriers. The Interagency Task Force on Older Indians continues to address issues of concern related to the provision of services to a population that has been underserved by the Federal sector. The Department of Veterans Affairs, represented by Social Work Service, has been an active member of this consortium.

REHABILITATION RESEARCH AND DEVELOPMENT

The mission of the Rehabilitation Research and Development (Rehab R&D) Service is to investigate and develop concepts, products and processes that promote greater functional independence and improve the quality of life for impaired and disabled veterans. Aging, particularly the aging of persons with disabilities, is a high priority of the service. Efforts in this area include:

A national VA program of merit-reviewed, investigator-initiated research, development and evaluation projects targeted to meet the needs of aging veterans with disabilities;

Support of a Rehabilitation Research and Development Center on Aging at Decatur, Georgia, VA Medical Center; and

Transfer into the VA health care delivery system of developed rehabilitation technology and dissemination of information to assist the population of aging veterans and those who care for them.

In addition to specific projects on aging, may of the investigations supported through the Service's nationwide network of research at VAMCs and at four Rehabilitation Research and Development Centers have relevance for impairments commonly associated with aging.

Some samples of investigator-initiated studies currently being carried out are:

A Low-Vision Enhancement System (LVES);

Liquid Crystal Dark-Adapting Eyeglasses;

Electronic Travel Aid for the Blind;

Non-Auditory Factors Affecting Hearing Aid Use in Elderly Veterans;

The Influence of Strength Training on Balance and Function in the Aged; and an

Epidemiologic Study of Aging in Spinal Cork Injured Veterans.

The Rehab R&D Center on Aging is structured around five interdisciplinary research sections to address the multi-dimensional nature inherent in problems of aging and disability: Environmental Research; Vision Rehabilitation; Neuro-Physiology; Engineering and Computer Science; and Social, Behavioral, and Health Research. Areas of study include:

Design-related problems that affect the quality of life of older people, including least restrictive environments, falls, independence and safety;

Orientation and mobility for the blind, low vision, and rehabilitation outcomes measurement for older persons with visual impairment;

The neurologic and physiologic changes that accompany aging and behavioral coping problems; and

Development and application of new technologies to a variety of prototypes for the design of assistive devices and assistive software.

PHYSICAL MEDICINE AND REHABILITATION MEDICINE

Physical Medicine and Rehabilitation Service (PM&RS) strives to provide all referred older veterans with comprehensive assessment, treatment and follow-up care for psychosocial and/or physical disability affecting functional independence and quality of life. The older veterans's abilities in the areas of self-care, mobility, endurance, cognition and safety are evaluated. Therapists utilize physical agents, therapeutic modalities, exercise and the prescription of adaptive equipment, to facilitate the veterans' ability to remain in the most independent life setting. Rehabilitation personnel provide education to the veterans and their families around adjustment to their disability or physical limitations and instruct them in techniques to maintain independence despite disability.

Over 6,000 veterans per year receive treatment and are discharged from inpatient rehabilitation programs at approximately 65 medical centers. There is a growing number of subacute rehabilitation programs being established at medical centers across the nation. The subacute setting affords us the ability to provide less intense rehabilitative services for the older veteran, aimed at promoting an individuals' integration back into the community. On both acute and subacute rehabilitation units, physicians, usually board certified physiatrists, lead interdisciplinary teams of professionals to focus on outcomes of functional restoration, clinical stabilization, or avoidance of acute hospitalization and medical complications.

A uniform assessment tool, the Functional Independence Measure (FIM), is being implemented throughout the VA rehabilitation system. Patients are evaluated on 18 elements of function at the time of admission, regularly during treatment and at discharge. Application of FIM results to quality management activity will assist local and national rehabilitation clinicians and managers to maximize effective and efficient rehabilitation care delivery. An administrative data base called the Uniform Data System for Medical Rehabilitation (UDS/mr) will monitor outcomes of care and increase accuracy of developing predictors and ideal methods of treatment for the older veteran with various diagnoses. As part of a national contract with UDS/mr, 65 facilities with rehabilitation bed units provide data and receive outcome reports as part of the national and international UDS/mr data bank.

Rehabilitation therapists are leading and participating in innovative treatment, clinical education, staff development and research. Rehabilitation professionals work within homebound health care; independent living centers; Geriatric Evaluation and Management Units; Adult Day Health Care; Day Treatment Centers; Domiciliaries; Interdisciplinary Team Training Programs; Geriatric Research, Education, and Clinical Centers (GRECCs); and hospice care programs.

Driver training centers are staffed at 40 VA medical centers to meet the needs of aging and disabled veterans. With the growing numbers of older drivers, the Department of Veterans Affairs has put emphasis on the training of the mature driver. Classroom education, updates in laws and defensive driving techniques are supported with behind-the-wheel evaluation by trained specialists.

NURSING SERVICE

Care of the elderly veteran continues to be one of the highest priorities for Nursing Service. Nurses at every level of the organization are committed to providing leadership in the clinical, administrative, research, and educational components of gerontological nursing.

Professional nurses function as part of interdisciplinary teams to coordinate and provide care in settings beginning with Geriatric Evaluation and Management Programs (GEMs) and progressing along many care settings including ambulatory care, acute care, long-term care, and community agencies. Gerontological nurse practitioners and clinical nurse specialists provide primary care

and continuity of care as clinical care managers and coordinators of care.

Preventive care and health promotion incentives continue to preserve independence, foster self-care, improve productivity, and enhance the quality of life by improving the health status of aging veterans. Proper screening, education, and referral of elderly veterans are vital activities to meet their health care needs in the least restrictive environment. Nurses in wellness clinics and other ambulatory care settings provide supervision, screening, and health education programs to assist veterans in maintaining healthy lifestyles.

Nurses play a key role in restoring the functional abilities of aging veterans with chronic illnesses and disabilities. Programs for the physically disabled and cognitively impaired have been established and are administered by nurses and nurse practioners in home care, ambulatory care settings, and inpatient units. Treatment programs are goal-directed toward physical and psychosocial reconditioning or retraining of patients with biological and psychosocial disturbances. Patient and family teaching is a major part of each program. Family and significant others have a key role in providing support to aging veterans and are assisted in learning and in maintaining appropriate caregiver responsibilities. VA nurses contribute to planning and implementing health care services for the elderly in the community-at-large. They serve on task forces and participate in self-help and support groups related to specific diseases such as Alzheimer's. Nurses are also advisors to local health planning councils, and they share VA educational activities and research seminars with other health care professionals.

Nursing leaders continue to collaborate with schools of nursing to offer positive learning experiences in both undergraduate and graduate nursing education. Nursing schools are encouraged to focus more attention on programs in geriatrics, rehabilitation, and chronic care. Graduate nursing students receive clinical experience in Geriatric Evaluation and Management Programs, Nursing Home Care Units, and Hospital Based Home Care Programs. Nursing Service is committed to leadership that will ensure the patient care needs of aging veterans are addressed. The preceptorship training program for the position of Associate Chief or Supervisor Nursing Home Care Unit is on hold until the need for nurses in these positions has been determined. The interdisciplinary approach to reduce poly-pharmacy continues, with several nursing home care units reporting successful programs.

Nursing Service continues to support restraint-free environments throughout the VA health care system. Several VAMCs report a variety of successful strategies to reduce the use of restraints, including a successful interdisciplinary approach to understanding, evaluating, and developing alternatives to physical restraints. Disciplines involved include Nursing, Medicine, Pharmacy, Dietetics, Recreation, Rehabilitation, and Social Work. Strategies that contribute to restraint reduction include an electronic wandering alert system, a gait training program, education of family members, greater use of volunteers and use of hospital beds with egress alarms.

Many medical centers across the VA system have developed new initiatives to improve the quality of care for aging veterans. Many such interventions have improved the quality of life of patients as well as the quality of care. Some of these include the following:

An interdisciplinary autonomy committee to create an environment in which resident autonomy is enhanced and promoted while meeting the therapeutic needs.

A variety of unique approaches to meet nutrition needs of aging patients in long-term care settings. Successful interventions included interdisciplinary total quality improvement teams for nutrition support and care, an interdisciplinary progressive self-feeding program and a dining together program.

The use of Tai-Chi to promote health and improve the quality of life for the institutionalized aging patient. Preliminary data suggest improvement in physical functioning and improved scores on mental status tests for dementia patients.

An enhanced Geriatric care project developed to provide a safe user friendly therapeutic environment while promoting an environment conducive to wellness. Outcomes of the project include the following:

A safe and protective area for wandering patients;

Greater patient participation, communication, and socialization through the use of outdoor activities;

Enhanced customer and staff satisfaction.

The use of primary care to reduce admissions and length of stays for nursing home patients in acute care settings. The use of multidisciplinary teams to provide Geriatric Primary Care for the frail elderly and those over the age of 75.

An innovative program designed to prevent and/or minimize the effects of bed rest utilizing a mobility program called VIPS (Volunteer in Professional Service). The program was designed to increase routine ambulating of patients utilizing trained volunteers. Outcomes of the program include enhanced mobility, return of patient to a less restrictive environment, and increased companionship and socialization for patients with limited mobility.

Research is needed to advance health care for older persons and to improve gerontological nursing practice. Nursing research is urgently needed to improve the quality of care in the following areas:

Urinary incontinence;

Common eating patterns, programs, and nutrition;

Falls;

Enhancing socialization skills;

Care of Alzheimer's patients;

Wandering behavior;

Dementia;

Exercise and mobility;

Medications, including effectiveness of psychotropic medications, and types and incidence of medication abuse among the elderly;

Health promotion;

Frail elderly in the home setting;

Alternatives to institutional care; and

Coping mechanisms of patients, families, and caregivers.

Studies are needed to enhance the quality of life for aging female veterans in a health care system largely focused on a male model of care. Osteoporosis is a serious metabolic bone disease which affects post-menopausal women to a greater degree than men. Women veterans who served during and prior to the Korean and Vietnam Wars are a prime risk group for this disease. Timely application of research findings to clinical care in all practice settings will improve the quality of care and quality of life to aging veterans.

NUTRITION AND FOOD SERVICE

Medical nutrition care saves money, improves patient outcomes and enhances the quality of life for our older veterans. To better serve the veteran and identify nutritional needs, many VA health care professionals are now using *Determine Your Nutritional Health Checklist* and *Level I and II Nutrition Screen* developed by the American Dietetic Association, American Academy of Family Physicians and National Council on Aging National Screening Initiative. The *Checklist* or *Level I Screen* identifies those at high risk for poor nutritional status, while *Level II Screen* provides specific diagnostic nutritional information. The National Screening Initiative emphasizes educating the physician in nutritional care. The booklet, *Incorporating Nutrition Screening and Interventions into Medical Practice*, has been nationally disseminated to doctors. This information complements the handbook, *Geriatric Pocket Pal*, developed in collaboration with the Office of Geriatrics and Extended Care.

Many medical centers have Geriatric Nutrition Specialist positions. Dietitians in these positions have developed easy-to-read educational materials for their audience and shared this information with other medical centers. Several medical centers are providing outreach services for the elderly in their community. For example, the Bronx VAMC provides outreach to local senior centers, and the Dallas VAMC has bi-monthly visits by their health screening team to facilities in their area. A variety of nutrition education programs have been offered for health care providers and patients.

Nutrition and Food Service continues to provide guidance on quality care. Several practice guidelines have been distributed to all the medical centers to ensure quality care for our elderly. In addition, Tomah VAMC has developed interdisciplinary guidelines for the care of dysphagia. The clinical indicator to ensure that the patient not only receives food, but also is fed, was distributed to all medical centers. Northampton VAMC developed an indicator for high-risk geriatric patients who are overweight.

OFFICE OF DENTISTRY

Dental care for the geriatric patient involves restoration of function through rehabilitation of the dentition, and elimination of pain and suffering attributable to oral disease. It is important that older adults are able to effectively masticate a variety of foods so that convalescence after surgery, chemotherapy, or other significant medical interventions is expedited.

Interpersonal skills, which are highly dependent upon physical appearance, as well as effective communication, can be enhanced by improving the teeth's appearance and by properly aligning and restoring the anterior teeth to maintain clarity of speech. The goals of dental care are consistent with those of all disciplines involved in geriatrics—to maximize function and foster independence in living. Dentistry should be an integral part of any comprehensive health care program for the elderly.

The nature of dental disease in late life—chronic and often asymptomatic even in advanced stages, aggravated by coexistent medical problems, and perceived as a low priority by health funding agencies—requires an increased emphasis on preventive services. Innovative, individualized, preventive dental programs are often necessary for each patient. Preventive modalities include the use of home-applied fluoride solutions, anti-microbial mouth rinses, specially fabricated tooth brushes, instruction to family or care givers on oral hygiene techniques, and more frequent dental examinations. These are low-cost yet effective measures that can obviate the need for future expensive or invasive dental care. VA has been a world leader in developing preventive dental therapies and field testing them for clinical efficacy.

Oral cancer is a disabling and disfiguring disease that primarily affects middle-aged and older adults. Ninety-five percent of cases occur in those over 40. Alcohol, tobacco, and advanced age are important risk factors in the development of this disease. Early detection of frequently asymptomatic lesions can significantly reduce the disease's morbidity. Through a long-standing program of oral screening examinations, VA dentists have been able to expeditiously detect incipient oral cancers. Such interventions minimize the need for ablative surgery, which often results in swallowing and eating difficulties. Early detection can also significantly reduce mortality rates.

Most VA Medical Centers have established Geriatric Evaluation and Management (GEM) programs. Dental Services contribute to the GEM's interdisciplinary team effort by conducting admission oral assessments, collaborating on treatment planning, providing specialty consultations and needed care, and preparing summaries of oral care protocols to be maintained after discharge. Oral examinations conducted during GEM admissions commonly identify problems previously undetected that can impede chewing efficiency, safe swallowing, and clearly articulated speech. Interdisciplinary treatment planning takes advantage of the synergy associated with group efforts. Patients are rehabilitated more rapidly with properly staged and coordinated care. New problems and unexpected outcomes are better addressed by geriatric interdisciplinary teams. For matters involving the oral-dental complex, dentistry has responded with timely assessment, definitive diagnosis, and recommended treatment. At discharge a review of the patient's response to treatment, plan for maintenance, and guidance for future care are prepared. The GEM Program has been an ideal environment for dentistry to demonstrate its relative merit and range of contributions to the interdisciplinary team.

