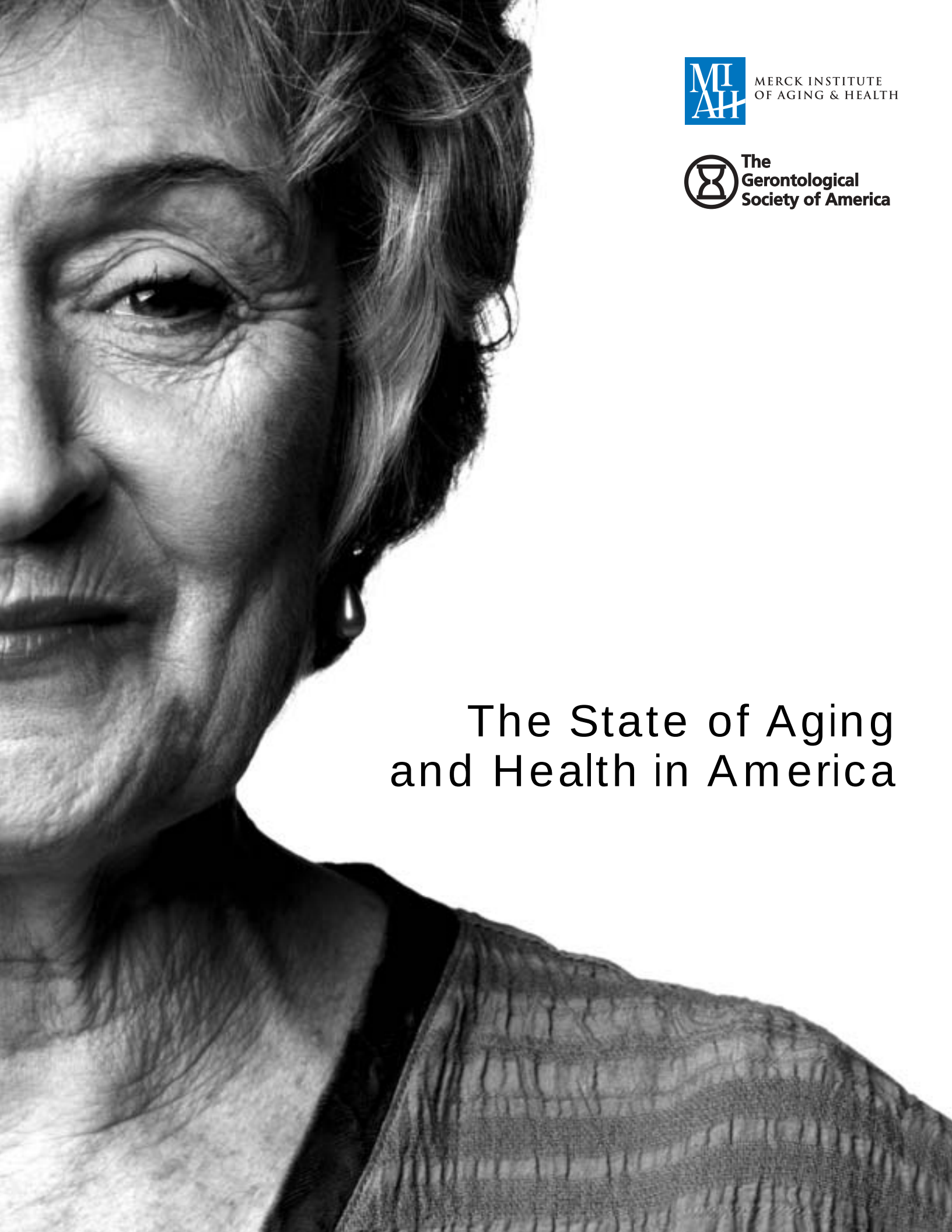

MERCK INSTITUTE OF AGING & HEALTH

The Gerontological Society of America

The State of Aging and Health in America

About this Report:

The State of Aging and Health report consists of five sections. The first section of the report, *The Health of Older Americans*, presents data that illustrate changes that have taken place during the past two decades in several important measures of older Americans' health. Five key measures show trends in life expectancy, death rates, chronic disease, disability, and self-rated health status. The second and third sections present the national and state-by-state *Report Card on Healthy Aging*. The *Report Card* includes 10 indicators divided into three groups:

- Health Behaviors
- Preventive Care and Cancer Screening
- Fall-Related Deaths and Injuries

The *Report Card* grades the nation and the states based on targets set for the older population in *Healthy People 2000*, a national effort to improve health by establishing health targets and measuring progress (see Appendix, Table 5). The *Report Card* uses a "Pass" or "Fail" grading system based on whether the nation and states met, or failed to meet, a target.

The fourth section of the report, *Mental Health and Aging*, presents challenges in treating mental illness among the elderly. The section focuses on the treatment of depression in later life, because most research on mental health services and the management of mental disorders relates to depressive disorders. The fifth section, *Training the Health Care Workforce—Present and Future,* focuses on the growing gap between older Americans' health care needs and the knowledge of health professionals who care for them.

Executive Summary

"The mission of the Merck Institute of Aging & Health is to improve the health, independence and quality of life of older adults, to help them not only survive but thrive. We hope this Report will focus the national spotlight on the obstacles to healthy aging and serve as a catalyst for improvement and advancement. We hope that health care professionals, policy makers and everyone interested in the challenges and consequences of our aging society will take note of its recommendations. Most of all, we hope this Report will serve as a national wake-up call for the changes we must undertake if we want to create the best possible health care system, and the best possible health care workforce, for older adults in the 21st century."

— Dr. Patricia Barry, MD, Executive Director of the Merck Institute of Aging & Health

"For over fifty years, The Gerontological Society of America has greatly contributed to the body of knowledge on aging and health. This Report continues and furthers that tradition. By assessing the health status of older Americans and providing recommendations for health care professionals, the Report illuminates what we as a nation must do to ensure not just a long life but a good life for older adults. It needs to be read in the corridors of government, the halls of medicine and newsrooms. It should become a valued reference for researchers. Above all, this Report deserves a place on the bookshelf of anyone who is interested in providing older adults with optimal health care."

— Toni C. Antonucci, Ph.D., President, The Gerontological Society of America

The United States population over age 65 is projected to grow from 35 million in 2000 to 70 million in 2030. At that time, one in five Americans will be age 65 or older.

The Merck Institute of Aging & Health and the National Academy on an Aging Society, the policy institute of The Gerontological Society of America, are releasing this report to assess the health status of older Americans and make recommendations to improve older Americans' future physical and mental well-being.

The most current data show that Americans, though living longer, are not necessarily living in better health during their senior years. Since 1990, healthy life expectancy (the number of healthy years after age 65) has remained at about 12 years—below the *Healthy People 2000* target of 14 years for 2000.

The good news is that the current gap between life span and healthy life span can be narrowed, and the primary responsibility rests with older adults. Seventy percent of the physical decline that occurs with aging is related to modifiable factors, including smoking, poor nutrition, lack of physical activity, injuries from falls and the failure to use Medicare-covered preventive services. Seniors need to start exercising, stop smoking and engage in other healthy behaviors.

In the area of mental health, primary care physicians, if given the right screening tools, can do a better job of diagnosing and treating depression and other mental disorders among older patients. In addition, providing training and education in geriatrics to practicing physicians, nurses, pharmacists, and other health care professionals can help them to better address the unique health needs of older patients.

This report is divided into five sections. Two of the sections offer a *Report Card*—the first of its kind—that shows whether older Americans are meeting specific targets set in *Healthy People 2000*. The following is a brief description of each section's findings:

The Health of Older Americans: Americans are living longer due to declines in heart disease and stroke mortality. But chronic diseases, such as diabetes and high blood

pressure, are becoming more prevalent among older adults—especially among Blacks and Hispanics. Among those 65 to 74, the share of those reporting very good to excellent health rose to 42 percent in 1999, from 35 percent in 1982. But those 75 or older reported little improvement or a decline in health status.

National Report Card on Healthy Aging: The nation failed to meet 6 of 10 national targets for improving the health status of older Americans. While the nation met important goals for smoking, colorectal screening, mammograms, and flu vaccinations, it failed to meet targets for physical exercise, nutrition, weight, pneumonia vaccinations, and injuries and deaths due to falls.

State-by-State Report Card on Healthy Aging: All states missed the targets for physical activity, nutrition, and weight. All states met the target for mammogram screenings. Nearly all met the targets for colorectal screenings and flu vaccinations.

Mental Health and Aging: Almost 20 percent of older Americans experience mental disorders. Many primary care physicians are not trained to screen for mental illness, and, unfortunately, may attribute psychiatric symptoms to "normal aging" or to chronic physical illness. As a result, close to 90 percent of depressed older patients in primary care get no treatment or inadequate treatment, despite the availability of effective treatments. Only 3 percent receive treatment for mental disorders from a mental health specialist.

Training the Health Care Workforce—Present and Future: Most health care professionals do not receive the geriatrics training necessary to respond to the unique and complex health needs of older adults. As such, inaccurate diagnoses and inappropriate care often result. Studies indicate that older patients who receive care from geriatrics-trained professionals show greater improvement than those treated with usual care. According to one estimate, proper geriatric care could reduce hospital, nursing home, and home care costs by at least 10 percent a year, saving $133.7 billion in 2020.