The VA Program Guide: *Oral Health Guidelines for Long Term Care Patients* developed by the Offices of Dentistry, Clinical Af-

fairs, and Geriatrics and Extended Care, continues to serve as the primary handbook for management of the multidisciplinary oral health efforts. It describes the goals, implementation, and monitoring of oral care provision for patients in VA long term care programs.

The impact of VA programs in geriatric dentistry is not limited to its own health care system, but extends to a broader level. VA dentistry is represented on both National Institute of Dental Research (NIDR) reviews and a U.S. Surgeon General's workshop on oral health promotion and disease prevention. The American Association of Dental Schools (AADS) has an ongoing Geriatric Education Project that has developed curricular guidelines for teaching concepts in gerontology and geriatrics to dental and dental hygiene students. VA dentists have been noteworthy contributors to these efforts to define geriatric educational objectives and identify resource materials for dental faculty members.

I response to the 1993 research agenda setting conference "Oral Health for Aging Veterans—Making a Difference: Priorities for Quality Care," emphasis is not being directed to improving outcomes for geriatric dental interventions. VA researchers and clinicians in a variety of settings are assessing the risk/benefit ratio of specific treatment modalities to determine which are the most effective. These efforts represent a fundamental shift from research involving process to that which measures actual outcomes, and as such will be more useful to clinicians.

In summary, the Office of Dentistry continues to support efforts that will benefit older veterans in three general areas. First, optimizing the quality of dental care received by elderly patients as VA facilities is a priority. Second, education in geriatric oral health will continue to be made available to patients, dental staff, and nondental care providers such as nurses, physicians, and family members. Third, research with promise to broaden our understanding of oral disease and its treatment in older adults will be encouraged.

Office of Research and Development

In fiscal year 1995 the total Research and Development Program (which includes the medical, health services and rehabilitation research programs) expenditure on aging-related research was $13.2 million, or 8.6 percent of the total research appropriation. These funds supported 123 research projects. VA investigators were supported by an additional $14.6 million from extra VA sources to conduct aging-related research (these funds supported 192 projects).

VA Medical Research Service

As the health care needs of the veteran population change, so must the areas of research and development funded by the VA Medical Research Service (VAMRS). Currently, half the veteran population (approximately 13.2 million) is over age 56. An estimated 37 percent of veterans (approximately 9 million) will be 65 or older by the end of the decade. In response, VAMRS has devoted substantial resources to medical problems common in this population, including dementia, prostate cancer, other cancers and heart disease. VA investigators have advanced the study of neurobiology

in Alzheimer's disease, hormone regulation in prostate cancer, larynx preservation in advanced laryngeal cancer, and drug therapy or vitamin supplementation for prevention of heart disease and stroke.

Age-related dementia is a major health concern of the elderly, affecting 10 percent of people over 65. VHA predicts that 600,000 veterans will suffer from dementia by the year 2000. VAMRS spent over $4 million on studies of Alzheimer's disease and other dementias in fiscal year 1995, and an additional $17.7 million in research grants were obtained from non-VA sources. Among the nearly 300 investigator-initiated VA research projects in this area are the following:

Dr. George Bartzokis is the West Los Angeles VA Medical Center is using magnetic resonance imaging (MRI) to test hypothesis that patients with Alzheimer's disease have increased iron in several brain regions. Post-mortem studies have found elevated iron levels in the brains of these patients, so iron may play an important role in the development of the disease. Dr. Bartzokis' ongoing research suggests that MRI may be useful in diagnosing and treating Alzheimer's disease.

Dr. Douglas Galasko of the San Diego VA Medical Center is investigating proteins in cerebrospinal fluid as possible biological markers for Alzheimer's disease. If such markers are confirmed, they could lead to earlier diagnosis and treatment of the illness.

Dr. Maurice Dysken of the Minneapolis VA Medical Center is conducting a special research initiative under which neuropsychological tests are administered to subjects 80 and older. Although cognitive impairment and other problems experienced by the younger elderly have received increasing attention, data on those 80 and older are sparse.

Osteoporosis is a crippling disease that affects millions of postmenopausal women. The long hospitalizations and extended nursing home care for patients suffering bone fractures is estimated at $10 billion per year in the United States. VAMRS devoted more than $1.4 million to research on osteoporosis last year. Total grants to VA investigators for osteoporosis research exceeded $4 million and funded more than 70 projects.

Among those studying osteoporosis are Dr. Stavros Manolagas and Dr. Robert Jilka of the Little Rock VA Medical Center. They have discovered that the lack of estrogen that occurs with the completion of menopause causes an overproduction of bone scavenger cells called osteoclasts. Their work, begun at the Indianapolis VA Medical Center, opens the door to new therapies for female veterans.

Other world-recognized investigators studying osteoporosis include Dr. Norman Bell of the Charleston VA Medical Center, Dr. Gregory Mundy of the South Texas Veterans Health Care System, and Dr. David Baylink and Dr. John Farley of the Loma Linda VA Medical Center. Dr. Baylink's group is conducting multiple projects aimed at improving understanding of the unequal changes in the rates of bone formation and bone resorption in postmenopausal women. Dr. Bell studies the relationship between vitamin D and bone and is currently participating in clinical studies of drugs for treating osteoporosis.

HEALTH SERVICES RESEARCH AND DEVELOPMENT

Health Services Research and Development (HSR&D) is an area of research designed to enhance veterans' health by improving the quality and cost effectiveness of the care provided by the Department of Veterans Affairs (VA). The focus of VA HSR&D is on (1) advancing the state of knowledge about health services in VA and the nation and (2) disseminating that knowledge for practical use. The large number of aging veterans and their increasing health care needs make this population particularly important for HSR&D to study. The Service's four major program areas emphasized aging during Fiscal Year 1995 and are:

(1) The *Investigator Initiated Research (IIR)* program encourages and supports projects proposed and conducted by VA researchers, clinicians, and administrators from throughout the Nation. In this intramural program of HSR&D, VA staff conduct merit reviewed and approved projects in VA Medical Centers with oversight and advice from Headquarters. The IIR program also includes career development, which encourages interested clinicians and researchers to pursue careers in VA by guaranteeing salary support.

Forty-four percent of the 52 HRS&D investigator-initiated projects addressed questions important to aging veterans. Six new projects were initiated in Fiscal Year 1995 that impact aging veterans. Projects included studies of cardiac procedures: appropriateness and necessity of cardiac procedure use after acute coronary artery bypass graft (CABG) surgery; and tow studies addressing utilization of cardiac procedures (carotid endarterectomy and CABG) in black veterans. One study is assessing risk factors for patients who may suffer the adverse affects of drug treatment for tuberculosis and another study is developing a reliable and valid health status measure for skin disease to improve outcomes of care.

Ongoing geriatric related investigations included studies of social factors in the occurrence of cardiac events; home measurement of peak expiratory flow rate in Chronic Obstructive Pulmonary Disease; the effects of exercise training on frail, elderly veterans; Simulated Presence Therapy, a new non-pharmacologic technique, to reduce problem behaviors in patients with Alzheimer's disease; the potential demand for bone marrow transplantation, resource use, and effectiveness; and malnutrition among elderly patients.

Eight IIR projects related to aging were completed in Fiscal Year 1995. These projects included studies of the benefits of arthritic knee joint rehabilitation; risk assessment for cardiac complication after non-cardiac surgery; and evaluation of home oxygen programs as compared to outpatient facility programs; factors that influence mortality and impatient health care utilization one year following admission to a medical intensive care unit (ICU); the impact of polypharmacy use on health related quality of life; the effectiveness of managed care for improving the health status and quality of care of aging veterans; rehospitalization following surgery; pressure ulcer development in long-term care; and institutional long-term care and hospital utilization.

(2) The HSR&D *Cooperative Studies in Health Services (CSHS)* projects are multi-site health services research studies based on the model of VA's Cooperative Studies Program. Because of VA's health

care system size, complexity, and data availability, it offers unique opportunities to conduct large-scale research projects, such as the CSHSs. These studies are expected to yield more definitive findings than may be available in other health care research environments. Three Centers for Cooperative Studies in Health Services provide scientific, technical, and management support to the CSHS investigators. One new CSHS project is determining the cost and outcome of telephone care. Five ongoing CSHS projects relevant to the concerns of the aging population are continuing. As a result of funding constraints, only one of two new CSHS Geriatric Evaluation and Management (GEM) trials that began preparations in Fiscal Year 1994 was allowed to continue in Fiscal Year 1995.

(3) The HSR&D *Field Program* is a cadre of core VA staff assigned to a network of selected medical centers. In 1995, the Service provided funding for nine ongoing HSR&D Field Programs. In support of program objectives, Fields Program staff conduct independent research projects and collaborate with community institutions.

Field Programs serve as Centers of Excellence in selected areas of expertise in health services research. Four of these programs have aging as one of their primary research foci. The Northwest Center for Outcomes Research in Older Adults, the HSR&D Field Program at Seattle VAMC, continues to examine issues related to aging, including the magnitude and costs of prevention strategies for diabetic foot problems; and the impact of rehabilitation services on inpatients newly diagnosed with a disabling disorder. The Midwest Center for Health Services and Policy Research at Hines VAMC in Illinois emphasized gerontology and rehabilitation issues. The HSR&D Field Program in Bedford, Massachusetts, is a Center for Health Quality, Outcome and Economic Research and has a strong interest in advance directives and health related quality of life issues. Another HSR&D Field Program, the Center for the Study of Healthcare Provider Behavior at the Sepulveda VAMC, has a strong interest in health care quality and outcomes within both VA and non-VA health systems.

In addition to these Field Program investigations during Fiscal Year 1995, HSR&D Service provided core support funding for the Normative Aging Study (NAS), a multidisciplinary and longitudinal investigation of human aging, and the Dental Longitudinal Study, a companion study addressing oral health and risk factors for oral disease in an aging population.

(4) The *Special Projects Program* encompasses the HSR&D Service Directed Research (SDR) Program, the Management Decision Research Center (MDRC), and special activities such as conferences and seminars. Special projects may include evaluation research, information syntheses, feasibility studies and other research projects responsive to specific needs identified by Congress, other federal agencies, or Department of Veterans Affairs executive and management staff. This is a centrally directed program of health services research conducted by VA field staff, VA Headquarters staff, and/or contractors engaged to analyze specific problems.

Five ongoing HSR&D Service Directed Research projects focus on issues relevant to the aging veteran population. These projects include an evaluation of the diagnosis, treatment, and outcomes of

veterans hospitalized for acute ischemic stroke; and a study of health related quality of life. Additionally, three SDR projects are focusing on prostate cancer to include an assessment of the impact of an educational intervention on patient preferences of prostate cancer treatment; an investigation of familial patterns in prostate cancer; and preference in patients suffering from advancing metastatic prostate cancer.

As a result of the HSR&D Service initiative on women's health, six new SDR projects were funded in 1995 that also are expected to benefit aging female veterans. These projects address issues of access to VA care; cancers of the reproductive system as it relates to military experience and Post Traumatic Stress Disorder; quality of life; long-term care; workforce participation, health insurance and health care use; and development of a Registry of Women Veterans.

Six SDR projects were completed in Fiscal Year 1995. They include an examination of the nursing home minimum data set for use in VA extended care facilities; an interactive videodisc project to increase physician discussion of advance directives with patients; an assessment of the impact of patient education on prostate cancer screening decisions; a study of breast cancer among women veterans; a study of the care of acute myocardial infarction patients; and a special project examining racial differences in cardiac care.

In addition to these special research initiatives, primers are being developed by the HSR&D Service Management Decision and Research Center (MDRC) to explain the fundamentals of a specific health services research or health care related issue relevant to VA's efforts to deliver high quality care. The first primer on primary care was released in September, 1995. The second primer on Technology Assessment in VA is expected to be released in mid-1996. Two additional primers are in the planning stage, one on Outcomes and the other on Program Evaluation for Managers.

Management briefs are a new effort from MDRC. The purpose of the management brief is to provide managers with a concise overview of HSR&D study findings in a particular area as well as describe the potential impact and possible implementation strategies and resources for managers. Examples include "Primary Care: Accessible, Continuous, Comprehensive and Coordinated," and "Caring for the Elderly Veteran' Commitment to Quality."

In Fiscal Year 1995, the MDRC, through its management consultation program, conducted five studies at the request of the Office of Geriatrics and Extended Care. Three were completed in Fiscal Year 1995 and two have continued into Fiscal Year 1996. Two studies, one a policy analysis and the other an evaluation of the nursing home enhanced prospective payment system, provided information about alternative rate structures for contracting with community nursing homes to maximize veteran access to high-quality long-term care while containing costs for the Department. A third study is analyzing the differences in costs between VA nursing home care units and rates charged by community nursing homes to understand the reasons for the differences. A fourth study assessed the extent of subacute care being provided in VA facilities, and in community nursing homes. A sixth study evaluated the ef-

fectiveness of the homemaker/home health aide program across the system.

OFFICE ACADEMIC AFFILIATIONS

All short- and long-range plans for VHA that address health care needs of the Nation's growing population of elderly veterans include training activities supported by the Office of Academic Affiliations (OAA). The training of health care professionals in the area of geriatrics/gerontology is an important component for a variety of programs conducted at VA medical centers in collaboration with affiliated academic institutions. Clinical experiences with geriatric patients is an integral part of health care education for the almost 109,000 health trainees, including 34,000 resident physicians and fellows, 22,000 medical students, and 53,000 nursing and associated health students. These residents and students train in VA medical centers annually as part of affiliation agreements between VA and nearly 1,000 health professional schools, colleges, and university health science centers. Recognizing the challenges presented by the ever-increasing size of the aging veteran population, the OAA has made great strides in promoting and coordinating interdisciplinary geriatric and gerontologic programs in VA medical centers and in their affiliated academic institutions.