Goals:

- To provide every health care professional with some education and training in geriatrics and access to geriatric experts.
- To remove patient, provider, and policy barriers so that older Americans gain access to timely and effective mental health services.
- To achieve the national goals in reducing health risk behaviors.

To meet these goals, the Merck Institute of Aging & Health and the National Academy on an Aging Society, the policy institute of The Gerontological Society of America, call for a number of actions. The following is an overview, with more details in the body of the report.

- Give physicians access to state-of-the-art information and resources to help them better prevent and treat depression, falls, urinary incontinence, and other age-related conditions.
- Encourage physicians to screen older patients for depression and other mental disorders.
- Expand the Medicare reimbursement system to provide for improved mental health coverage. The federal program also needs to cover patient care coordination and assessment, a major component of geriatric care.
- Develop continuing education programs in geriatrics based on effective models of practicing-physician education, interactive sessions, and evidence-based materials.
- Encourage physicians to routinely ask and counsel seniors about smoking, physical activity, diet and other health risk behaviors.
- Target information and resources toward African-Americans and Hispanics, since minority seniors are at greater risk than whites for several chronic conditions and health-damaging behaviors.

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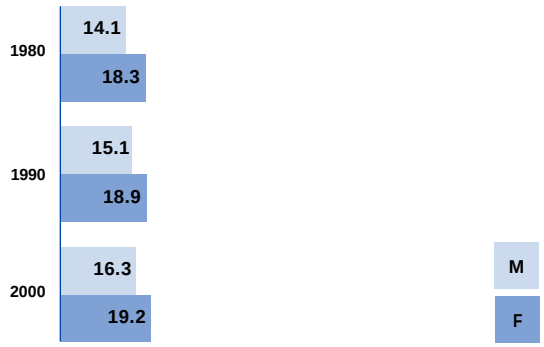
The Health of Older Americans

Over the last century, the number of older Americans increased more than tenfold, to 35 million people age 65 or older in 2000. Experts predict this age group will double by 2030, when one in five Americans will be age 65 or older.

Thanks to improved medical care, increased use of preventive health services, public health efforts, and healthier lifestyles, the vast majority of Americans now survive to age 65. Women who reach age 65 can expect to live an additional 19 years, while men can expect to live another 16 years (see Figure 1).

Experts disagree on whether we can expect further gains in older Americans' life expectancy in the 21st century. Some argue that life expectancy cannot continue to increase unless there are dramatic, unforeseen medical advances in preventing and treating major causes of death, such as heart disease and cancer. Others argue that life expectancy will continue to increase, since future seniors will benefit from continuing medical advances.

f.1 **THE GAP BETWEEN MALE AND FEMALE LIFE EXPECTANCY AT AGE 65 IS NARROWING**



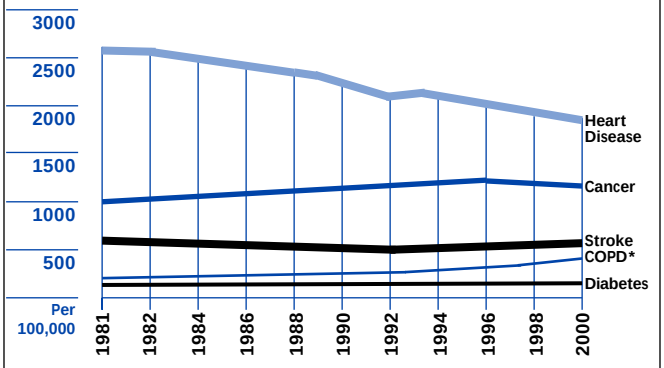
Source: National Center for Health Statistics, Trends in Health and Aging Database

Causes of Death

In the 1980s and 1990s, the death rates for two of the three leading killers of older Americans—heart disease and stroke—declined by approximately one-third (see Figure 2). In fact, decreases in seniors' death rates for heart disease and stroke have driven the increase in life expectancy at age 65. Evidence suggests that, at least for heart disease, falling death rates are due more to treatment advances than to a reduction in the incidence of the disease.

Yet, despite the availability of improved care, heart disease and stroke remain major killers of older Americans. In 2000, heart disease, stroke, and cancer accounted for 60 percent of all deaths among people age 65 or older. The death rates for cancer and for chronic lower respiratory diseases have increased, reflecting, in large part, the effects of prior smoking patterns among those age 65 or older. The death rate for diabetes also increased over this period, due to increases in average weight and obesity and high levels of physical inactivity among older people.

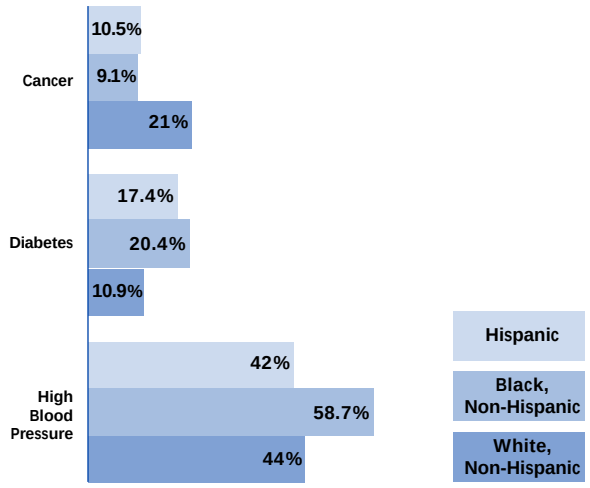
f.2 **HEART DISEASE AND STROKE DEATH RATES HAVE FALLEN BY ONE-THIRD SINCE 1981 (FOR THOSE AGE 65+)**



Source: National Center for Health Statistics, Trends in Health and Aging Database

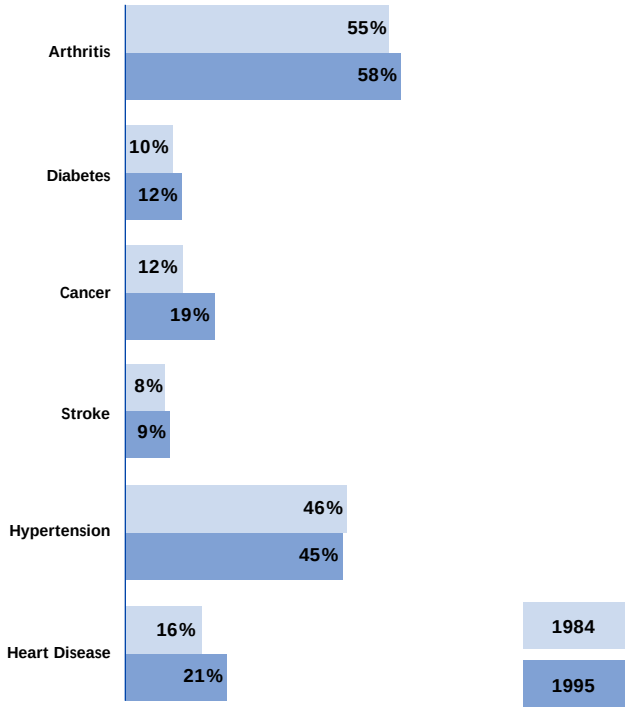
**COPD: Chronic obstructive pulmonary diseases, which include bronchitis, emphysema, asthma, and other chronic respiratory diseases*

f.3 **PREVALENCE OF CHRONIC CONDITIONS AMONG 70+ GROUP VARIES CONSIDERABLY BY RACE AND ETHNICITY, 1995**



Source: Second Supplement on Aging

f.4 **HIGHER SHARE OF THOSE AGE 70+ REPORT HAVING SELECTED CHRONIC CONDITIONS**



Source: Supplement on Aging and Second Supplement on Aging

Chronic Health Conditions

With earlier diagnosis and better treatment of life-threatening diseases, people are living longer after the onset of illness, but not necessarily healthier. For example, better treatment of heart disease means that an individual may live long enough to develop other age-related conditions, such as arthritis and diabetes.

Prevalence of chronic diseases among older Americans varies by race and ethnicity. Nearly 60 percent of elderly blacks report high blood pressure, and a growing share of elderly blacks and Hispanics report problems with diabetes (see Figure 3).

Disability

Chronic conditions cause almost half of all disability among older Americans. Between 1984 and 1995, the prevalence of all major chronic diseases increased among persons age 70 or older (see Figure 4).

Although chronic diseases are becoming more prevalent in the older population, disability rates for older Americans have been declining in recent years. In 1982, the disabled older population in the United States totaled 6.4 million. If the 1982 rate had continued, the number of disabled would have climbed to about 9.3 million in 1999. Instead, it only rose slightly, to 7 million—less than a quarter of the increase that might have been expected (see Figure 5).

Possible explanations for this decreased disability include improved management and treatment of underlying chronic diseases, changes in health behavior, and increased use of devices—canes, walkers, walk-in showers, support rails, and handicapped accessible facilities—that enable seniors to stay independently active despite physical limitations.