The Office of Academic Affiliations, in VHA, supports selected geriatric education and training activities through the VA fellowship and residency programs for physicians and dentists.

Geriatric medicine

The issue of whether or not geriatrics should be a separate medical specialty or a subspecialty was resolved in September 1987, when the Accreditation Council for Graduate Medical Education (ACGME) approved Geriatric Medicine as an area of special competence. Effective January 1988, the American Board of Internal Medicine and the American Board of Family Practice specified procedures for the certification of added qualifications in geriatric medicine. VA played a critical role in the development and recognition of geriatric medicine in the United States, and since 1989, any VA medical center may conduct training in geriatrics providing an ACGME-accredited program is in place.

The demand for physicians with special training in geriatrics and gerontology continues unabated because of the rapidly advancing numbers of elderly veterans and aging Americans. The VA health care system offers clinical, rehabilitation, and follow-up patient care services as well as education, research, and interdisciplinary programs that constitute the support elements that are required for the training of physicians in geriatrics. This special training was accomplished through the VA Fellowship Program in Geriatrics from Fiscal Year 1978–89 and through specialty residency training since Fiscal Year 1990. In Fiscal Year 1995, VA supported 92 physicians receiving advanced education in geriatrics.

These educational programs are designed to develop a cadre of physicians committed to clinical excellence and to becoming leaders of local and national geriatric medical programs. Their dedication to innovative and thorough geriatric patient care is expected to produce role models for medical students and for residents. The

curriculum incorporates clinical, pharmacological, psychosocial, education, and research components that are related to the full continuum of treatment and health care of the elderly.

During its 17-year history, the program has attracted physicians with high quality academic and professional backgrounds in internal medicine, psychiatry, neurology, and family practice. Their genuine interest in the well-being of elderly veterans is apparent from the high VA retention rate after completing the fellowship training. Many of the fellows have published articles on geriatric topics in nationally recognized professional journals, and several fellows have authored or edited books on geriatric medicine and medical ethics. The number of recipients of important awards and research grants (AGS/Pfizer, AGS/Merck, Kaiser, National Institutes on Aging, and VA) increases each year.

The VA fellowship alumni continue to represent the largest single agency contribution to the pool of trained geriatricians in the United States.

Geriatric dentistry

The VA Dentist Geriatric Fellowship Program ended in June 1994. It proved to be an excellent recruitment source for dentists uniquely trained in the care of the elderly. Approximately thirty of these graduated fellows currently serve as staff dentists throughout the VA system. Others have assumed leadership positions in geriatric dentistry at academic institutions. They have enhanced patient care and other geriatric initiatives at their own as well as regional medical centers, and have also contributed to the geriatric efforts at affiliated health centers and in the community. Nationally, former fellows have made significant contributions to the professional literature and are actively involved in geriatric dental research.

In July 1982, a two-year Dentist Geriatric Fellowship Program commenced at five medical centers affiliated with Schools of Dentistry. The goals of this program are similar to those described for the Physician Fellowship Program in Geriatrics. In Fiscal Year 1988, the number of training sites increased to six for a final 3-year cycle. As of June 1994, 52 Geriatric Dentistry Fellows had completed their special training.

The format of these fellowships, however, has changed from predesignated sites in geriatric dentistry to individual awards in dental research. Candidates from any VA medical center with the appropriate resources may now compete for postdoctoral fellowships for dental research. In Fiscal Year 1995, nine fellows participated.

Geriatric psychiatry and geriatric neurology

In Fiscal Years 1990 and 1991, the Department of Veterans Affairs established the 2-year Fellowship Programs in Geriatric Psychiatry and Geriatric Neurology to develop a cadre of physicians with expertise in two areas; (1) specialized knowledge in the diagnosis and treatment of elderly patients with dementia and other psychiatric/neurological problems; and (2) innovative teaching and research skills for academic potential. In Fiscal Year 1995, VA sup-

ported 30 Geriatric Psychiatry Fellows and eight Geriatric Neurology Fellows.

The American Board of Psychiatry developed criteria for ACGME-accredited training in geriatric psychiatry; and the approval of Geriatric Psychiatry became official in September, 1993. VA expects to continue funding for fellow-level training at the current fellowship sites during the transition to accredited program status. This is another example of VA's initiative in establishing programs in areas of need. In Fiscal Year 1996, any accredited VA training site could request positions in Geriatric Psychiatry as part of the residency allocation.

NURSING AND ASSOCIATED HEALTH PROFESSIONS

Interdisciplinary team training program

The Interdisciplinary Team Training Program (ITTP) is a nationwide systematic educational program that is designed to include didactic and clinical instruction for VA faculty practitioners and affiliated students from three or more health professions such as physicians, nurses, psychologists, social workers, pharmacists, and occupational and physical therapists. The ITTP provides a structured approach to the delivery of health services by emphasizing the knowledge and skills needed to work in an interactive group. In addition, the program promotes an understanding of the roles and functions of other members of the team and how their collaborative contributions influence both the delivery and outcomes of patient care.

The ITTP has been activated at 12 VA medical centers. Two sites located at VA Medical Centers (VAMCs) Portland, Oregon; and Sepulveda, California, were designated in 1979. Three additional VA sites at Little Rock, Arkansas; Palo Alto, California; and Salt Lake City, Utah, were selected in 1980; and VAMCs Buffalo, New York; Madison, Wisconsin; Coatesville, Pennsylvania; and Birmingham, Alabama, were approved in 1982. In the spring of 1983, three sites were selected at VAMCs Tucson, Arizona; Memphis, Tennessee; and Tampa, Florida.

The purposes of the ITTP are to develop a cadre of health practitioners with the knowledge and competencies required to provide interdisciplinary team care to meet the wide spectrum of health care and service needs for veterans, to provide leadership in interdisciplinary team delivery and training to other VA medical centers, and to provide role models for affiliated students in medical and associated health disciplines. Training includes the teaching of staff and students in selected priority areas of VA health care needs, e.g., geriatrics, ambulatory care, management, nutrition, etc.; instruction in team teaching and group process skills for clinical core staff; and clinical experiences in team care for affiliated education students with the core team serving as role models. During Fiscal Year 1995, more than 185 students from a variety of health care disciplines were provided monetary support at the 12 model ITTP sites.

Advanced practice nursing

Advanced Practice Nursing, i.e., master's level clinical nurse specialist and nurse practitioner training, is another facet of VA education programming in geriatrics. The need for specialty trained graduate nurses is evidenced by the sophisticated level of care needed by VA patient populations, specifically in the area of geriatrics. Advanced nurse training is a high priority within VA because of the shortage of such nursing specialists who are capable of assuming positions in specialized care and leadership.

The master's level Advanced Practice Nursing Program was established in 1981 to attract specialized graduate nursing students to VA and to help meet needs in the VA priority areas of geriatrics, rehabilitation, psychiatric/mental health, adult health and critical care, all of which impact on the care of the elderly veteran. Direct funding support is provided to master's level nurse specialist students for their clinical practicum at the VA medical centers that are affiliated with the academic institutions in which they are enrolled. During Fiscal Year 1995, 146 master's level advanced practice nursing student positions were supported: 34 in geriatrics, 4 in rehabilitation, 32 in psychiatric/mental/health, 32 in critical care, and 44 in adult health/medsurgery.

VA gerontological nurse fellowship program

Gerontological nursing has been a nursing specialty since the mid-1960's. As society changes, particularly in terms of the demographic trends in aging, more attention is being focused on both the area of gerontological nursing and the education of nurses in this specialty. Doctoral level nurse gerontologists are prepared for advanced clinical practice, teaching, research, administration, and policy formulation in adult development and aging.

In Fiscal Year 1985, a two-year nurse fellowship program was initiated for registered nurses who were doctoral candidates with dissertations focused on clinical research in geriatrics/gerontology. The first competitive review was conducted in 1986. One nurse fellow was selected for the Fiscal Year 1986 funding cycle. Since that time, two nurse fellowship positions have been available for selection at approved VA medical center sites each fiscal year.

Initial appointments for nurse fellows are for one year. Reappointments of one additional year are subject to satisfactory first year's performance evaluation.

Expansion for associated health training in geriatrics

A special priority for geriatric education and training is recognized in the allocation of associated health training positions and funding support to VA medical centers hosting GRECCs and to VA medical centers (non-ITTP/GRECC sites) offering specific educational and clinical programs for the care of older veterans. In Fiscal Year 1995, a total of 20 associated health students received funding support in the following disciplines: Social Work, Psychology, Audiology/Speech Pathology, Clinical Pharmacy, Advanced Practice Nursing, Dietetics, and Occupational Therapy.

Health professional scholarship program

The Scholarship Program was established in 1980 and funded from 1982 through 1985 to assist in providing an adequate supply of nurses for the VA and the Nation. Beginning in 1988, the Scholarship Program was reactivated to provide scholarships to students in full-time nursing and physical therapy baccalaureate and master degree programs in certain specialties specified by VA.

By Fiscal Year 1990, additional scholarships were available to students enrolled in baccalaureate and master's degree occupational therapy programs, and students enrolled in their final year of associate degree nursing programs. In Fiscal Year 1992, scholarships were available for students enrolled in master's degree nurse anesthetist programs. Beginning in 1994, Respiratory Therapy scholarships became available through this program.

Since the beginning of the program, 530 awards have been given to students studying for advanced master's degrees, including 481 in nursing, 40 in nurse anesthesia, and 9 in occupational therapy and physical therapy. Of this number, 301 students have completed degrees and fulfilled their obligations by working as professionals in VA medical centers. Of these 301 professionals, 206 are still employed by VA. The remaining students are in the process of completing their degrees, completing their service obligations, or beginning their service obligation in the near future.

Learning resources

The widespread education and training activities in geriatrics have generated a broad spectrum of requirements for learning resources throughout the VA system. Local medical media services continue to provide thousands of audiovisual products that meet educational and clinical needs in the areas of geriatrics and gerontology. Local library services continue to perform hundreds of online searches on data bases such as MEDLINE and AGELINE (available through Bibliography Retrieval Services), and continue to add books, journals, and audiovisuals on topics related to geriatrics and aging. Employee education staff have produced and/or sponsored a number of satellite programs on Alzheimer's disease and other dementias. Taped copies of three of these satellite programs ("Diagnosis and Treatment of Alzheimer's Disease," "Dental Care of Cognitively Impaired Older Adults: Prioritizing Service Needs," and "Progressive Aphasia: Overview and Case in Point") can be obtained from the local Library Service at every VA medical center.

Employee education

In support of VA's mission to provide health care to the aging veteran population, education and training continues to be offered to enhance VA medical center staff skills in the area of geriatrics. These educational activities are designed to respond to the needs of VA health care personnel throughout the entire Veterans Health Administration. Annually, funding is provided for employee education and distributed to two levels of the organization for support of continuing education activities in priority areas.

First Level.—Funds are provided directly to each of the VA medical centers to meet the continuing education needs of its employees.

VA Headquarters also allocates funds for VAMC-initiated programs to allow health care facilities, with assistance from the Employee Education Network, to conduct education programs within the facility to meet locally-identified training needs. VAMC-initiated funds were used to support 23 separate activities specifically having geriatrics as the primary content.

Second Level.—The Office of Employee Education, through the Employee Education Network, meets education needs by conducting programs at the regional and local medical enter level. Examples of recent programs are:

Dementia, Depression, and Addiction;
JCAHO-Long Term Care Standards;
Alzheimer's and Dementia;
Nursing Role in Caring for the Older Adult;
Geriatric Treatment Update;
Suicide and Depression in the Elderly;
Identification and Treatment of Depression in the Elderly;
Issues Facing Older Women;
Elder Abuse;
Myths of Aging;
Geropharmacology; and
Geriatric Care—Unresolved Problems.

Employee education programs are also conducted in cooperation with the GRECCs, which received $276,835 in training funds in Fiscal Year 1995 to support their identified needs. This collaborative effort ensures the efficient use of existing resources to meet the increasing demands for training in geriatrics/gerontology.

In response to systemwide training needs, a National Training Program on "Long Term Care in Psychiatric Hospitals" was held.

In addition, funds were provided to support continuing education experiences for the Geriatric Fellows and the Interdisciplinary Team Training Program staff members.

The Office of Employee Education continues to work cooperatively with the Office of Geriatrics and Extended Care. A collaborative initiative was the printing and distribution of the updated "Geriatric Pocket Pal," a supplemental reference guide for clinicians.

VII. Veterans Benefits Administration

COMPENSATION AND PENSION PROGRAMS

Disability and survivor benefits such as pension, compensation and dependency and indemnity compensation administered by the Veterans Benefits Administration (VBA) provide all, or part, of the income for 1,700,469 persons age 65 or older. This total includes 1,238,957 veterans, 443,666 surviving spouses, 15,845 mothers and 2,001 fathers.

The Veterans' and Survivors' Pension Improvement Act of 1978, effective January 1, 1979, provided for a restructured pension program. Under this program, eligible veterans receive a level of support meeting a national standard of need. Pensioners generally receive benefits equal to the difference between their annual income from other sources and the appropriate income standard. Yearly

cost of living adjustments (COLAs) have kept the program current with economic needs.

This Act providers for a higher income standard for veterans of World War I or the Mexican border period. This provision was in acknowledgement of the special needs of the Nation's oldest veterans. The current amount added to the basic pension rate is $1,867 as of December 1, 1995.

VETERANS SERVICES PROGRAM STAFF

VBA Regional Office personnel maintain an active liaison with local nursing homes, senior citizen homes, and senior citizen centers in an effort to ensure that older veterans and their dependents understand and have access to VA benefits and services.