Self-Reported Health Status

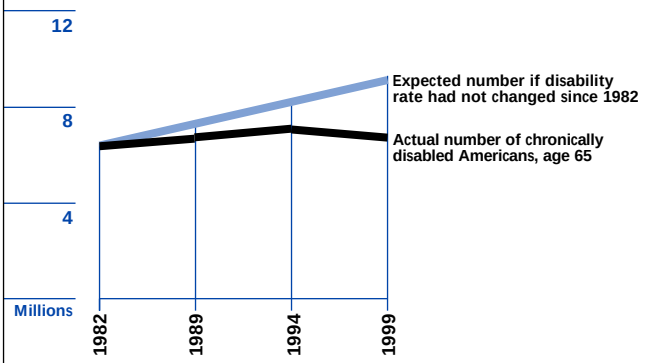
Perhaps the best measure of seniors' health is their self-reported health status. How do older Americans' view their own physical health? Here, the answer depends on which group of older Americans is surveyed.

For example, self-reported health status varies by race (see Figure 6). Among older persons in every age group, blacks were much less likely than whites to report their health as very good or excellent.

Self-reported health status also varies by age. Among those ages 65 to 74, the percentage reporting very good or excellent health increased from 35 percent in 1982 to 42 percent in 1999. The oldest age groups, however, reported only modest improvements in health status. About 33 percent of those ages 75 to 84 reported their health as very good or excellent in 1982, compared with 35 percent in 1999. Among those age 85 or older, the percentage that rated their health as very good or excellent actually declined. This decline is perhaps not surprising given the greater proportion of older persons surviving to old age with chronic conditions. However, this is of great significance to health planners and policy makers since those age 85 or older are the fastest growing group of older Americans and the group that generates the greatest demand for health and long-term care services.

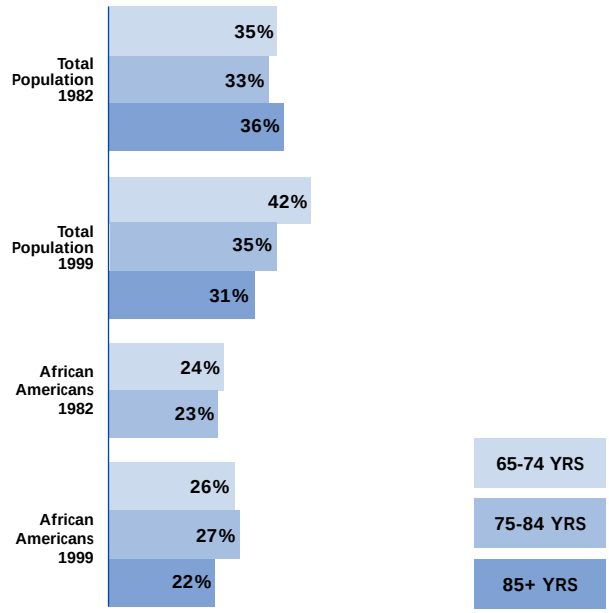
Americans can improve the odds for healthy aging simply by taking advantage of recommended preventive health services and by making healthy lifestyle changes. In fact, 70 percent of the physical decline that occurs with aging is related to modifiable factors, including smoking, poor nutrition, physical inactivity, and failure to use preventive and screening services (National Center for Chronic Disease Prevention and Health Promotion, 1999). Research shows that simple behavioral changes can improve the health condition of even the oldest old. The challenge is to encourage people to reduce preventable health risks, thereby increasing the number of additional healthy years they can expect to live.

f.5 **NUMBER OF CHRONICALLY DISABLED AMERICANS AGE 65+ LESS THAN PROJECTED**



Source: National Long-Term Care Survey , 1982-1999

f.6 **SELF-REPORTED EXCELLENT OR VERY GOOD HEALTH VARIES BY AGE AND RACE, 1982 AND 1999**



Source: National Center for Health Statistics, Trends in Health and Aging Database

The National Report Card on Healthy Aging

This section includes the *National Report Card on Healthy Aging* (see Table 1). The *Report Card* shows the nation's most current data for the indicator, and a grade of either "Pass" or "Fail" relative to the *Healthy People 2000* target. The rest of the section describes the indicators in greater detail. Although *Healthy People 2000* established several targets for improving the health of the older population, the *Report Card* focuses on 10 modifiable factors that have the greatest potential to promote healthy aging.

SUMMARY OF FINDINGS:

- The nation met 4 of the 10 *Healthy People 2000* targets for the older population—mammography, colorectal screening, flu vaccinations and smoking.
- The older population failed to achieve the targets set for physical activity, nutrition, weight, pneumonia vaccinations, hospitalizations due to hip fractures and deaths due to falls.

Table 1 THE NATIONAL REPORT CARD ON HEALTHY AGING

Indicator	Current Data For Persons Age 65 or Older (Year)	*Healthy People 2000* Target*	Grade
Health Behaviors			
1. No Physical Activity During Leisure-Time In Past Month (%)	34.6 (2000)	22	Fail
2. Overweight (%)	37.1 (1999)	20	Fail
3. Eating 5+ Fruits/Veg. Daily (%)	31.8 (2000)	50	Fail
4. Current Smoker (%)	11.1 (1997/98)	15	Pass
Preventive Care and Cancer Screening			
5. Flu Vaccine in Past Year (%)	64 (2000)	60	Pass
6. Ever had Pneumonia Vaccine (%)	53 (2000)	60	Fail
7. Mammogram within Past 2 Years (%)	68 (2000)	60	Pass
8. Ever had Colorectal Screening (%)	48.5 (1999)	40	Pass
Fall-Related Deaths and Injuries (per 100,000)			
9. Hip Fractures, 65+	863 (1998)	607	Fail
10. Fall-related Deaths, 85+	162.7 (1998)	105	Fail

** See Appendix, Table 5, for a full description of Healthy People 2000 targets.*

Health Behaviors

Healthy People 2000 included several targets for improving older Americans' quality of life through simple lifestyle changes. Research has shown that healthy lifestyles are more influential than genetic factors in helping older people avoid the decline traditionally associated with aging. Older adults who are physically active, eat a healthy diet, do not smoke, and maintain a healthy body weight can extend their healthy years and improve their quality of life. Since all are behaviors individuals can change, they represent an area in which significant future progress is achievable.

Indicator 1: No physical activity during leisure-time in the past month

- Physical activity is the key to healthy aging. In fact, older people have more to gain than younger people by becoming more active because they are at higher risk of developing problems that regular physical activity can prevent, such as obesity, high blood pressure, diabetes, osteoporosis, stroke, depression, colon cancer, and premature death.
- Most older Americans are not active enough to achieve the health benefits associated with physical activity, and the *Healthy People 2000* target related to physical activity showed little improvement at the end of the decade. In 2000, 35 percent of older adults reported being physically inactive during the past month (see Figure 7).

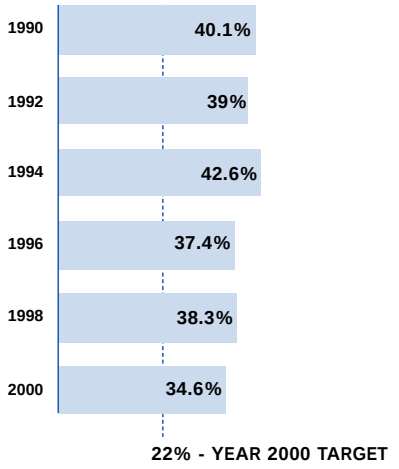
Indicator 2: Overweight

- Maintaining a healthy body weight is important for older Americans' health, since being overweight or obese is associated with a greater risk of diseases, such as cardiovascular disease and diabetes, and can worsen existing conditions, such as arthritis.
- Between 1990 and 1998, there has been little change in the share of overweight older Americans. Currently, the percent of older Americans who are overweight is nearly twice the national target of 20 percent (see Figure 8).
- There has been an increase in the share of older Americans that is obese. Obesity is defined as 30 pounds over an individual's recommended Body Mass Index. Obesity is a particularly severe problem among older black Americans. In 1999, more than 25 percent of older blacks were obese. A *Healthy People 2000* target for obesity does not exist.

Indicator 3: Five or more fruits and vegetables daily

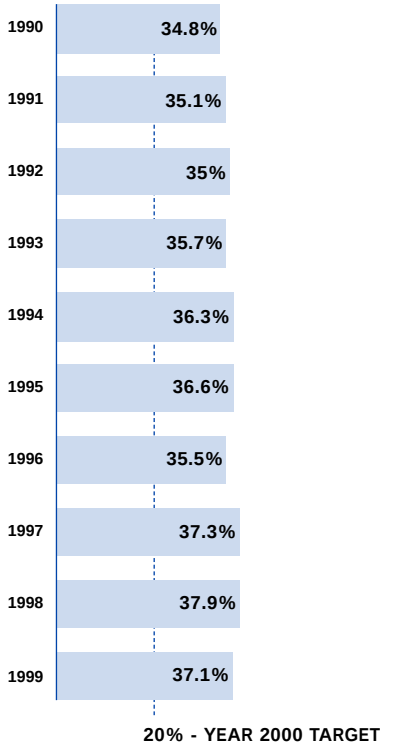
- Poor nutrition increases a person's risk for many conditions (including high blood pressure, osteoporosis, and arthritis) and diseases (including cardiovascular diseases, diabetes, and certain cancers) in later life. Older Americans consume too much saturated fat and too few fruits and vegetables that are high in vitamins, minerals, and carbohydrates.

f.7 **SHARE OF 65+ WHO REPORT NO PHYSICAL ACTIVITY DURING LEISURE TIME STILL MISSES TARGET**



Source: CDC, Behavioral Risk Factor Surveillance System Online Prevalence Database

f.8 **PERCENT OF OLDER AMERICANS WHO ARE OVERWEIGHT IS NEARLY TWICE THE NATIONAL TARGET**



Source: CDC, Behavioral Risk Factor Surveillance System Online Prevalence Database

- Current recommendations call for the consumption of five or more servings of fruits and vegetables every day. This goal set forth in *Healthy People 2000* has not been met (see Figure 9).

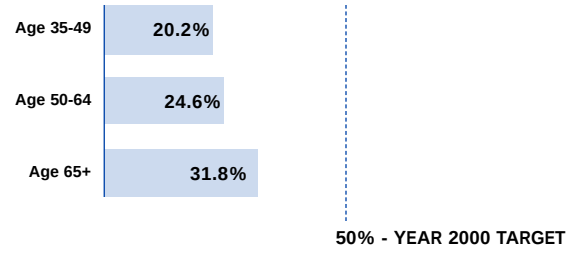
Indicator 4: Current smoker

- Smoking is the single most preventable cause of death and disease in the United States. Smoking contributes substantially to chronic disease and disability.
- The majority of older Americans do not smoke. However, the percentage of older black males who smoke is still considerably above the *Healthy People 2000* target of 15 percent (see Figure 10).

CALL TO ACTION:

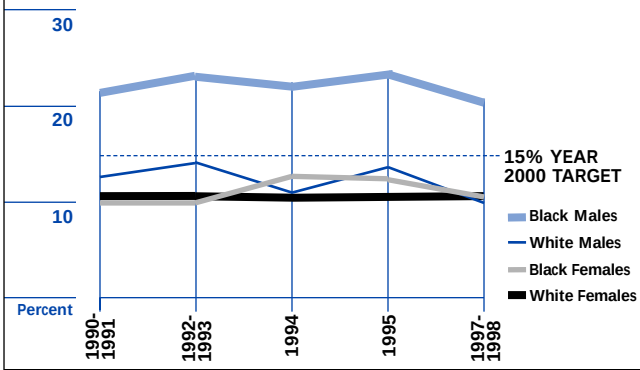
Physicians need to be more active in promoting healthy behaviors for older patients. Physician-based interventions are very influential with seniors. Studies have shown that a physician's advice to quit smoking plays a key role in smoking cessation. Educational materials should be made available to physicians to encourage them to routinely ask seniors about smoking, physical activity, diet, and other health risk behaviors. The responsibility, however, should not fall only on physicians. Public awareness campaigns could be developed to encourage older people to talk to their physicians about the benefits of healthy lifestyle changes.

f.9 **SHARE OF 65+ WHO CONSUME 5+ FRUITS/VEGETABLE SERVINGS DAILY HIGHER THAN FOR OTHER AGE GROUPS, BUT STILL BELOW TARGET, 2000**



Source: CDC, Behavioral Risk Factor Surveillance System Online Prevalence Database

f.10 **SHARE OF BLACK MALES 65+ WHO ARE CURRENT SMOKERS EXCEEDS TARGET**



Source: National Center for Health Statistics, Trends in Health and Aging Database (Note: 1996 data not available)

Preventive Care and Cancer Screening

Healthy People 2000 included several goals that focused on improving the use of preventive care health services, such as immunizations and cancer screening tests. Although older adults are more likely now than in the past to use preventive health services, need for improvement still exists.

Preventive Care

Pneumonia and influenza are the fifth-leading cause of death among older Americans. More than 60,000 people 65 and older died of these illnesses in 2001. Vaccinations can prevent these illnesses or substantially reduce their severity. The costs of vaccinations are covered under Medicare.

Indicator 5: Flu vaccine in past year

- Between 1989 and 2000, flu vaccinations for persons age 65 and older doubled, and the target of 60 percent established in *Healthy People 2000* was met. However, coverage needs to expand among older black and Hispanic persons (see Figures 11 and 12).

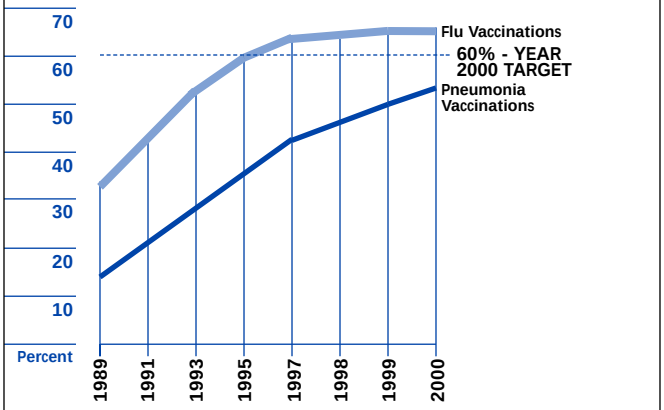
Indicator 6: Ever had pneumonia vaccine

- Pneumonia vaccinations more than tripled between 1989 and 2000. However, coverage among older blacks and Hispanics needs to greatly increase to meet the *Healthy People 2000* target of 60 percent (see Figures 11 and 12).

Cancer Screening

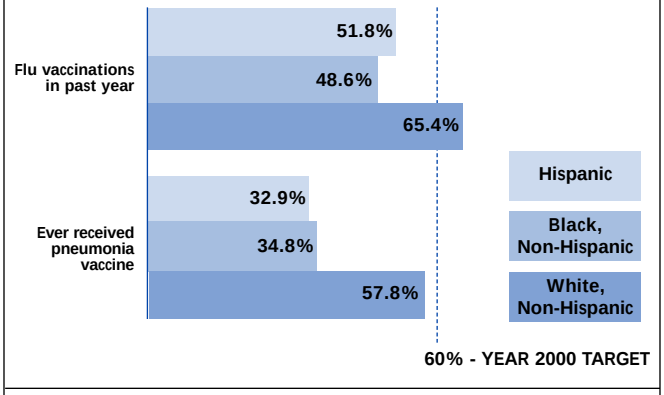
Some cancers, such as colorectal cancer and breast cancer, can be treated if detected in their early stages. Both Medicare and Medicaid cover mammograms.

f.11 **FLU VACCINATIONS FOR PERSONS AGE 65+ EXCEED TARGET; PNEUMONIA LAGS BEHIND**



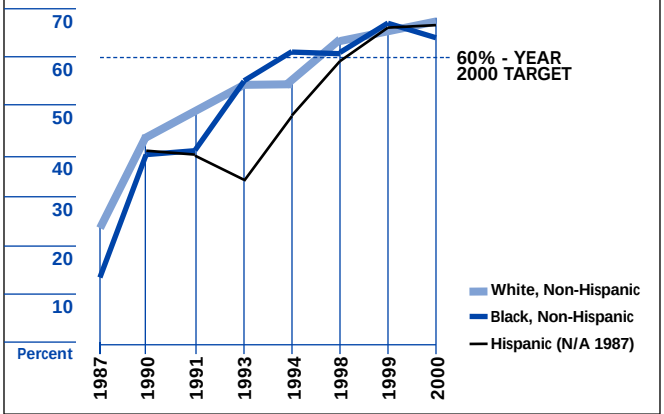
Source: National Health Interview Survey

f.12 **WHILE WHITES AGE 65+ APPROACH OR HAVE MET NATIONAL IMMUNIZATION TARGETS, OTHER RACE AND ETHNIC GROUPS FALL BEHIND, 2001**



Source: National Health Interview Survey

f.13 **IN 2000, ALL WOMEN AGE 65+ MET TARGET FOR MAMMOGRAMS**



Source: National Health Interview Survey

Indicator 7: Mammogram within past two years

- Between 1987 and 2000, the percentage of women age 65 or older who had a mammogram within the preceding two years tripled, and racial and ethnic disparities narrowed considerably. In 2000, all racial and ethnic groups had reached the *Healthy People 2000* target of 60 percent (see Figure 13).

Indicator 8: Ever had colorectal cancer screening

- Colorectal cancer is the second-leading cause of cancer deaths in the U.S. Early detection greatly increases the chances of survival, and detection procedures may actually prevent the disease through the removal of colon polyps. Regular colorectal screening is recommended beginning at age 50. Medicare covers screening tests for those over age 65.
- In 1999, 49 percent of older Americans reported that they have had a sigmoidoscopy or colonoscopy exam, considerably above the *Healthy People 2000* target of 40 percent.

CALL TO ACTION:

To reduce illness and death associated with influenza and pneumonia infections, new strategies must be developed to promote the use of Medicare-covered vaccination services among racial and ethnic minority groups.

Fall-Related Deaths and Injuries

Healthy People 2000 included several goals for reducing fall-related injury and death rates among older Americans. Unintentional injuries are the eighth-leading cause of deaths among adults age 65 or older, and they are a major cause of disabilities and hospitalization. Falls and fall-related injuries are the leading cause of injury death among those 85 or older. Hip fractures are one of the most serious outcomes associated with falls. Half of all older adults hospitalized for hip fractures cannot return home or live independently after their injuries.