Generally, regional office staff visit these facilities as needed or when requested by the service providers. VA pamphlets and application forms are provided to the facility management and social work staff during visits and through frequent use of regular mailings. State and area agencies on the aging have been identified and are provided information about VA benefits and services through visits, workshops and pre-arranged training session. Senior citizen seminars are conducted for nursing home operations staff and other service providers that assist and provide service to elderly patients. Regional office staff regularly participate in senior citizens fairs and information events, thereby visiting and partipating in events where the audience is primarily elderly citizens. VBA staff also visit places where senior citizens congregate such as malls, churches, and special luncheons or breakfasts to advise veterans of their benefit entitlements. Regional office outreach coordinators continue to serve on local and state task forces and represent VA as members of special groups that deal extensively with the problems of the elderly.

ACTIVITIES ON BEHALF OF OLDER VETERANS FOR FISCAL YEAR 1996

I. INTRODUCTION

The Department of Veterans Affairs has the potential responsibility for a beneficiary population of more than 26 million veterans whose median age is approximately 57 years. Over thirty-three percent of the veteran population is age 65 and older. By the year 2005, over four and a half million veterans will be 75 years or older.

The demographic trend will require VA to redistribute its resources to meet the different needs of this older population. Historically, older persons are greater users of health care services. The number of physician visits, short-term hospital stays, and number of days in the hospital all increase as the patient moves from the fifth to seventh decade of life.

VA has developed a wide range of services to provide care in a variety of institutional, noninstitutional, and community settings to ensure that the physical, psychiatric and socioeconomic needs of the patient are met. Special projects, a variety of innovative, medically-proven programs and individual VA medical center (VAMC)

initiatives have been developed and tested that can be used for veteran patients and adapted for use by the general population.

VA operates the largest health care system in the Nation, encompassing 173 hospitals, 133 nursing home care units, 40 domiciliaries, and 398 outpatient clinics. Veterans are also provided care in non-VA hospitals and in community nursing homes, fee-for-service visits by non-VA physicians and dentists for outpatient treatment, and support for care in 89 State Veterans Homes in 42 States. As part of a broader VA and non-VA network, affiliation agreements exist between virtually all VA health care facilities and nearly 1,000 medical, dental, and associated health schools. This affiliation program with academic health centers results in almost 107,000 health profession students receiving education and training in VAMCs each year.

In addition to VA hospital, nursing home and domiciliary care programs, VA is increasing the number of diversity of non-institutional extended care programs. The dual purpose is to facilitate independent living and to keep the patient in a community setting by making available the appropriate supportive medical services. These programs include Home-Based Primary Care, Community Residential Care, Adult Day Health Care, Psychiatric Day Treatment and Mental Hygiene Clinics, and Homemaker/Home Health Aide Services.

The need for both acute and chronic hospitalization will continue to rise as older patients experience a greater frequency and severity of illness, as well as a different mix of diseases, than younger patients. Cardiovascular diseases, chronic lung diseases, cancers, psychiatric and mental disorders, bone and joint disease, hearing and vision disorders, and a variety of other illnesses and disabilities are all more prevalent in those age 65 and older. VA continues efforts to improve the outcomes of care for elderly patients with complex problems by supporting Geriatric Research, Education and Clinical Centers and specialized clinical services such as Geriatric Evaluation and Management Programs.

II. Veterans Health Administration

Office of Patient Care Services

During this fiscal year, the Office of Patient Care Services reorganized to form ten strategic healthcare groups. Each of these functional groups has contributed significantly to VA's efforts on behalf of older veterans.

Primary and Ambulatory Care Strategic Healthcare Group (SHG)

The Office of Primary and Ambulatory Care and the Office of Geriatrics and Extended Care continue to maximize collaboration in transforming the veterans health care system from a bed-based, hospital inpatient system to one rooted in ambulatory care. Physicians who specialize in geriatrics often come from an internal medicine background that includes a strong emphasis on primary care and an interdisciplinary team approach to patient care. Assistance in continuing development of geriatric primary care programs is one of the options offered by Primary Care Education and Consultation Teams.

VHA's National Primary Care Strategic Education Committee has charged a work group with developing a field facility educational module specifically designed for integrating geriatrics and primary care. Other completed modules available to geriatricians for further developing their geriatric primary care programs include: Managing Change; Strategic Planning; Team Development; Customer Service; Patient and Family Education; Information Management; Performance Measures; Ethics and Legal Issues; and Medical Faculty Development.

Dentistry

Oral/Dental care for the geriatric patient involves restoring function of the dentition, and elimination of pain and suffering attributes to oral disease. It is important that older adults are able to effectively masticate a variety of foods so that convalescence after surgery, chemotherapy, or other significant medical interventions is expedited.

Interpersonal skills, which are highly dependent upon physical appearance, as well as effective communication, can be enhanced by improving the patient's appearance and by properly aligning and restoring the anterior teeth to maintain clarity of speech. The goals for oral/dental care are consistent with all disciplines involved in geriatrics—to maximize function and foster independence in living. Dentistry needs to be an integral part of any comprehensive health care program for the elderly.

The nature of dental disease is often chronic and often asymptomatic even in advanced stages. It can be aggravated by coexistent medical problems, and perceived as a low priority by health care funding agencies. Innovative, individualized, preventive dental care programs are necessary for each patient. Preventive modalities can include the use of home-applied fluoride solutions, anti-microbial mouth rinses, specially fabricated tooth brushes, instruction to family or care givers on oral hygiene techniques, and more frequent dental examinations. These are low cost yet effective measures that can reduce the need for future expensive or invasive dental care. VA has been a world leader in developing preventive dental therapies and field testing them for clinical efficacy.

Oral cancer is a disabling and disfiguring disease that primarily affects middle-aged and older adults. Ninety-five percent of cases occur in those over 40. Alcohol, tobacco, and advanced age are important risk factors in the development of this disease. Early detection of frequently asymptomatic lesions can significantly reduce the disease's morbidity. Through a long-standing program of oral screening examinations, VA dentists have been able to expeditiously detect incipient oral cancers. Such interventions minimize the need for ablative surgery, which often results in disfigurement and difficulties in swallowing and eating. Early detection also reduces mortality rates.

Most VA Medical Centers have established Geriatric Evaluation and Management (GEM) Programs. Dental Services contribute to the GEM's interdisciplinary team effort by conducting admission oral assessments, collaborating on treatment planning, providing specially consultations and needed care, and preparing summaries or oral care protocols to be maintained after discharge. Oral exami-

nations conducted during GEM admissions commonly identify problems that can impede chewing efficiency, safe swallowing, and clearly articulated speech. Interdisciplinary treatment planning takes advantage of the synergy associated with group efforts. Patients are rehabilitated more rapidly with properly staged and coordinated care. New problems and unexpected outcomes are better addressed by geriatric interdisciplinary teams. For matters involving the oral-dental complex, dentistry has responded with timely assessments, definitive diagnosis, and recommended treatment. At discharge a review of the patient's response to treatment, plan for maintenance, and guidance for future care is prepared. The GEM Program has been an ideal environment for dentistry to demonstrate its relative merit and range of contributions to the interdisciplinary team.

The VA Program Guide, "Oral Health Guidelines for Long-Term Care Patients" developed by the Office of Patient Care Services, Dentistry and Geriatrics and Extended Care, continues to serve as the primary handbook for management of the multidisciplinary oral health efforts. It descries the goals, implementation, and monitoring of oral care provision for patients in VA long-term care programs.

The impact of VA programs in geriatric dentistry is not limited to its own health care system, but extends to a broader level. VA dentistry is represented on both National Institute of Dental Research (NIDR) reviews and a U.S. Surgeon General's workshop on oral health promotion and disease prevention. The American Association of Dental Schools (AADS) has an ongoing Geriatric Education Project that has developed guidelines for teaching concepts in gerontology and geriatrics to dental and dental hygiene students. VA dentists have been noteworthy contributors to these efforts to define geriatric educational objectives and identify resource materials for dental faculty members.

VA dentists have been active participants in recent projects involving both basic research and health services research. One investigator has developed measures to assess the relationship between oral health and overall quality of life in older patients. Another has surveyed VA dental services to determine the effectiveness of smoking cessation interventions. Finally, research is ongoing to discover biological markers for the detection of oral cancer.

In summary, VA's Office of Dentistry continues to support efforts that will benefit older veterans in three general areas. First, optimizing the quality of dental care received by elderly patients at VA facilities is a priority. Second, education in geriatric oral health will continue to be made available to patients, dental staff, and nondental care providers such as nurses, physicians, and family members. Thirds, research with promise to broaden our understanding of oral disease and its treatment in older adults will be encouraged.

Hospital Based Acute Care Strategic Healthcare Group (SHG)

Hospital Based Acute Care serves as the primary source of physicians for the care of all veterans, including elderly patients. Due to the growing proportion of older veterans, Hospital Based Acute Care is increasingly involved in all aspects of the delivery of health care to this patient population. Acute and intermediate medical

wards, coronary and intensive care units, and outpatient clinics are all seeing an increased proportion of elderly patients with acute and chronic illnesses. While some care is provided specifically by geriatricians, as the population ages, all internists are seeing an older veteran population.

Some subspecialty areas are particularly impacted, such as cardiology, endocrinology (diabetes), rheumatology and oncology. Hospital Based Acute Care provides necessary subspecialty care in inpatient and outpatient settings in addition to participation in Geriatric Evaluation and Management (GEM) Programs, Hospice, Respite, Nursing Home, Adult Day Health Care and Home-Based Primary Care. The specialized care required by elderly patients with complex problems has been recognized by Hospital Based Acute Care at a number of medical centers by their establishment of Geriatric Medicine Sections which emphasize clinical care, as well as coordinate research and education efforts related to geriatrics.

Age alone is less frequently used as a determinant of an individual patient's care. Geriatric patients undergo invasive diagnostic procedures as well. For example, the Sunbelt is experiencing an increasingly heavy cardiac catheterization workload. The average age of patients treated in coronary and intensive care units is increasing, producing a concomitant demand for cardiac rehabilitation and physical fitness programs that are targeted to the frail elderly and the physically handicapped of all ages. The special interest and involvement of Hospital Based Acute Care in geriatrics has also resulted in participation of internists in research studies such as nutrition problems in the elderly and treatment of hypertension.

Smoking cessation has been shown to benefit even elderly patients. Thus, the role of Preventive Medicine for this patient population has expanded. Hospital Based Acute Care staff have been active in implementing preventive strategies in smoking cessation, immunization (influenza and pneumococcal vaccines), and colorectal screening (for cancer). Lipid control is an emerging area that may benefit this population.

Participation in evaluation and treatment of elderly patients by interdisciplinary teams during intermediate-length hospital stays will be an increasingly important role for physicians in the Hospital Based Acute Care Strategic Healthcare Group.

Geriatrics and Extended Care Strategic Healthcare Group (SHG)

Geriatrics and Extended Care has developed an extensive continuum of clinical services including specialized and primary geriatric care, residential rehabilitation, community-based long-term care, and nursing home care. The shared purpose of all geriatrics and extended care programs is to prevent or lessen the burden of disability on older, frail, chronically ill patients and their families/caregivers, and to maximize each patient's functional independence.

The following is a description of VA's geriatrics and extended care programs and activities within each.

VA nursing home care

VA nursing home care units (NHCU), which are based at VA facilities, provide skilled nursing care and related medical services.

Patients in NHCUs may require shorter or longer periods of care and rehabilitation services to attain and/or maintain optimal functioning. An interdisciplinary approach to care is utilized in order to meet the multiple physical, social, psychological and spiritual needs of patients.

In fiscal year 1996, more than 35,900 veterans were treated in VA's 133 NHCUs. The average daily census of patients provided on these units was 13,605.

VA is continuing to offer NHCU staff educational programs to enhance the care of the mentally ill nursing home patient. Interest in the use of the Resident Assessment Instrument/Minimum Data Set remains high, and while not mandated, many NHCUs have adopted it.

Community nursing home care

This is a community-based contract program for veterans who require skilled nursing care when making a transition from a hospital setting to the community. Veterans who have been hospitalized in a VA facility for treatment, primarily for a service-connected condition, may be placed at VA expense in community facilities for as long as they need nursing home care. Other veterans may be eligible for community placement at VA expense for a period not to exceed 6 months. Selection of nursing homes for a VA contract requires the prior assessment of participating facilities to ensure quality services are offered. Follow-up visits are made to veterans by staff from VA medical centers to monitor patient programs and quality of care.

VA has added multi-state contracts (MSC) to the Community Nursing Home (CNH) Program. Multi-state and single state nursing home contracts have been developed to reduce the administrative and direct care costs while improving access to nursing home care for veterans. Administrative costs associated with maintaining 3,200 separate nursing home contracts and the annual inspection process will be reduced. Direct care costs are expected to be reduced by providing a more competitive rate for nursing home care. Access to community nursing homes will be improved by adding nursing homes, adding specialized services in selected nursing homes, and guaranteeing placement within 48 hours.

In September 1996, VA awarded 6 multi-state contracts and one single state contract to corporations for quality community nursing home care in 1,053 facilities. This includes new contracts with 588 nursing homes. Multi-state contracts have been awarded to: Beverly Health Care and Rehabilitation Services; Vencor; Sun Health Care Group; Genesis Health Ventures; Integrated Health Services; and, Unicare Health Facilities/Park Associates. A single state contract was awarded in California to Harmony, Inc. Together, these corporations span 43 states.

In fiscal year 1996, 26,201 veterans were treated in the CNH program. The number of nursing homes under contract was 3,200 and the average daily census of veterans in these homes was 7,379.

VA domiciliary care

Domiciliary care in VA facilities provides necessary medical and other professional care for eligible ambulatory veterans who are

disabled by disease, injury, or age and are in need of care but do not require hospitalization or the skilled nursing services of a nursing home.