Indicator 9: Hip fracture hospitalizations for persons 65+

- Since 1990, hip fracture hospitalization rates among adults age 65 or older have increased. *Healthy People 2000's* goal was to reduce the rate of hospitalization among adults age 65 or older to no more than 607 per

100,000 persons. The 1998 rate was 863 per 100,000 persons—42 percent higher than the target (see Figure 14).

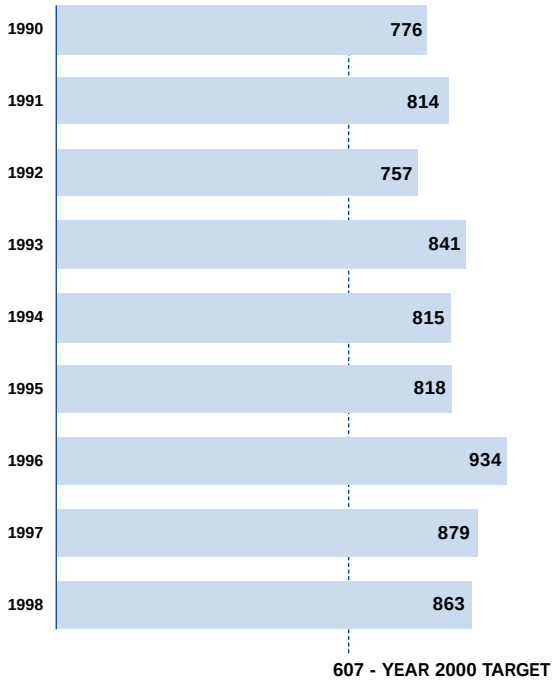
Indicator 10: Deaths from falls and fall-related injuries for persons age 85+

For people age 85 or older, unintentional fall-related death rates gradually increased from 1990 through 1998, exceeding the target for 2000 (see Figure 15).

CALL TO ACTION:

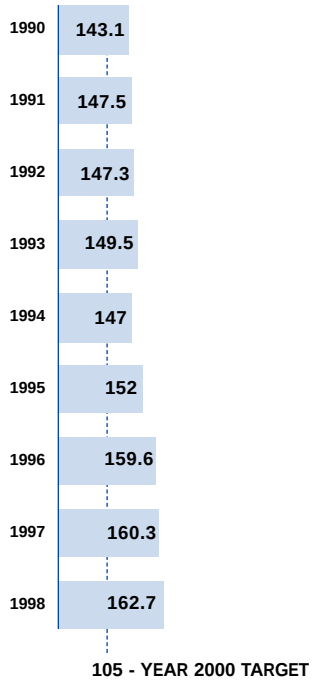
It is time to develop and implement a national strategy for the prevention of falls among seniors. Because adults 85 or older are the fastest-growing segment of the elderly population, hip fracture hospitalization rates and fall-related death rates will continue to climb unless fall prevention strategies are improved. The most effective fall prevention programs use a multifaceted approach that includes education, exercise, vision screenings, medication review, and home modifications (installing grab bars and handrails, and improving lighting). Also, new products such as protective hip pads and impact-absorbing floor materials can reduce fall-related injuries and deaths.

f.14 **HIP FRACTURES AMONG THE OLDER POPULATION STILL EXCEED TARGET**



Source: Trends in Health and Aging Database
National Center for Health Statistics

f.15 **FALL-RELATED DEATHS FOR PEOPLE AGE 85+ STILL EXCEED TARGET**



Source: National Vital Statistics System

The State-by-State Report Card on Healthy Aging

This section includes the *Report Card* for the 50 states and the District of Columbia. Table 2 presents, for each indicator, the best- and worst-ranked states, and how many states met each target. For each state and the District of Columbia, the *Report Card* displays the state's most current data for the indicator, and a grade of either "Pass" or "Fail" relative to the *Healthy People 2000* target (see Table 3). State rankings are also presented. However, because state-level data are not available for some indicators, the states are graded on fewer targets than the nation as a whole.

SUMMARY OF FINDINGS:

At the state level, there has been mixed progress:

- No states met all the targets.
- All states failed to meet targets for physical activity, nutrition, and weight for older Americans.
- All states, except Delaware, failed to meet the target for pneumonia vaccinations.
- All states met the target for mammogram screenings.
- Only Nevada failed to meet the smoking reduction target.
- Hawaii was most often ranked in the top five. Kentucky was most often in the bottom five.
- 48 states met the target for colorectal cancer screening.
- 46 states met the target for flu vaccinations.
- Variation among states can be significant. For example, in Colorado, which ranked first in the category of older Americans receiving flu vaccinations, 75 percent of older adults got a flu shot—while the District of Columbia ranked last in that category, with only 55 percent of older adults vaccinated (see Table 2).

Table 2 **STATES SHOW CONSIDERABLE VARIATION IN REPORT CARD RANKINGS**

Indicator	Best Ranked State	Worst Ranked State	*Healthy People 2000* Target*	Number of States That Met Target
Health Behaviors				
1. No Physical Activity During Leisure-Time In Past Month (%)	Utah (22)	Kentucky (50)	22	0
2. Overweight (%)	Hawaii (32)	North Dakota (44)	20	0
3. Eating 5+ Fruits/Veg. Daily (%)	Mass. (45)	Mississippi (20)	50	0
4. Current Smoker (%)	Utah (5)	Nevada (18)	15	50
Preventive Care and Cancer Screening				
5. Flu Vaccine in Past Year (%)	Colorado (75)	D.C. (55)	60	46
6. Ever had Pneumonia Vaccine (%)	Delaware (60)	D.C. (34)	60	1
7. Mammogram within Past 2 Years (%)	Arizona (85)	Indiana (65)	60	51
8. Ever had Colorectal Screening (%)	Delaware (61)	Oklahoma (33)	40	48
Fall-Related Deaths and Injuries per 100,000**				
10. Fall-related Deaths, 85+	California (85)	Minnesota (270)	105	N/A

** See Appendix, Table 5, for a full description of Healthy People 2000 targets.*
*** There is no state data available for Indicator 9.*

Table 3 **STATE-BY-STATE REPORT CARD ON HEALTHY AGING**

	No Physical Activity during Leisure-Time, 2000 (%)			Overweight, 1998-2000 (%)			Eating 5 or More Fruits and Vegetables, 1998-2000			Smoking, 1998-2000 (%)			Flu Vaccination, 1997-1999 (%)		
	Data	Rank	Grade	Data	Rank	Grade	Data	Rank	Grade	Data	Rank	Grade	Data	Rank	Grade
Alabama	35.6	29	Fail	40.4	39	Fail	33.1	29	Fail	12.0	41	Pass	63.6	42	Pass
Alaska	29.5	9	Fail	36.8	10	Fail	31.6	32	Fail	14.0	50	Pass	59.0	50	Fail
Arizona	34.9	27	Fail	38.1	17	Fail	23.2	47	Fail	10.2	24	Pass	72.1	5	Pass
Arkansas	32.2	17	Fail	39.1	27	Fail	35.7	17	Fail	11.6	39	Pass	64.2	40	Pass
California	28.5	7	Fail	36.9	12	Fail	38.6	7	Fail	8.5	7	Pass	68.8	17	Pass
Colorado	26.5	6	Fail	36.8	11	Fail	34.8	20	Fail	8.2	5	Pass	74.6	1	Pass
Connecticut	33.8	22	Fail	38.6	21	Fail	33.9	26	Fail	10.3	27	Pass	66.0	29	Pass
Delaware	36.6	31	Fail	42.8	49	Fail	37.6	9	Fail	10.1	20	Pass	68.2	18	Pass
Dist. of Columbia	28.7	8	Fail	33.6	2	Fail	24.4	46	Fail	8.6	9	Pass	55.0	51	Fail
Florida	31.9	16	Fail	38.8	25	Fail	32.1	31	Fail	9.9	18	Pass	62.8	44	Pass
Georgia	40.3	43	Fail	37.7	16	Fail	21.3	49	Fail	12.4	45	Pass	59.5	47	Fail
Hawaii	24.4	3	Fail	32	1	Fail	41.6	3	Fail	7.1	2	Pass	72.6	3	Pass
Idaho	24.8	4	Fail	39.7	35	Fail	36.8	12	Fail	10.1	21	Pass	67.7	22	Pass
Illinois	42.2	46	Fail	38.2	18	Fail	35.2	19	Fail	10.3	28	Pass	66.7	27	Pass
Indiana	33.6	21	Fail	38.7	23	Fail	36.2	14	Fail	12.8	47	Pass	65.0	33	Pass
Iowa	35.5	28	Fail	40.4	40	Fail	27.3	44	Fail	8.0	4	Pass	69.6	12	Pass
Kansas	41.4	44	Fail	39.3	32	Fail	34.1	23	Fail	10.0	19	Pass	64.3	38	Pass
Kentucky	50.4	51	Fail	39.2	28	Fail	21.1	50	Fail	13.7	49	Pass	64.8	35	Pass
Louisiana	49	50	Fail	38.7	24	Fail	27.4	43	Fail	10.6	30	Pass	59.5	49	Fail
Maine	34	23	Fail	37.5	13	Fail	38.4	8	Fail	9.3	12	Pass	72.9	2	Pass
Maryland	31.5	14	Fail	36	4	Fail	40.2	4	Fail	10.3	25	Pass	63.0	43	Pass
Massachusetts	32.8	19	Fail	39.6	34	Fail	45.1	1	Fail	9.2	11	Pass	67.8	20	Pass
Michigan	30.3	10	Fail	39.3	33	Fail	42.1	2	Fail	9.9	17	Pass	66.8	26	Pass
Minnesota	37	34	Fail	43.5	50	Fail	34	24	Fail	9.5	13	Pass	65.5	31	Pass
Mississippi	43	48	Fail	38.4	20	Fail	20.4	51	Fail	11.3	36	Pass	62.0	45	Pass
Missouri	39.1	40	Fail	38.6	22	Fail	29	41	Fail	13.2	48	Pass	69.3	15	Pass
Montana	33.4	20	Fail	38.3	19	Fail	31.5	33	Fail	11.2	34	Pass	71.4	8	Pass
Nebraska	39.3	41	Fail	39.2	29	Fail	34	25	Fail	9.9	16	Pass	67.5	25	Pass
Nevada	34.3	24	Fail	37.6	14	Fail	30.8	36	Fail	18.0	51	Fail	59.5	48	Fail
New Hampshire	37	35	Fail	41.3	45	Fail	36.8	13	Fail	12.3	44	Pass	64.9	34	Pass
New Jersey	34.4	25	Fail	40.7	43	Fail	34.7	21	Fail	9.0	10	Pass	64.3	39	Pass
New Mexico	32.5	18	Fail	36.4	6	Fail	31.2	34	Fail	12.1	43	Pass	70.8	10	Pass
New York	38.5	37	Fail	39.8	37	Fail	32.8	30	Fail	9.6	15	Pass	64.1	41	Pass
North Carolina	36.6	32	Fail	41.1	44	Fail	27.1	45	Fail	10.9	32	Pass	64.4	37	Pass
North Dakota	34.4	26	Fail	43.9	51	Fail	38.9	6	Fail	8.3	6	Pass	66.0	30	Pass
Ohio	41.8	45	Fail	36.4	7	Fail	27.7	42	Fail	12.5	46	Pass	67.7	21	Pass
Oklahoma	43.8	49	Fail	35.9	3	Fail	29.7	38	Fail	11.2	35	Pass	70.6	11	Pass
Oregon	25.5	5	Fail	42.1	47	Fail	36.9	11	Fail	10.2	23	Pass	67.5	24	Pass
Pennsylvania	30.9	12	Fail	42.2	48	Fail	29.3	39	Fail	8.6	8	Pass	64.4	36	Pass
Rhode Island	38.4	36	Fail	39.2	30	Fail	29.9	37	Fail	11.2	33	Pass	71.8	6	Pass
South Carolina	38.9	39	Fail	39.7	36	Fail	29.1	40	Fail	10.1	22	Pass	69.0	16	Pass
South Dakota	39.6	42	Fail	41.9	46	Fail	34.3	22	Fail	12.0	42	Pass	69.6	13	Pass
Tennessee	42.8	47	Fail	36.2	5	Fail	39.2	5	Fail	11.7	40	Pass	68.0	19	Pass
Texas	31.7	15	Fail	36.7	9	Fail	31.1	35	Fail	10.5	29	Pass	67.5	23	Pass
Utah	22.4	1	Fail	36.6	8	Fail	36.2	15	Fail	5.3	1	Pass	70.9	9	Pass
Vermont	36.2	30	Fail	37.6	15	Fail	33.6	27	Fail	8.0	3	Pass	71.5	7	Pass
Virginia	38.7	38	Fail	38.9	26	Fail	35.4	18	Fail	11.5	38	Pass	66.7	28	Pass
Washington	22.6	2	Fail	39.2	31	Fail	35.9	16	Fail	9.6	14	Pass	69.6	14	Pass
West Virginia	36.8	33	Fail	40.2	38	Fail	22.9	48	Fail	10.9	31	Pass	61.3	46	Pass
Wisconsin	30.3	11	Fail	40.5	42	Fail	37.4	10	Fail	10.3	26	Pass	65.5	32	Pass
Wyoming	31.3	13	Fail	40.4	41	Fail	33.6	28	Fail	11.3	37	Pass	72.6	4	Pass

	Pneumonia Vaccination, 1997, 1999 (%)			Mammograms, 1998-2000 (%)			Colorectal Cancer Screening, 1997, 1999 (%)			Fall-related Deaths, 85+ 1997-1999 (per 100,000)		
	Data	Rank	Grade	Data	Rank	Grade	Data	Rank	Grade	Data	Rank	Grade N/A
Alabama	50.7	23	Fail	73.9	25	Pass	48.7	30	Pass	91.8	4	
Alaska	41.4	49	Fail	81.6	4	Pass	58.2	2	Pass	-	-	
Arizona	56.3	5	Fail	85.0	1	Pass	45.0	40	Pass	192.4	42	
Arkansas	44.8	47	Fail	66.6	48	Pass	43.2	43	Pass	120.3	17	
California	53.4	18	Fail	81.3	7	Pass	56.4	6	Pass	85.1	1	
Colorado	58.2	2	Fail	75.5	19	Pass	54.9	9	Pass	188.7	41	
Connecticut	46.0	42	Fail	79.3	11	Pass	53.7	15	Pass	102.6	11	
Delaware	59.8	1	Fail	81.9	3	Pass	61.0	1	Pass	155.1	31	
Dist. of Columbia	33.7	51	Fail	84.5	2	Pass	57.3	5	Pass	92.1	5	
Florida	49.5	30	Fail	81.4	6	Pass	53.1	17	Pass	92.3	6	
Georgia	49.6	28	Fail	69.2	44	Pass	53.7	14	Pass	158.5	33	
Hawaii	53.8	15	Fail	78.1	13	Pass	56.3	7	Pass	138.3	27	
Idaho	52.7	19	Fail	69.7	43	Pass	47.7	33	Pass	217.3	47	
Illinois	48.8	32	Fail	72.6	30	Pass	48.5	31	Pass	89.2	3	
Indiana	45.6	43	Fail	64.7	51	Pass	47.0	36	Pass	127.8	21	
Iowa	56.3	4	Fail	70.0	41	Pass	50.0	25	Pass	193.8	44	
Kansas	49.4	31	Fail	75.2	21	Pass	44.1	42	Pass	158.2	32	
Kentucky	45.4	46	Fail	68.4	45	Pass	39.1	50	Fail	129.6	24	
Louisiana	37.4	50	Fail	70.5	37	Pass	44.9	41	Pass	97.3	9	
Maine	53.7	17	Fail	76.1	16	Pass	49.1	28	Pass	182.4	38	
Maryland	47.6	38	Fail	80.3	9	Pass	51.6	18	Pass	97.9	10	
Massachusetts	54.8	11	Fail	80.7	8	Pass	46.5	38	Pass	96.7	8	
Michigan	51.7	21	Fail	79.1	12	Pass	55.9	8	Pass	105.3	13	
Minnesota	48.8	33	Fail	67.0	47	Pass	57.3	4	Pass	270.1	50	
Mississippi	48.2	36	Fail	66.1	50	Pass	42.9	45	Pass	143.1	29	
Missouri	48.6	34	Fail	70.4	38	Pass	47.1	35	Pass	164.4	34	
Montana	56.0	8	Fail	72.4	31	Pass	49.8	26	Pass	216.7	46	
Nebraska	52.3	20	Fail	66.6	49	Pass	42.3	47	Pass	193.1	43	
Nevada	57.9	3	Fail	74.0	24	Pass	50.4	22	Pass	93.7	7	
New Hampshire	55.2	10	Fail	77.0	14	Pass	51.1	20	Pass	105.7	14	
New Jersey	45.6	44	Fail	73.0	28	Pass	45.7	39	Pass	88	2	
New Mexico	51.7	22	Fail	73.3	26	Pass	48.2	32	Pass	232.1	48	
New York	44.4	48	Fail	73.1	27	Pass	50.2	24	Pass	103.9	12	
North Carolina	54.7	12	Fail	75.7	18	Pass	46.6	37	Pass	134.8	25	
North Dakota	47.9	37	Fail	76.2	15	Pass	51.2	19	Pass	187.3	40	
Ohio	47.4	39	Fail	71.3	35	Pass	47.3	34	Pass	123.4	19	
Oklahoma	47.2	40	Fail	70.1	39	Pass	32.8	51	Fail	145.4	30	
Oregon	56.1	7	Fail	76.1	17	Pass	53.7	16	Pass	178.8	37	
Pennsylvania	49.7	27	Fail	75.1	22	Pass	43.0	44	Pass	121.9	18	
Rhode Island	50.1	26	Fail	81.5	5	Pass	50.5	21	Pass	140.2	28	
South Carolina	49.5	29	Fail	79.4	10	Pass	41.6	48	Pass	117.3	16	
South Dakota	45.5	45	Fail	74.6	23	Pass	49.1	27	Pass	184.9	39	
Tennessee	50.2	24	Fail	69.8	42	Pass	42.9	46	Pass	128.5	22	
Texas	50.2	25	Fail	71.7	33	Pass	50.3	23	Pass	114.9	15	
Utah	55.4	9	Fail	70.9	36	Pass	54.7	10	Pass	129	23	
Vermont	54.1	14	Fail	72.3	32	Pass	48.8	29	Pass	208.8	45	
Virginia	54.4	13	Fail	73.0	29	Pass	54.4	12	Pass	137.4	26	
Washington	53.7	16	Fail	75.4	20	Pass	53.9	13	Pass	174.1	36	
West Virginia	46.9	41	Fail	71.6	34	Pass	39.6	49	Fail	127.4	20	
Wisconsin	48.2	35	Fail	70.1	40	Pass	57.8	3	Pass	240.6	49	
Wyoming	56.1	6	Fail	68.1	46	Pass	54.7	11	Pass	171.9	35	

Mental Health and Aging

The first report of the U.S. Surgeon General on mental health (U.S. Department of Health and Human Services, 1999), stated that almost 20 percent of older adults experience mental disorders that are not a part of "normal aging." Although there are effective treatments available for most mental disorders, many older adults are never screened for or diagnosed with these illnesses, so they do not receive treatment.