The domiciliary offers specialized interdisciplinary treatment programs that are designed to facilitate the rehabilitation of patients who suffer from head trauma, stroke, mental illness, chronic alcoholism, heart disease and a wide range of other disabling conditions. With increasing frequency, the domiciliary is viewed as the treatment setting of choice for many older veterans.

Implementation of rehabilitation-oriented programs has provided a better quality of care and life for veterans who require prolonged domiciliary care and has prepared increasing number of veterans for return to independent or semi-independent community living.

Special attention is being given to older veterans in domiciliaries with a goal of keeping them active and productive as well as integrated into the community. The older veterans are encouraged to utilize senior centers and other resources in the community where the domiciliary is located. Patients at several domiciliaries are involved in senior center activities as part of VA's community integration program. Other specialized programs in which older veterans are involved include Foster Grandparents, Handyman Assistance to senior citizens in the community, and Adopt-A-Vet.

In fiscal year 1996, 19,229 veterans were treated in 40 VA domiciliaries resulting in an average daily census of 5,521. Of these numbers, approximately 3,410 veterans and an average daily census of more than 1,500 were admitted to the domiciliaries for specialized care for homelessness. The average age of this latter group was 43 years, while the overall average age of domiciliary patients was 59 years.

State homes

The State Home Program has grown from 10 homes in 10 states in 1888 to 89 state homes in 42 States. Currently, a total of 23,248 State home beds is authorized by VA to provide hospital, nursing home, and domiciliary care. VA's relationship to State veterans homes is based upon two grant programs. The per diem grant program enables VA to assist the states in providing care to eligible veterans who require domiciliary, nursing home or hospital care. The other VA grant program provides up to 65 percent federal funding to States to assist in the cost of construction or acquisition of new domiciliary and nursing home care facilities, or the expansion, remodeling, or alteration of existing facilities.

In fiscal year 1996, State veterans homes provided care to 6,095 veterans in the domiciliaries and 20,260 in the nursing homes. The average daily census of veteran patients was 3,349 for domiciliary care and 12,749 for nursing home care.

Hospice care

VA has developed programs that provide pain management, symptom control, and other medical services to terminally ill veterans, as well as bereavement counseling and respite care to their families. The hospice concept of care is incorporated into VA medical center approaches to the care of the terminally ill. All VA medical centers have appointed a hospice consultation team, which is

responsible for planning, developing, and implementing the hospice program.

Home based primary care

This program, formerly called Hospital Based Home Care, provides in-home primary medical care to veterans with chronic illnesses. The family provides the necessary personal care under the coordinated supervision of a hospital-based interdisciplinary treatment team. The team prescribes the needed medical, nursing, social, rehabilitation, and dietetic regimens, and provides the training of family members and the patient in supportive care.

Seventy-five VA medical centers are providing home based primary care (HBPC) services. In fiscal year 1996, home visits were made by VA health professionals to an average daily census of 5,100 patients.

Adult Day Health Care

Adult Day Health Care (ADHC) is a therapeutically-oriented, ambulatory program that provides health maintenance and rehabilitation services to veterans in a congregate setting during the daytime hours. ADHC in VA is a medical model of services, which in some circumstances may be a substitute for nursing home care. VA operated 14 ADHC centers in fiscal year 1996 with an average attendance of 373 patients. VA also continued a program of contracting for ADHC services in 83 medical centers. The average daily attendance in contract programs was 613 in fiscal year 1996.

Community Residential Care/Assisted Living

The Community Residential Care/Assisted Living program provides residential care, including room, board, personal care, and general health care supervision to veterans who do not require hospital or nursing home care but who, because of health conditions, are not able to resume independent living and have no suitable support system (e.g., family, friends) to provide the needed care. All homes are inspected by a multidisciplinary team prior to incorporation of the home into the VA program and annually thereafter. Care is provided in private homes that have been selected by VA, and is at the veteran's own expense. Veterans receive monthly follow-up visits from VA health care professionals. In fiscal year 1996, an average daily census of 9,300 veterans was maintained in this program, utilizing approximately 2,100 homes.

Homemaker/Home Health Aide (H/HHA)

In fiscal year 1996, VA provided homemaker/home health aide services for veterans needing nursing home care. These services are provided in the community by public and private agencies under a system of case management provided directly by VA staff.

One hundred eighteen VAMCs were purchasing H/HHA services in fiscal year 1996 for approximately 1,500 veterans on any given day.

Geriatric Evaluation and Management

The Geriatric Evaluation and Management (GEM) Program includes inpatient units, outpatient clinics, and consultation services.

A GEM Unit is usually a functionally different group of beds (ranging typically in number from 10 to 25 beds) on a medical service or an intermediate care unit of the hospital where an interdisciplinary health care team performs comprehensive, multidimensional evaluations on a targeted group of elderly patients who will most likely benefit from these services. The GEM unit serves to improve the diagnosis, treatment, rehabilitation, and discharge planning of older patients who have functional impairments, multiple acute and chronic diseases, and/or psychosocial problems. GEM clinics provide similar comprehensive care for geriatric patients not in need of hospitalization as well as provide follow-up care for older patients to prevent their unnecessary institutionalization. A GEM program also provides geriatric training and research opportunities for physicians and other health care professionals in VA facilities. Currently, there are 121 GEM Programs.

Respite care

Respite care is a program designed to relieve the spouse or other caregiver from the burden of caring for a chronically disabled veteran at home. This is done by admitting the veteran to a VA hospital or nursing home for planned, brief periods of care. The long range benefit of this program is that it enables the veteran to live at home with a higher quality of life than would be possible in an institutional setting. It may also provide the veteran with needed treatment during the period of care in a VA facility, thus maintaining or improving functional status and prolonging the veteran's capacity to remain at home in the community. Nearly all VA facilities have a respite care program.

A formal evaluation of the program, issued in 1995, found a high level of satisfaction with the Respite Care Program by family caregivers. The evaluation also found a high level of enthusiasm for the program by medical center staff delivering the care.

Alzheimer's disease and other dementias

VA's program for veterans with Alzheimer's disease and other dementias is decentralized throughout the medical care system, with coordination and direction provided by the Geriatrics and Extended Care Strategic Healthcare Group in VA Central Office. Veterans with these diagnoses participate in all aspects of the health care system, including outpatient, acute care, and extended care programs. Approximately 56 medical centers have established specialized programs for the treatment of veterans with dementing illnesses. Policy guidance concerning a continuum of dementia services to be provided in VA's health care networks is currently under development.

In order to advance knowledge about the care for veterans with dementia, VA investigators conduct basic biomedical, applied clinical, health services, and rehabilitation research, much of which occurs at VA's Geriatric Research, Education and Clinical Centers (GRECC's), and which is supported through the VA office of Research and Development as well as extramural sources. In fiscal year 1996, VA investigators were involved in approximately 200 funded research projects on Alzheimer's disease and other dementias.

Continuing education for staff is provided through training classes sponsored by GRECCs and VA's continuing education field units. In addition, VHA has disseminated a variety of dementia patient care educational materials in the form of publications and videotapes to all VA medical centers. These include guidelines for the diagnosis and treatment of dementia, videotapes concerning the management of Alzheimer's disease in home and health care settings, videotapes on other geriatric health care topics relevant to dementia patient care, and videotapes of VA satellite teleconferences on diagnosis and treatment of dementia. In addition to these VA-developed materials, VA has also purchased and distributed to VA regional libraries for use on a circulating basis throughout the VA system a comprehensive instructional program, "Keys to Better Care," for health care providers caring for persons with Alzheimer's disease and related disorders. Other dementia program planning and resource materials have been distributed to all VA medical centers, including a report on program characteristics of a sample of VA inpatient dementia units.

In fiscal year 1996, VA conducted its second nationwide satellite teleconference with national experts presenting strategies for diagnosis and treatment of dementia from a primary care perspective. In addition, a set of previously-disseminated 21 dementia caregiver education pamphlets developed by the Minneapolis GRECC became available via the Internet on the home page established by the Bedford Division of the Boston GRECC (http://med-www.bu.edu/alzheimer/). Also in fiscal year 1996, a new videotape on natural feeding techniques in Alzheimer's disease developed by the Bedford GRECC was distributed to all VA medical centers. In addition, a joint VA/University Healthsystem Consortium (UHC) technical advisory group is working on an updated clinical guideline for primary care practitioners on the identification and assessment of dementia. This guideline, which is nearing completion, will be distributed throughout the VA and UHC systems. Another project currently under development is an Alzheimer's caregiver CD–ROM. This interactive, multimedia program will provide basic information on Alzheimer's disease, a staging tool, and stage-specific strategies for care. This effort is being directed by the VA Education Center in Minneapolis.

The comprehensive Center for Alzheimer's Disease and Other Neurodegenerative Disorders at the Oklahoma City VA Medical Center completed its second year of development during fiscal year 1996. The center is progressing toward a goal to develop and evaluate a rural health care model for the coordinated care of patients with Alzheimer's disease or other degenerative neurological disorders in the state of Oklahoma, using an interdisciplinary, case-management approach.

Geriatric Research, Education, and Clinical Centers

Geriatric Research, Education and Clinical Centers (GRECCs) are designed to enhance the VA's capability to develop state-of-the-art care for the elderly through research, training and education, and evaluation of alternative models of geriatric care. First established by VA in 1975, the current 16 GRECCs continue to serve an important role in further developing the capability of the VA health

care system to provide cost-effective and appropriate care to older veterans.

GRECCs have established many interrelationships with other programs to avoid fragmentation and duplication of efforts. Important examples include the GRECCs coordination with VA's Health Services Research and Development (HSR&D) Field Programs and other research programs within VA and at affiliated health science centers; coordination with VA Employee Education Centers and Cooperative Health Manpower Education Programs, as well as with Geriatric Education Centers at affiliated universities; and coordination with clinical programs and quality improvement efforts at each host VA facility and throughout the VA network in which each GRECC is located.

In fiscal year 1996, GRECCs made a number of contributions to the field of aging and care of the elderly. Examples include the discovery of an Alzheimer's gene by researchers at the Seattle, Washington GRECC; the development and dissemination by the Bedford division of the Boston, Massachusetts GRECC of a video on Natural Feeding Techniques for Alzheimer's Patients for training of staff and students; and an evaluation by the Miami, Florida, GRECC of an interdisciplinary model of care for patients with prostate cancer.

Mental Health Strategic Healthcare Group (SHG)

Although the reported prevalence of mental illness among the elderly varies, conservative estimates for those age 65 years or older include a minimum of 5 percent with Alzheimer's disease or other dementias and an additional 15 to 30 percent with other disabling psychiatric illnesses. If we use the 30 percent estimate, 2.3 to 2.7 million veterans can be expected to need psychogeriatic care at any given time during the first two decades of the next century. Mental Health Services throughout VA have continued to provide care to older veterans through a growing continuum of acute, subacute, and long-term hospital programs, residential care, and both clinic and community-based programs in each of the 22 new Veterans Integrated Services Networks (VISNs). During a 1992 survey of VA mental health programs, 192 psychogeriatric programs in 87 VA medical centers were identified. Some of the specific activities in fiscal year 1996 are noted below:

Integrated psychogeriatric patient care

This 55 page VHA Program Guide (1103.22) was published March 26, 1996, for primary care and mental health professionals engaged in care of the elderly with mental health problems. These guidelines, developed by a national VA Psychogeriatric Field Advisory Group over a period of five years, describe a continuum of programs for elderly psychogeriatric patients including suggestions for treatment modalities, organization, space, equipment, staffing, education, research, and quality management in addition to an overall introduction to the subject. It is recommended as a resource for clinicians serving elderly veterans and non-veterans alike.

UPBEAT (Unified Psychogeriatric Biopsychosocial Evaluation and Treatment)

UPBEAT, a $2 million demonstration project currently in 10 VA facilities, is exploring clinical and economic outcomes as a result of screening elderly patients in acute VA medical and surgical hospital settings for depression, anxiety, and substance abuse. Following an interdisciplinary psychogeriatric team evaluation, case managers follow-up patients with positive symptoms. Early findings suggest no fewer readmissions but lower bed days of care and, consequently, significantly lower overall costs, as compared to a "usual care" group.

Treatment guidelines for major depressive disorders

This algorithm-based treatment guideline for both primary care practitioners and mental health specialist was developed last year by a multidisciplinary group of VA and non-VA professionals to enhance the uniformity and quality of VHA's clinical interventions. A special depression screening exam for veterans over 60 years of age and annotations regarding pharmacological treatment of elders are major features of the new guidelines. In addition, treatment of veterans with substance abuse and post-traumatic stress disorder (PTSD) is included. The Guideline built upon similar efforts published by the American Psychiatric Association and the Agency for Health Care Policy and Research (AHCPR) in 1993, and the VA Medical Advisory Panel (Pharmacologic Management of Depression) in 1996. A "Version I" draft is being field tested at 30 VA medical centers and sent to all VA facilities and a "Version II" will be made available after feedback from the field test is incorporated.

Clinical research

A MEDLINE search of medical research publications since 1990 on geriatric psychiatry in VA settings revealed 122 articles, of which 56 dealt exclusively with elderly veterans. Of these, 21 addressed post-traumatic stress disorder (PTSD) including studies of ex-prisoners of war, 14 primarily alcohol abuse and its detection; 9 Alzheimer's and related diseases; and the rest, other aspects of medical or mental illness.

Physical Medicine and Rehabilitation Strategic Healthcare Group (SHG)

Physical Medicine and Rehabilitation Therapy strives to provide all referred older veterans with comprehensive assessment, treatment and follow-up care for psychosocial and/or physical disability affecting functional independence and quality of life. The older veteran's abilities in the areas of self-care, mobility, endurance, cognition and safety are evaluated. Therapists utilize physical agents, therapeutic modalities, exercise and the prescription of adaptive equipment, to facilitate the veteran's ability to remain in the most independent life setting. Rehabilitation personnel provide education to the veteran and family members about adjustment to a disability or physical limitations and instruct them in techniques to maintain independence despite disability.