Older Americans' Use of Mental Health Services

Although adults age 65 or older comprise 12 percent of the U.S. population, they use a disproportionately lower share of inpatient and outpatient mental health services.

- Older Americans account for only 7 percent of all inpatient mental health services, 6 percent of community-based mental health services, and 9 percent of private psychiatric care (Persky, 1998).

- It is estimated that only half of older adults who acknowledge mental health problems actually receive treatment from any health care provider, and fewer than 3 percent of those receive outpatient mental health treatment by specialty mental health providers—a rate that is lower than for any other adult age group (Lebowitz et al., 1997).

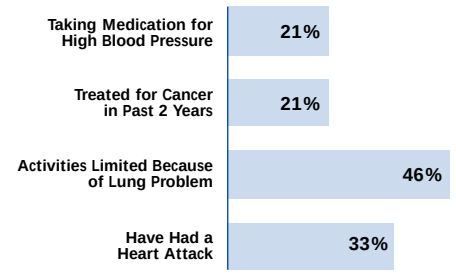
Barriers to Mental Health Care

Older Americans' underutilization of mental health services has a number of causes:

Patient Barriers: Older adults often mistakenly believe that mental health problems such as depression are natural conditions of older age, especially with prolonged bereavement. According to a National Mental Health Association survey, about 58 percent of those age 65 or older believe that it is "normal" for people to get depressed as they grow older. While depression is not a normal part of the aging process, it is likely to occur when other chronic medical conditions are present (see Figure 16). Unfortunately, symptoms of depression often go unrecognized and untreated when they coincide with other medical illnesses in later life. Older adults with mental disorders tend to emphasize physical complaints rather than psychological troubles in clinical settings, making the detection of mental illness less likely. This may be due, in part, to heightened concerns about the stigma of mental illness within this generation of older adults. This applies particularly to older men, who have the highest suicide rate in the United States (see Figure 17).

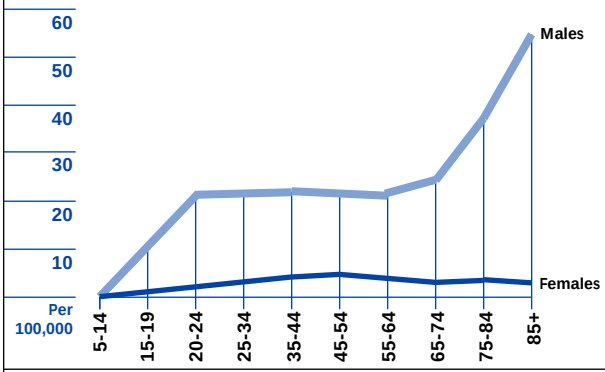
Provider Barriers: Most older adults who receive mental health services obtain them in the context of a visit with their primary care provider. Unfortunately, many primary

f.16 **DEPRESSION OFTEN CO-EXISTS WITH OTHER CHRONIC CONDITIONS**



Source: Health and Retirement Study, 2000

f.17 **SUICIDE DEATH RATES HIGHEST AMONG MALES AGE 65+, 1999**



Source: National Center for Health Statistics, Trends in Health and Aging Database

care physicians receive insufficient training in mental health and in geriatric assessment and care. Many physicians mistakenly believe that depression is an inevitable consequence of an older person's physical illness and disability. One study found that only 11 percent of depressed patients in primary care received adequate antidepressant treatment, while 34 percent received inadequate treatment, and 55 percent received no treatment (Katon et al., 1992).

Undetected or untreated, mental disorders such as depression can cause severe impairment and can even be fatal. In studies of older adults who committed suicide, nearly all had major depression. Studies have found that many older adults who committed suicide had visited a primary care physician very close to the time of the suicide—20 percent on the same day, 40 percent within one week, and 70 percent within one month of the suicide (Conwell, 1994).

Policy Barriers: Medicare's higher reimbursement for physical ailments than for mental health conditions presents a barrier for older Americans in terms of access to, and payment for, mental health services. Current Medicare coverage rules require seniors to pay a 50 percent co-payment for most outpatient mental health services compared with 20 percent for general medical services. The current disparity in coverage between mental and physical disorders serves to further the misperception of mental illness as "not a health problem" and fails to acknowledge the fact that treatment in elderly persons can be just as successful as treatment in young persons. When properly diagnosed and treated, 65 to 80 percent of depressed older adults improve with medication, psychotherapy, or a combination of both—a success rate higher than many current common medical treatments for non-psychiatric illnesses (U.S. Department of Health and Human Services, 1999).

The Future Need for Trained Professionals

According to the Surgeon General's report, "disability due to mental illness in individuals over 65 years old will become a major public health problem in the near future." The number of older adults with major psychiatric disorders is expected to increase dramatically over the coming three decades to 15 million individuals, compared with about 7 million in 2000. This growth will have a major impact on the need for geriatric mental health services and will result in a significant increase in health service utilization and costs. In 1996, for example, the United States spent more than $69 billion for the direct treatment of mental disorders (or more than 7 percent of national health expenditures).

According to the Federal Administration on Aging's 2001 report, *Older Adults and Mental Health*, "more geriatric mental health professional and paraprofessional personnel are needed in the fields of medicine, mental health, and social services." Today, the nation has an estimated 200 to 700 geropsychologists, and 2,400 geriatric psychiatrists. Yet, current estimates suggest that at least 5,000 of each specialty are necessary to meet current national needs, and shortages are expected to become more severe in the coming decades as the number of older Americans continues to grow (for a more detailed discussion see page 15).

CALL TO ACTION:

Primary care physicians are the main entry points for older adults in need of mental health care. Yet the lack of detection and treatment of mental illness in the primary care setting is well documented. For these reasons, reform must focus on improving the primary care treatment of older adults with mental disorders. To reach this goal, the Merck Institute of Aging & Health and the National Academy on an Aging Society propose the following steps:

- **Integrate mental health professionals into the primary care setting.** Several studies have shown that models of collaborative care, including community mental health teams and the pairing of mental health professionals (including geriatric nurse specialists and geriatric social workers) with primary care physicians, are effective and economical ways to improve access and care for older adults (Unutzer et al., 1999).

- **Screen older adults for depression.** In 2002, the U.S. Preventive Services Task Force of the Agency for Healthcare Research and Quality published recommendations for systematic screening as a means of improving the detection of depression in older adults. At the same time, the Task Force has recommended that clinical practices should have a well-functioning system in place to follow depression screening with accurate diagnosis, treatment, and follow-up. Currently, it is estimated that only one-third of primary care providers use screening tests for depression.

- **Expand the Medicare reimbursement system for mental health care of older adults.** Currently, Medicare has limited coverage for mental health care, excludes certain qualified mental health providers, and covers few mental health drug expenses. The disparity in Medicare reimbursement between physical and mental treatments serves to further the stigma, myths, and misperceptions surrounding mental illness in older adults. The current coverage rules also fail to recognize that cost-effective treatments for late-life mental illnesses are now available.

Training the Health Care Workforce—Present and Future

As the nation's older population grows, the U.S. will require a well-trained workforce of health care professionals. Compared with younger adults, older Americans use more services provided by physicians, nurses, pharmacists, physical therapists, and other practitioners. Unfortunately, only a small share of the 660,000 medical doctors in practice today—including specialists whose patients are disproportionately elderly—receive the training and education in geriatrics necessary to provide older Americans with the best possible care.

Less than half of medical schools have geriatric programs, and less than half of baccalaureate nursing programs have full-time faculty certified in geriatric nursing. A mandatory geriatrics rotation in all medical schools would be welcomed, but it would not solve the problem. There are approximately 650,000 physicians in the U.S. About 16,000 new doctors graduate from medical schools each year. If geriatric training was required in every medical school today, it would still take more than 40 years for all practicing physicians to be replaced by those with geriatric training.

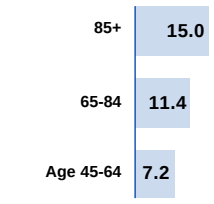
The U.S. cannot afford to wait that long. In fewer than 10 years, the baby boomers will start turning 65. Although schools of medicine, nursing, and social work are beginning to take steps to attract new students to the field of geriatrics, it is imperative that the existing health care workforce—physicians, nurses, therapists, pharmacists, and social workers—receive the training and education necessary to address the needs of their expanding pool of older patients.