There are approximately 65 comprehensive inpatient medical rehabilitation programs (both acute and subacute) within the Veter-

ans Health Administration. There are a growing number of subacute rehabilitation programs being established at medical centers across the nation. The subacute rehabilitation setting affords us the ability to provide less intense rehabilitation services for the older veteran, aimed at promoting an individual's integration back into the community. On both acute and subacute rehabilitation units, physicians, usually board certified physiatrists, lead interdisciplinary teams of professionals to focus on outcomes of functional restoration, clinical stabilization, or avoidance of acute hospitalization and medical complications.

A uniform assessment tool, the Functional Independence Measure (FIM) is being implemented throughout the VA rehabilitation system. Patients are evaluation on 18 elements of function at the time of admission, regularly during treatment and at discharge. Application of FIM results to quality management activity will assist local and national rehabilitation clinicians and managers to maximize effective and efficient rehabilitation care delivery. An administrative data base called the Uniform Data System for Medical Rehabilitation (UDS/mr) monitors outcomes of care and increases the accuracy of developing predictors and ideal methods of treatment for the older veterans with various diagnoses. Through a national contract with UDS/mr, facilities with inpatient rehabilitation programs provide data and receive outcome reports as part of a national and international USD/mr data bank.

Rehabilitation therapists are leading and participating in innovative treatment, clinical education, staff development and research. Rehabilitation professionals work within Home-based Primary Care Programs, Independent Living Centers, Geriatric Evaluation and Management Units, Adult Day Health Care, Day Treatment Centers, Domiciliaries, Interdisciplinary Team Training Programs, Geriatric Research, Education, and Clinical Centers (GRECCs), and Hospice Care Programs. Applying principles of health education and fitness, rehabilitation staff develop and provide programs aimed at promoting health and wellness for the aging veteran.

Driver training centers are staffed at 40 VA medical centers to meet the needs of aging and disabled veterans. With the growing numbers of older drivers, the VA has put emphasis on the training of the mature driver. Classroom education, updates in laws and defensive driving techniques are supported with behind-the-wheel evaluation by trained specialists.

Recreation therapy

Provided that adequate preventive and support services are made available, older individuals can enjoy full and satisfying lives. Studies have shown that isolation leads to depression, and depression is the most common mental disorder affecting 20% of persons aged 65 and older. Also, the highest suicide rate in America is among persons aged 50 and over.

The Department of Veterans Affairs (VA) Recreation Therapists are an integral part of interdisciplinary teams in the treatment of illnesses in the elderly. Whether the patient is in-patient, out-patient, residential or independent living, therapeutic recreation services focus on restoring or maintaining optimum independent living

and quality of life. Recreation Therapists assist patients in the following ways:

Promote physical health through therapeutic exercises and gross motor activities;

Enhance mental functioning through the use of reality orientation, sensory stimulation, remotivation therapy and challenging therapeutic activities;

Use behavioral approaches to help older persons replace maladaptive behaviors with effective functional skills; and

Provide leisure skills training programs within the patients' range of abilities and facilitate community integration through the use of existing resources.

Since 1983, VA's Recreation Therapy Service has held the National Veterans Golden Age Games (NVGAGs) for the benefit of veterans age 55 and older. Sports and recreation are vital components of rehabilitative medicine within VA medical facilities, where recreation therapy plays an important role in the lives of older patients.

The NVGAGs serve as a showcase for the preventive and therapeutic medical value that sports and recreation provide in the lives of all older Americans. Participants compete in a variety of events that include but are not limited to, swimming, tennis, shuffleboard, horseshoes, croquet, bowling and bicycle races.

The NVGAGs are co-sponsored by VA and the Veterans of Foreign Wars. Financial support is also provided by numerous corporate sponsors and hundreds of local volunteers provide on-site assistance each year.

The 1996 NVGAGs were hosted by the VA Medical Center in Loma Linda, California. The 1997 program will be held in Leavenworth, Kansas, during the week of July 27–August 2.

Nursing Strategic Healthcare Group (SHG)

Nursing Service, in support of VHA's reorganization and "Prescription for Change", continues to rank care of the elderly veteran as a major priority. Nurses at every level of the organization are committed to leadership in the clinical, administrative, research, and educational components of gerontological nursing. Powerful societal forces in both the federal government and the private sector require even a greater collaborative teamwork as nursing strives to integrate advances in the technology, information management, and participates in the transition from inpatient to outpatient healthcare within the managed care model.

Nurses continue to participate in preventive care and health promotion initiatives, to preserve both the veterans' and their significant others' independence. Team approaches to improving the health status of aging veterans have fostered optimum levels of self-care, improved productivity, and enhanced quality of life. Health screening, education, primary care and referral of elderly veterans are critical functions necessary to evaluate healthcare needs and properly place the veteran in the most appropriate level of care. This may range from the environment of personal care in the home as the least restrictive setting to nursing home care as the most restrictive environment. Nurses in wellness clinics, mobile units and other ambulatory care settings provide supervision,

screening and health educational programs to assist veterans and their significant others in fostering and maintaining healthy lifestyles.

Effective utilization of Advanced Practice Nurses (APN) in the provision of healthcare services is a critical component of VHA's mission to provide primary care in a seamless system across a continuum of care. This continuum of care for aging veterans includes primary care, acute care, long-term care, rehabilitative care and mental health care. Nurses are a vital part of interdisciplinary teams that coordinate and provide care in settings such as Geriatric Evaluation and Management Programs (GEMs), ambulatory care, acute care, long-term care, mobile care units, and community agencies. Gerontological advanced practice nurses provide primary care and continuity of care in the role as clinical care managers, coordinators of care, and case managers. Through sustained patient partnerships, APNs provide health care for aging patients in diverse settings minimizing illness and disabilities and focusing on health promotion, disease prevention and health maintenance.

Primary care may be provided to aging veterans by a physician or a nurse practitioner primary care provider and followed by a care team including psychiatry, psychology, social work, rehabilitative medicine and others. Primary care services are based on long-term care needs of aging patients including those with multiple and chronic medical problems, functional disabilities, cognitive impairments and weakened social support systems. Services are provided across the continuum from health promotion and disease prevention to screening for community services including hospice care evaluation.

Nurses facilitate the restoration of functional abilities of veterans with chronic illnesses and disabilities. Programs for the physically disabled and cognitively impaired are administered by nurses and advanced practice nurses in settings representing ambulatory care, inpatient care and home care. Treatment programs and rehabilitation teams are goal-directed with physical and psychosocial reconditioning or retraining of patients. Patient and family teaching are a major part of each program. Family/significant others have a key role in providing support to veterans. Both are assisted in learning and in maintaining appropriate patient/caregiver rights and responsibilities. VA nurses contribute to planning, implementing and evaluating healthcare services for veterans in the community-at-large. They serve on task forces and participate in self-help and support groups. These include those related to specific diseases such as Alzheimer's, cancer, AIDS, diabetes, stroke, and spinal cord injury. VA nurses serve in a variety of roles in their work and private volunteer activities.

Committed to leadership in education, VA nurses provide creative learning, experiences for both undergraduate and graduate nursing students. Nursing education initiatives including "distance learning" are being developed to provide skills and competencies necessary to function in primary and managed care settings. Students are able to work and study with VA nurses who have clinical and administrative expertise in aging and long-term care. These include nurses in various organizational and leadership roles. These

collaborative experiences promote a culture and image of an agency that is committed to quality care and quality of life for aging.

A recent national VA Nursing Home Care Unit (NHCU) study revealed that over the last three years there has been a significant decrease in restraint usage. Decreased restraint usage is attributed to interdisciplinary reassessment of the patient's treatment. Each patient/resident has a comprehensive interdisciplinary plan of care which facilitates reduced restraining usage. Resident outcomes include a decrease in the number of falls and injuries with an increase in residents' alertness, happiness, muscle strength, independence and pride. Nurses and other members of the interdisciplinary team are proud of these clinical outcomes as VA NHCUs strive to become a restraint free environment. Such an environment enhances resident behaviors in independence, decision making and socialization.

Committed to research, VA nurses continue to change and reshape clinical nursing practices. Nursing research is improving care delivery and health promotion in the following areas:

Alternatives to Institutional Care;
Wound Care and Effectiveness of Treatment Regimens;
Risk Assessment for Falls;
Restraint Minimization and Interdisciplinary Assessment Tool Effectiveness;
Patient Education, Health Promotion and Maintenance; and
Clinical Pathways

Timely application of research findings to clinical care in all practice settings will improve the quality care and quality of life to aging veterans. Quality of life is an essential component for evaluating the effects of nursing care in both research and clinical practice. Research by nurses as a discipline and in collaboration with other members of the health care team must focus on specific patient care outcomes including quality of life, effectiveness of care interventions, cost effectiveness and patient satisfaction.

Pharmacy and Benefits Management Strategic Healthcare Group (SHG)

The Under Secretary for Health established the Pharmacy Benefits Management (PBM) Service line in FY 1996 to provide a focus within the Veterans Health Administration (VHA) concerning the appropriate use of pharmaceuticals in the health care of veterans. A secondary goal is to decrease the overall cost of health care through achievement of the PBM's primary goal. As the VHA transitions from an emphasis on inpatient care to ambulatory/primary care, pharmaceutical utilization will increase dramatically.

VHA's PBM is organized around a group of field-based physicians called the Medical Advisory Panel (MAP). The MAP provides leadership and guidance to the PBM in addressing the four functions of the PBM. These functions are (1) to enhance the efficiency and effectiveness of the drug use process; (2) to enhance the distribution systems for pharmaceuticals used in both the inpatient and outpatient settings; (3) to consistently bring best pharmaceutical practices into the VA health care system, and (4) to maintain and enhance VA's drug pricing capabilities.

The PBM serves a qualitative and quantitative role in addressing the needs of older veterans. In a patient population who frequently has co-morbidities and multiple drug therapies, the actions of pharmacists to improve the drug use process are essential in realizing the goal of the appropriate use of pharmaceuticals. In collaboration with other health professionals and the use of adjunct tools such as drug treatment guidelines, acute and chronic conditions facing geriatric patients are addressed in an efficient and effective manner with emphasis on the clinical condition as well as issues related to customer service and access.

Substantial gains have occurred in addressing the timeliness of pharmaceutical services at VA medical facilities through the use of automated distribution systems for mail prescriptions and improved work flow processes for patients who present at pharmacy counters. In addition, serious discussion is underway to further improve customer service, access and clinical care for all veteran patients through entering into relationships with community-based pharmacists to act as nonresident members of the facility-based primary care team. While still in the conceptual stage this practice has the potential to accomplish quality patient care, improve access and customer service and improve on the efficiency of care delivery.

Allied Clinical Services Strategic Healthcare Group (SHG)

Nutrition and food service

Medical nutrition care saves money, improves patient outcomes and enhances the quality of life for our older veterans. To better serve the veteran and identity nutritional needs, many VA health care professionals are now using *Determine Your Nutritional Health Checklist* and *Level I and II Nutrition System* developed by the American Dietetic Association, American Academy of Family Physicians and National Council on Aging National Screening Initiative. The *Checklist* or *Level I Screen* identifies those at high risk for poor nutritional status, while *Level II Screen* provides specific diagnostic nutritional information. The National Screening Initiative emphasizes educating the physician in nutritional care. The booklet, *Incorporating Nutrition Screening and Interventions into Medical Practice*, has been nationally disseminated to doctors. This information complements the handbook, *Geriatric Pocket Pal,* developed in collaboration with the Geriatrics and Extended Care SHG.

Many medical centers have Geriatric Nutrition Specialists positions. Dietitians in these positions have developed easy-to-read educational materials for their audience and shared this information with other medical centers. Several medical centers are providing outreach services for the elderly in their community. For example, the Bronx VAMC provides outreach to local senior centers, and the Dallas VAMC has bi-monthly visits by their health screening team to facilities in their area. Feeding dependency is highly associated with malnutrition among nursing hone residents. Silver Spoons is one of the successful programs instituted by the Miami VAMC nursing home aimed at intervention before severe nutritional problems develop in feeding dependent residents. The program uses volunteers to fee residents and to ensure adequate nu-

trition. This is an interdisciplinary program including dietary, nursing, voluntary, medical, recreation and dental services. The Brockton/West Roxbury VAMC developed a pureed product line to enhance the appearance, taste, quality and acceptability of foods for geriatric patients with dysphagia.

Social Work Service

Meeting the biopsychosocial health care needs of an aging population of veterans and caregivers continues to be a major priority of Social Work Service and the Veterans Health Administration. The need to be competitive in a challenging and changing health care environment, as well as cost-effective and efficient in addressing the social components of health care, has led to a re-examination of social work priorities and their relevance to the VA health care mission, with special reference to the needs of chronically ill, older veterans. Without a support network of family, friends, and community health and social services, health care gains would be lost and VHA acute care resources would be over-burdened. It is frequently not the degree of illness that determines the need for hospital care, but rather the presence or absence of family and community resources.

The expansion of homemaker/home health aide services is evidence of the importance of non-institutionalized support networks in maintaining the veteran in the community. Social workers continue to coordinate discharge planning and to serve as the focal point of contact between the VA medical center, the veteran patient, family members, and the larger community health and social services network. The veteran and family members have, in many respects, become the "unit of care" for social work intervention. It is this "customer" focus which will undergird social work programming for vulnerable populations, including older veterans who are demanding that VHA be more responsive and sensitive to their psychosocial needs and those of their caregivers.

The role of the caregiver as a member of the VA health care team and as a key player in the provision of health care services continues to be a major area of social work practice and will continue to be in the immediate future. This is consistent with the recognition that 80 percent of care of the elderly is provided in the home by family, neighbors, etc., and that the family, ordinarily the veteran's spouse, is the key decision-maker concerning health insurance issues, and, most probably, access to health and community support services.

As VHA transitions from an acute care to a primary care/community interactive health care delivery system, Social Work Service has placed increased emphasis on its pivotal role in community services coordination, development, and integration. The development of a "seamless garment of care," with case management services as its centerpiece, is being given increased emphasis by Social Work Service and its National Committee. The National Committee published Social Work Practice Guidelines, Number 2: Social Work Case Management, in September 13, 1995. These standards are used as a starting point and part of the educational process that takes place at each medical center, as we move into interdisciplinary clinical paths and practice guidelines. The National Commit-

tee functions in an advisory capacity concerning social work and systems issues, priorities, and practice concerns. While case management services have been a central component of social work practice in VHA, this service modality is being "re-discovered" by the VA health care system as an essential component of services provided to "at-risk" veterans and their caregivers. Case management, also known as care coordination, was identified in veterans' discussion groups as a very important ingredient in meeting the veterans' health care needs and those of their caregivers. During 1997 and beyond, VHA, and particularly Social Work Service, will be challenged to expand case management services in concert with other community providers and to provide a perspective that addresses this critical ingredient in health care in terms of its absolute relevance to successful health care outcomes. In a revitalized and reconfigured VA health care system, issues of coordination, access, cost, and appropriateness of VA and community services will be determined not only by the needs of the customers, but also by the experience and expertise of the providers.

Diagnostic Services Strategic Healthcare Group (SHG)

The clinical services of Pathology and Laboratory Medicine, Radiology, and Nuclear Medicine constitute the Diagnostic Services Group. Each of these clinical services provides direct services to veteran patients and to clinician-led teams in ambulatory/primary care, acute care, mental health, geriatrics and long-term care, and rehabilitation medicine.

Diagnostic Services' staff are educated on special care of the elderly. Pathology and Laboratory staff, for example, receive special training on phlebotomy with the elderly. In addition, normal values of various laboratory tests may be different in the elderly. These differences are incorporated into each VA facility's reference on normal ranges for tests.

Prosthetic and Sensory Aids Strategic Healthcare Group (SHG)

The mission of the Prosthetic and Sensory Aids Service (PSAS) Strategic Healthcare Group is to provide specialized, quality patient care by furnishing properly prescribed prosthetic equipment, sensory aids and devices in the most economical and timely manner in accordance with authorizing laws, regulations and policies. PSAS serves as the pharmacy for assistive aids and PSAS prosthetic representatives serve as case managers for prosthetic equipment needs of the disabled veteran.

Today, the majority of amputations performed in VA medical centers are a result of peripheral vascular disease and diabetes as opposed to traumatic amputations related to war injuries dating back to World War II. Elderly veterans make up roughly 90 percent of this patient population. For some of these elderly veterans, the transition to learning the mobility requirements of an artificial limb can be difficult. For others, the adjustment to a different type artificial limb due to the amputation of the residual limb or an amputation of another extremity can be just as traumatic. Prosthetic representatives exercise good logic in filling prosthetic prescriptions for both groups of veterans, taking into account the veteran's present quality of life, mobility, and dependence.

PSAS is an integral member of health care teams providing prevention, treatment, and follow-up care to our aging veteran population. An example of this would be VHA's Preservation-Amputation Care and Treatment (PACT) Program. It was established to provide a model of at-risk limb care which essentially expands the scope of care and treatment of veterans who are at risk for limb loss or who have sustained amputations. The PACT incorporates interdisciplinary coordination of surgeon, rehabilitation physician, nurse, podiatrist, therapist, and prosthetic/orthotic personnel to track every patient with amputations, or those at risk for limb loss, from the day of entry into the VA healthcare system, through all appropriate care levels, back into the community. There are 139 PACT Programs VA-wide.

Some of the most common prosthetic appliances provided to elderly patients are artificial limbs, wheelchairs, braces, hospital beds, environmental controls, oxygen and respiratory equipment, eyeglasses, hearing aids, speech prostheses, talking machines, reading machines, home safety equipment, walking canes, crutches, and custom molded shoes.

Office of Research and Development

Medical research

Within the Office of Research and Development, the mission of Medical Research Service is to support and enhance patient care at VA health care facilities by seeking improvements in the prevention, diagnosis, and treatment of diseases and disorders. In order to focus efforts on medical problems most prevalent within the veteran population and establish priorities for future funding, the service has conducted a thorough review of its research portfolio. As a result of this study, aging has been established as one of the 17 priority areas for funding by Medical Research Service.

Although the number of funded projects identified with a primary focus on aging remains relatively constant, research efforts with a secondary focus on aging include studies on a multitude of diseases and disorders affecting older veterans. Examples of such conditions are Alzheimer's Disease, prostate and other cancers, depression, heart disease, and Parkinson's Disease. Studies on these and other conditions which affect older veterans constitute a large portion of the Medical Research Service budget.

Among the current efforts focusing on aging in research conducted by Gerard Schellenberg, Ph.D., Associate Director for Research, VA Puget Sound Geriatric Research, Education and Clinical Center (GRECC), who recently discovered the first human gene associated with aging. The gene causes a rare disorder, i.e., Werner's Syndrome, which results in premature aging. This important discovery follows a previous one by Dr. Schellenberg and colleagues—the discovery of an Alzheimer's gene which may allow a better understanding of the disease and lead to improved treatments.

Health Services Research and Development

Health Services Research and Development (HSR&D) is an area of research designed to enhance veterans' health by improving the quality and cost effectiveness of the care provided by the Depart-

ment of Veterans Affairs. The focus of VA HSR&D is on (1) advancing the state of knowledge about health services in VA and the nation and (2) disseminating that knowledge for practical use. The large number of aging veterans and their increasing health care needs make this population particularly important for HSR&D to study. The Service's four major program areas emphasized aging during FY 1996, as described in the following pages.

(1) The Investigator Initiated Research (IIR) program encourages and supports projects proposed and conducted by VA researchers, clinicians, and administrators from throughout the Nation. In this intramural program of HSR&D, researchers conduct merit reviewed and approved projects in VA Medical Centers with advice from VA Headquarters staff. The IIR program includes career development which guarantees salary support to clinicians and researchers interested in pursuing research careers in VA.

Thirty-two percent of the 53 HSR&D IIR projects addressed questions important to aging veterans. Five newly initiated projects included an evaluation study of the effectiveness of screening for prostatic cancer; a controlled trial of a physical restoration intervention (SAFE–GRIP) to reduce the likelihood of falls in the elderly after hospitalization; a study of the differences in coronary angioplasty outcomes between veterans and non-veterans; a study of the impact of oral health conditions and quality of life in older veterans; and a study to improve the management of patients with chronic obstructive pulmonary disease.

Ongoing geriatric related investigations included studies affecting veterans with cardiac related illnesses such as: appropriateness and necessity of cardiac procedure use after acute myocardial infarction; quality of life outcomes after coronary artery bypass graft (CABG) surgery; the role of social factors in the occurrence of cardiac events; and two studies addressing utilization of cardiac procedures (carotid endarterectomy and CABG) in African-American veterans.

Researchers are examining pressure ulcer incidence rates as a measure for long-term care in VA facilities; examining strategies to improve the quality of nutritional care to elderly hospitalized patients; and developing reliable and valid health status measures for skin disease to improve outcomes of care.

Five IIR projects related to aging were completed. These projects included a study of the magnitude, costs, treatment, and prevention strategies of diabetic foot problems; a study of quality of life outcomes after coronary artery bypass graft surgery; Simulated Presence Therapy (SPT), a new non-pharmacologic technique to reduce problem behaviors in Alzheimer's disease patients; and the effects of exercise training on frail, elderly veterans. Also completed was a study of home monitoring of peak expiratory flow rates to detect early respiratory decompensation in patients with chronic obstructive pulmonary disease. This study revealed that home monitoring is feasible, and that symptoms and peak flows can be used to forecast respiratory status in three to seven days.

(2) The HSR&D Cooperative Studies in Health Services (CSHS) projects are multi-site health services research studies based on the model of VA's Cooperative Studies Program for biomedical research. Because of VA's health care system size, complexity, and

data availability, if offers unique opportunities to conduct large-scale research projects, such as the CSHS. These studies are likely to yield more definitive findings than may be available in other health care environments. Three Centers for Cooperative Studies in Health Services (CCSHS) provide scientific, technical, and management support to CSHS investigators. Examples of Cooperative Studies in Health Services projects relevant to the concerns of the aging population include: a comparison of the cost and effectiveness of team-managed Home Based Primary Care (HBPC) to customary care for severely disabled and terminally ill patients; and a study of whether the combination of inpatient care provided by Geriatric Evaluation and Management (GEM) Units and outpatient care provided by GEM Clinics as compared with usual care provided to hospitalized veterans will reduce mortality and enhance health-related quality of life for veterans. Researchers are examining which processes and structures of cardiac care are predictive of positive health outcomes; and comparing costs and health outcomes of telephone care to face-to-face clinic visits. Funding ended for one project that tested whether providing discharged patients with "rapid access" to high quality primary car would affect health services utilization, health-related quality of life, patient satisfaction with care, and health care costs.

(3) The HSR&D Field Program is a network of core VA staff assigned to selected medical centers. In 1996, the Service funded nine ongoing HSR&D Field Programs. Field Program staff conduct independent research projects and collaborate with community institutions in support of program objectives.

Field Programs serve as Centers of Excellence in selected subject matter areas. Although some Field Programs have aging as one of their primary research foci, Field Programs have research interests in health care issues affecting aging veterans. The Northwest Center for Outcomes Research in Older Adults at Puget Sound Healthcare System examines issues affecting the elderly such as, improving the quality of ambulatory care, prevention and treatment for chronic illnesses, and long-term care. The Midwest Center for Health Services and Policy Research at Hines VAMC in Illinois continues to emphasize gerontology and rehabilitation issues. The Field Program in Bedford, Massachusetts, is a Center for Quality, Outcomes and Economic Research with interests in the quality of long-term care, cost effectiveness, health outcomes and health related quality of life issues. the Center for Health Services Research in Primary Care at Durham VAMC emphasizes research that enhances the delivery, quality and efficiency of primary care provided to veterans. The Center is focusing on topics such as access to health care for ethnic groups, process and outcomes of care relative to such diseases as stroke, diabetes and breast cancer, and cost-effective management of chronic diseases.

In addition to supporting Field Program investigations, HSR&D Service provided core support funding for the Normative Aging Study (NAS), a multidisciplinary, longitudinal investigation of human aging, and the Dental Longitudinal Study, a companion study addressing oral health and risk factors for oral disease in an aging population.

(4) The Special Projects Program encompasses the HSR&D Service Directed Research (SDR) Program, Management Decision Research Center (MDRC), and special activities such as conferences and seminars. Special projects may include evaluation research, information syntheses, feasibility studies, special initiatives and other research projects responsive to specific needs identified by Congress, other federal agencies, or Department of Veterans Affairs executive and management staff. This is a centrally directed program of health services research conducted by VA field staff, VHA Headquarters staff, and/or contractors engaged to analyze specific problems.

Ongoing HSR&D Service Directed Research (SDR) projects focus on issues relevant to the aging veteran population. These projects include an evaluation of the diagnosis, treatment, and outcomes of veterans hospitalized for acute ischemic stroke; and a study of health related quality of life. Additionally, three SDR projects focus on prostate cancer. One assesses the impact of an educational intervention on patient preferences for treatment. Another investigates familial patterns in prostate cancer, and another studies patient preferences in advanced metastatic prostate cancer.

Seven continuing projects related to women's health are expected to benefit aging female veterans. These projects address issues of access to VA care; cancers of the reproductive system relating to military experience and Post Traumatic Stress Disorder; quality of life; long-term care; workforce participation, health insurance and health care use; and development of a Registry of Women Veterans.

Since many veterans, including older veterans, suffer from chronic diseases, VA researchers are looking for efficient and effective ways to manage their care. A new HSR&D Service Directed Research project is investigating the effectiveness of telecare in the management of diabetes.

The Under Secretary for Health proposed the nursing research initiative to encourage new research on nursing topics and to expand the pool of nurse investigators within the Department of Veterans Affairs. The Research and Development Office in collaboration with the Nursing Service staff implemented a research program that targets nursing investigators. This effort would invite research proposals for health services research, medical research and rehabilitation research. In 1995 Health Services Research Service issued a formal Request for Applications inviting nurses at VA medical centers to submit research proposals. The first nursing research project was funded in 1996 related to the psychophysiology of Post Traumatic Stress Disorder in female nurse Vietnam veterans. It is expected that this initiative will increase the number of projects related to aging veterans in fiscal year 1997.

In addition to these special research initiatives, MDRC is developing primers to explain specific health services-related or health care-related issues relevant to VA's efforts at delivering high quality care. The first primer on Primary Care was released in September 1995. The second primer on Technology Assessment in VA was released in July 1996. Two forthcoming primers will be on outcomes and program evaluation for managers.

Management Briefs and Practice Matters are new MDRC projects. The purpose of the Management Brief is to provide man-

agers with a concise overview of HSR&D study findings in a particular research area as well as provide contact information and important citations. Practice Matters summarizes the results of important research within VA and promotes its application to managers by describing the potential impact and possible implementation strategies and resources.

In FY 1996, the MDRC, through its Management Consultation Program conducted three studies at the request of the Office of Geriatrics and Extended Care. Two were completed including one study that analyzed the differences in costs between VA nursing home care units and community nursing homes; and a second study that assessed the extent of subacute care provided in VA facilities and community nursing homes. One ongoing study is evaluating the national multi-state nursing home contract initiative. The evaluation is assessing costs, access, quality of care and administration burden of new contracts. The MDRC also will conduct a Congressionally-mandated analysis of VA hospice care in 1997.

Future HSR&D initiatives expected to increase research on aging relate to improving veterans access to VHA services; the effects of managed care on patient and system outcomes; alternative strategies for implementing evidence-based clinical practice guidelines; investigating ethnic and cultural variations in health care and designing interventions; and exploring gender differences in health care and evaluating interventions for improving women's health services in VA.

Rehabilitation Research and Development

The mission of the Rehabilitation Research and Development (Rehab R&D) Service is to investigate and develop concepts, products and processes that promote greater functional independence and improve the quality of life for impaired and disabled veterans. Aging, particularly the aging of persons with disabilities, is a high priority of the service. Efforts in this area include:

A national VA program of merit-reviewed, investigator-initiated research, development and evaluation projects targeted to meet the needs of aging veterans with disabilities;

Support of a Rehabilitation Research and Development Center on Aging at Decatur, Georgia, VA Medical Center; and

Transfer into the VA health care delivery system of developed rehabilitation technology and dissemination of information to assist the population of aging veterans and those who care for them.

In addition to specific projects on aging, many of the investigations supported through the Service's nationwide network of research at VAMCs and at four Rehabilitation Research and Development Centers have relevance for impairments commonly associated with aging.

Some examples of investigator-initiated studies currently being carrier out are:

A Low-Vision Enhancement System (LVES);

Liquid Crystal Dark-Adapting Eyeglasses;

Upper Body Motion Analysis for Amelioration of Falls in the Elderly;

Non-Auditory Factors Affecting Hearing Aid Use in Elderly Veterans;

The Influence of Strength Training on Balance and Function in the Aged; and an

Epidemiologic Study of Aging in Spinal Cord Injured Veterans.

The Rehab R&D Center on Aging is structured around five interdisciplinary research sections to address the multi-dimensional nature inherent in problems of aging and disability: Environmental Research; Vision Rehabilitation; Neuro-Physiology; Engineering and Computer Science; and Social, Behavioral, and Health Research. Areas of study include:

Design-related problems that affect the quality of life of older people, including least restrictive environments, falls, independence and safety;

Orientation and mobility for the blind, low vision, and rehabilitation outcomes measurement for older persons with visual impairment;

The neurologic and physiologic changes that accompany aging and behavioral coping problems; and

Development and application of new technologies to a variety of prototypes for the design of assistive devices and assistive software.

Office of Academic Affiliations

All short- and long-range plans for VHA that address health care needs of the Nation's growing population of elderly veterans include training activities supported by the Office of Academic Affiliations (OAA). The training of health care professionals in the area of geriatrics/gerontology is an important component for a variety of programs conducted at VA medical centers in collaboration with affiliated academic institutions. Clinical experiences with geriatric patients are an integral part of health care education for the almost 107,000 health trainees, including 33,000 resident physicians and fellows, 20,000 medical students, and 54,000 nursing and associated health students. These residents and students train in VA medical centers annually as part of affiliation agreements between VA and nearly 1,000 health professional schools, colleges, and university health science centers. Recognizing the challenges presented by that ever-increasing size of the aging veteran population, the OAA has made great strides in promoting and coordinating interdisciplinary geriatric and gerontologic programs in VA medical centers and in their affiliated medical institutions.

The Office of Academic Affiliations, in VHA, supports selected geriatric education and training activities through the VA fellowship and residency programs for physicians and dentists.

Geriatric medicine

The issue of whether or not geriatrics should be a separate medical specialty or a subspecialty was resolved in September 1987, when the Accreditation Council for Graduate Medical Education (ACGME) approved Geriatric Medicine as an area of special competence. Effective January 1988, the American Board of Internal Medicine and the American Board of Family Practice specified pro-

cedures for the certification of added qualifications in geriatric medicine. VA played a critical role in the development and recognition of geriatric medicine in the United States, and since 1989, any VA medical center may conduct training in geriatrics providing an ACGME accredited program is in place.

The demand for physicians with special training in geriatrics and gerontology continues unabated because of the rapidly advancing numbers of elderly veterans and aging Americans. The VA health care system offers clinical, rehabilitation, and follow-up patient care services as well as education, research, and interdisciplinary programs that constitute the support elements that are required for the training of physicians in geriatrics. This special training was accomplished through the VA Fellowship Program in Geriatrics from Fiscal Year 1978–89 and through the specialty residency training since Fiscal Year 1990. In Fiscal Year 1996, VA supported 104 physicians receiving advanced education in geriatric medicine and 19 physicians receiving advanced education in geriatric psychiatry. VA also supported 15 physicians pursuing post residency fellowship education in geriatric neurology and geriatric psychiatry.

GERIATRIC DENTISTRY

In July 1982, a two-year Dentist Geriatric Fellowship Program commenced at five medical centers affiliated with Schools of Dentistry. The goals of this program were similar to those described for the Physician Fellowship Program in Geriatrics. In Fiscal Year 1988, the number of training sites increased to six for a final 3-year cycle. As of June 1994, 52 Geriatric Dentistry Fellows had completed their special training.

The VA Dentist Geriatric Fellowship Program ended in 1994. It proved to be an excellent recruitment source for dentists uniquely trained in the care of the elderly. Approximately thirty of these graduated fellows currently serve as staff dentists throughout the VA system. Others have assumed leadership positions in geriatric dentistry at academic institutions. They have enhanced patient care and other geriatric initiatives at their own as well as regional medical centers, and have also contributed to the geriatric efforts at affiliated health centers and in the community. Nationally, former fellows have made significant contributions to the professional literature and are actively involved in geriatric dental research.

Since the Dentist Geriatric Fellowship Program ended at designated VA sites, individual awards in dental research have been initiated. Candidates from any VA medical center with the appropriate resources may now compete for postdoctoral fellowships for dental research.

Nursing and associated health professions

Based on the demographics of its veteran patient population, all affiliation students receive experience in caring for the elderly. VA also has special programs which focus on geriatrics.

Interdisciplinary Team Training Program

The interdisciplinary Team Training Program (ITTP) is a nationwide systematic educational program that is designed to include didactic and clinical instruction for VA facility practitioners and affiliated students from three or more health professions such as physicians, nurses, psychologists, social workers, pharmacists, and occupational and physical therapists. The ITTP provides a structured approach to the delivery of health services by emphasizing the knowledge and skills needed to work in an interactive group. In addition, the program promotes an understanding of the roles and functions of other members of the team and how their collaborative contributions influence both the delivery and outcomes of patient care. Training includes the teaching of staff and students in selected priority areas of VA health care needs, e.g., geriatrics, ambulatory care, management, and nutrition; instruction in team teaching and group process skills for clinical core staff; and clinical experiences in team care for affiliated education students with the core team serving as role models.

The ITTP, which began in 1978, has been activated at 12 VA medical centers: Birmingham, AL; Buffalo, NY; Coatesville, PA; Little Rock, AR; Madison, WI; Memphis, TN; Palo Alto, CA; Portland, OR; Salt Lake City, UT; Sepulveda, CA; Tampa, FL; and Tucson, AZ.

The goal of ITTP is to develop a cadre of health practitioners with the knowledge and competencies required to provide interdisciplinary team care to meet the wide spectrum of health care and service needs for veterans, to provide leadership in interdisciplinary team delivery and training to other VA medical centers, and to provide role models for affiliated students in medical and associated health disciplines. During Fiscal Year 1996, more than 184 students from a variety of health care disciplines were provided funding support at the 12 ITTP sites.

Advanced Practice Nursing Program

Advanced Practice Nursing, i.e., master's level clinical nurse specialist and nurse practitioner training, is another facet of VA education programming in geriatrics. The need for specialty trained graduate nurses is evidenced by the sophisticated level of care needed by VA patient populations, specifically in the area of geriatrics. Advanced nurse training is a high priority within VA because of the shortage of such nursing specialists who are capable of assuming positions in specialized care and leadership.

The master's level Advanced Practice Nursing Program was established in 1981 to attract specialized graduate nursing students to VA and to help meet needs in the VA priority areas of geriatrics, rehabilitation, psychiatric/mental health, primary care, medical-surgical and critical care, all of which impact on the care of the elderly veteran. Direct funding support is provided to master's level nurse specialist students for their clinical practicum at the VA medical centers that are affiliated with the academic institutions in which they are enrolled. During Fiscal Year 1996, 376 master's level advanced practice nurse student positions were supported.

VA Predoctoral Nurse Fellowship Program

Gerontological nursing has been a nursing specialty since the mid-1960's. As society changes, particularly in terms of the demographic trends in aging, more attention is being focused on both the area of gerontological nursing and the education of nurses in this specialty. Doctoral level nurse gerontologists are prepared for advanced clinical practice, teaching, research, administration, and policy formulation in adult development and aging.

In Fiscal Year 1985, a two-year nurse fellowship program was initiated for registered nurses who were doctoral candidates with dissertations focused on clinical research in geriatrics/gerontology. The first competitive review was conducted in 1986. One nurse fellow was selected for the Fiscal Year 1996 funding cycle. Since that time, two nurse fellowship positions have been available for selection at approved VA medical center sites each fiscal year.

In FY 1994, the program was changed to Predoctoral Nurse Fellowship to include all clinical areas that are relevant to the care of veterans.

Expansion for associated health training in geriatrics

A special priority for geriatric education and training is recognized in the allocation of associated health training positions and funding support to VA medical centers hosting GRECCs and to VA medical centers (non-ITTP/GRECC sites) offering specific educational and clinical programs for the care of older veterans. In Fiscal Year 1996, a total of 189 associated health students received funding support in the following disciplines: Social Work, Psychology, Audiology/Speech Pathology, Clinical Pharmacy, Advanced Practice Nursing, Dietetics, and Occupational Therapy.

Geropsychology post-doctoral fellowship

In FY 1993, the Office of Academic Affairs initiated a one year geropsychology post-doctoral fellowship program. The purpose of the program is to develop a cadre of highly trained geropsychologists who will contribute to the care of the elderly both within and outside the Department of Veterans Affairs. This pool of individuals should provide an excellent source of recruitment for future VA psychologists.

One fellow is selected annually at each of the following 10 VA Medical Centers: Brockton, MA; Cleveland, OH; Gainesville FL; Houston, TX; Knoxville, IA; Little Rock, AR; Milwaukee, WI; Palo Alto, CA; Portland, OR; and San Antonio, TX. These VAMCs have strong geriatric focus programs and accredited psychology internship programs.

Office of Employee Education

In support of VA's mission to provide health care to the aging veteran population, education and training opportunities are offered to enhance the skills of medical center employees in the area of geriatrics. These educational activities are designed in response to the needs of health care personnel throughout the entire Veterans Health Administration. Annually, funding is provided for employee education and distributed to three major levels of the organization to support continuing education activities in priority areas.

First Level.—Funds are provided directly to each VA medical center to meet the continuing education needs of their employees. In FY 1996, 383 individual episodes of training were received by medical center employees in the area of geriatrics. An additional 2,393 employees attended locally sponsored lectures, workshops and seminars. The total number trained through local funding represents 4.3% of the total number of individuals trained.

Second Level.—The Office of Employee Education, through the Employee Education System meets education needs by conducting programs at the VA network and local medical center levels. In FY 1996, seven of the ten major employee education system sites conducted a total of 35 programs in the area of geriatrics. A total of 1,139 employees participated in these programs. Examples of some of the more recent programs include:

Dementia, Depression, and Addiction;
Alzheimer's and Dementia;
Suicide and Depression in the Elderly;
Issues Facing Older Women; and
Myths of Aging.

Level Three.—Employee education programs are also conducted in cooperation with the GRECCs. In FY 1996, the GRECCs received $253,304 in training funds to support their identified needs. This collaborative effort ensures the efficient use of existing resources to meet the increasing demands for training in geriatrics and gerontology.

Chief Information Office

Library and audiovisual communication

The widespread education and training activities in geriatrics have generated a broad spectrum of requirements for information throughout the VA system. Local library services continue to perform hundreds of on-line searches on databases such as MEDLINE and other bibliographic databases, and continue to add books, journals, and audio visuals on topics related to geriatrics and aging.

The Satellite Television network carried four live broadcasts targeted to healthcare providers who work with aged patients. The topics included elder abuse, PTSD in the older adult, geriatric oral surgery and Alzheimer's Disease.

The AV Software Delivery Program partnered with the Employee Education Network to produce and distribute two programs on videocassette explaining the VA Patient Assessment Instrument and Alzheimer's Feeding Techniques. Both are available in VA Library Services.

III. Veterans Benefits Administration

COMPENSATION AND PENSION

Disability and survivor benefits such as pension, compensation, and dependency and indemnity compensation administered by the Veterans Benefits Administration (VBA) provide all, or part, of the income for 1,672,173 persons age 65 or older. This total includes 1,225,426 veterans, 430,864 surviving spouses, 14,152 mothers and 1,731 fathers.

The Veterans' and Survivors' Pension Improvement Act of 1978, effective January 1, 1979, provided for a restructured pension program. Under this program, eligible veterans receive a level of support meeting a national standard of need. Pensioners generally receive benefits equal to the difference between their annual income from other sources and the appropriate income standard. Yearly cost of living adjustments (COLAs) have kept the program current with economic needs.

This Act provides for a higher income standard for veterans of World War I or the Mexican border period. This provision was in acknowledgment of the special needs of the Nation's oldest veterans. The current amount added to the basic pension rate is $1,867 as of December 1, 1995.

VETERANS SERVICES PROGRAM STAFF

VBA Regional Office personnel maintain an active liaison with local nursing homes, senior citizen homes, and senior citizen centers in an effort to ensure that older veterans and their dependents understand and have access to VA benefits and services.

Generally, regional office staff visit these facilities as needed or when requested by the service providers. VA pamphlets and application forms are provided to the facility management and social work staff during visits and through frequent use of regular mailings. State and area agencies on aging have been identified and are provided information about VA benefits and services through visits, workshops and pre-arranged training sessions. Senior citizen seminars are conducted for nursing home operations staff and other service providers that assist and provide service to elderly patients. Regional office staff regularly participate in senior citizens fairs and information events, thereby visiting and participating in events where the audience is primarily elderly citizens. VBA staff also visit places where senior citizens congregate such as malls, churches, and special luncheons or breakfasts to advise veterans of their benefit entitlements. Regional office outreach coordinators continue to serve on local and state task forces and represent VA as members of special groups that deal extensively with the problems of the elderly.

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