Older Adults' Use of Services

Older adults tend to use health services more than younger adults do. Patients 65 or older visit physicians an average of 11.4 times a year, compared with 7.2 visits for the population between the ages of 45 and 65. The oldest old—those at least 85—average 15 physician visits each year (see Figure 18).

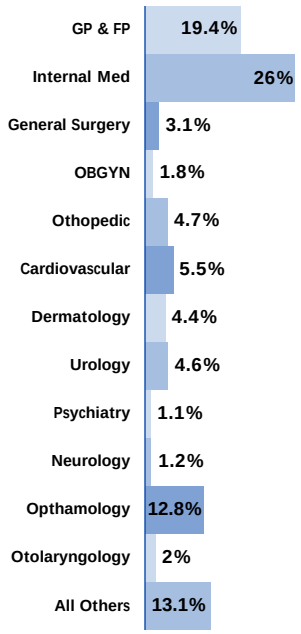
As a result, though adults 65 or older made up only 12 percent of the population in 2000, they made 24.3 percent of all physician office visits that year—about 200.3 million visits, according to the National Center for Health Statistics (NCHS). About 45 percent of all

f.18 **AVERAGE NUMBER OF PHYSICIAN VISITS HIGHEST AMONG PERSONS 65+, 1999**



Source: Department of Health and Human Services

f.19 **45 PERCENT OF ALL VISITS BY PERSONS AGE 65+ ARE TO PRIMARY CARE PHYSICIANS, 1999-2000**



Source: National Center for Health Statistics, Trends in Health and Aging Database

Table 4 **PERCENTAGE OF TOTAL VISITS TO VARIOUS MEDICAL SPECIALTIES MADE BY PEOPLE AGE 65 OR OLDER, 1981, 1991, 2000.**

Specialty	Percentage of Total Visits in:		
	1981	1991	2000
All Specialties	18.4	23.2	24.3
General/Family Practice	19.3	19.9	20.4
Internal Medicine	34.4	37.7	39.0
Cardiology	46.1	53.4	59.7
Ophthalmology	39.3	55.0	51.5
Urology	37.6	45.8	53.1
General surgery	20.1	32.2	30.1
Neurology	17.7	19.9	28.5
Dermatology	13.4	27.9	26.3
Otolaryngology	16.9	17.7	22.3
Orthopedic surgery	13.7	17.9	20.4
Psychiatry	4.6	7.0	6.6
Obstetrics/gynecology	2.6	4.5	4.7

Source: National Ambulatory Medical Care Survey

visits made by older adults are to primary care physicians (see Figure 19).

For most medical specialists, older adults represent a disproportionate share of their patients (see Table 4). For family practitioners, 20.4 percent of their total patient visits in 2000 were made by people age 65 or older, and for internists, older adults made 39 percent of all visits. The percentages were higher for cardiologists (59.7 percent), ophthalmologists (51.5 percent), and urologists (53.1 percent).

Unique Medical Needs of Older Adults

Many, if not most, health care professionals are not trained to recognize the health needs of older adults. Older Americans often have three or more chronic medical conditions, take multiple daily medications, and respond to treatments and medications differently than do younger persons. Health care professionals not trained in geriatric care may make incorrect diagnoses. Medication-related problems among the elderly, including improper dosing and adverse reactions, may account for as many as 17 percent of hospitalizations of older Americans, and may cost approximately $20 billion a year in hospital stays (GAO, 1995).

Health problems in older adults are often misdiagnosed, overlooked, or dismissed as normal conditions of aging because physicians are not trained to distinguish diseases and impairments from the normal physiological changes associated with aging. Physicians often consider conditions like memory loss or incontinence to be expected side effects of aging, though appropriate interventions can improve these conditions. Studies also suggest that physicians hesitate to prescribe exercise regimens, smoking cessation programs or cholesterol lowering strategies to older patients, even though evidence shows that they benefit from such therapies as well as younger persons.

The Role of Geriatrics-Trained Health Care Professionals

Health care professionals who are trained in geriatrics can help to maintain the health and quality of life of older patients. The complex needs of older patients often require a team of health care providers with aging-related expertise to work together to assess the patient's physical and mental well being and to coordinate care in a variety of settings—the patient's home, the physician's office, the hospital, and the nursing home. Geriatric-care teams also work cooperatively with caregivers, such as family and friends, who play a crucial role in helping the older patient maintain health and independence.

Specialty health care professionals could also benefit from training in geriatrics. A cardiologist, for example, may be more likely to look for signs of depression, which often worsens conditions like hypertension and heart disease. Family doctors and internists may be more likely to help frail patients prevent fall-related injuries by reviewing medications and checking vision.

Older patients who receive specialized geriatric care tend to do better than those who receive usual care (Kovner et al., 2002). In one study, patients who received inpatient and outpatient care in geriatric units experienced large reductions in functional decline and improvements in mental health at no additional cost. In another study, older patients cared for by nurses trained in geriatrics had fewer readmissions to the hospital and were less likely to be transferred from nursing facilities to a hospital for inappropriate reasons.

Cost Savings

The financial benefits of care by specially trained physicians and other health care workers are potentially enormous. The Alliance for Aging Research estimates that proper geriatric care could reduce hospital, nursing home, and home care costs by at least 10 percent a year, saving $50.4 billion in 2000 and $133.7 billion in 2020. As one example, fall-related injuries among older Americans cost $20.2 billion in direct medical costs each year, according to the Centers for Disease Control and Prevention (CDC). The CDC notes that the number of falls could be reduced substantially through a prevention strategy of exercise, vision correction, medication review, and home modifications, such as bathroom grab rails.

Shortages of Trained Professionals

The projected increase in the number of older baby boomers comes alongside another demographic certainty: The decline in the size of the working-age population needed to support rising numbers of older Americans. In 2000, there were three workers to support every senior; by 2044, there will be two workers for every senior, according to the Social Security Administration.

This projection has profound implications for the health care workforce. The number of trained professionals, most of them baby boomers themselves, may decline as the need for their services rises. For example, about half of registered nurses are at least 45 years old, higher than the average across all occupations. Their retirement will aggravate an already severe nursing shortage. The U.S. Bureau of Labor Statistics estimates that employers will need to find replacements for 331,000 RNs between 1998 and 2008.

Medical schools have yet to make the same commitment to geriatrics that they have made to pediatrics. In 2000, there were 62,386 pediatricians to treat 59 million children up to age 14 (one pediatrician for every 945 children) compared with 9,000 geriatricians to treat about 35 million persons 65 and over (one for every 3,888 older persons). It is estimated that the U.S. needs 20,000 physician-geriatricians to adequately care for the current older population. By 2030, the nation will need 36,000 geriatricians, according to estimates by the Alliance for Aging Research.

Only 14 of the nation's 145 medical schools include geriatrics in their required courses. While 86 medical schools offer an elective in geriatrics, only 3 percent of medical students choose to register for these courses. Less than one-half of 1 percent of medical school faculty are geriatrics specialists. Though residency programs in family practice and internal medicine require some geriatrics training, the length of rotation is not specified (Alliance For Aging Research, 2002).

In the nursing field, less than 1 percent of the nation's 2.2 million practicing RNs are certified in geriatrics. In 2000, only 5 percent of all nurses who completed either a clinical nurse specialist or nurse practitioner program indicated gerontology as their specialty area. Only 30 of the more than 670 baccalaureate nursing programs met all the criteria for an exemplary geriatrics education, such as including a stand-alone geriatrics course and at least one full-time faculty member nationally certified in geriatrics (Kovner et al., 2002).

Other health care professionals also lack specialized training in gerontology. Only 720 of 200,000 pharmacists have geriatric certification, according to the Commission for Certification in Geriatric Pharmacy. Though the Bureau of Labor Statistics notes that demand for social workers with geriatrics training is projected to grow, only a small percentage of graduating social workers report majors in gerontology.

In addition, the supply of paraprofessionals in the long-term care industry—home health aides, nursing assistants, and personal aides—falls short of meeting demand. Low wages and poor training are causing yearly turnover rates estimated at about 45 percent in nursing homes. A 2001 report by the Paraprofessional Healthcare Institute notes that this caregiver gap will widen over the next 30 years—when the elderly population will double—while the population of traditional caregivers is expected to grow by only 7 percent.

CALL TO ACTION

To prepare for the coming demographic realities, the U.S. must take immediate steps to reform professional health education, equipping future physicians, nurses, and other health workers with skills in geriatrics. Medical schools must create programs in geriatrics. Nursing programs must introduce geriatrics content into their required curriculum. Students in health professional education programs should have required courses concerning the care of older adults.

However, the nation also must ensure that the current workforce of health care professionals develops the necessary knowledge and techniques to address the complexity of delivering care to the already growing elder population. The goal: to provide every health care worker today with some education and training in geriatrics.

To reach this goal, the Merck Institute of Aging & Health and the National Academy on an Aging Society propose the following steps:

- **Engage physicians, nurses, and other health care professionals in lifelong training in geriatric medicine.** Academic schools of medicine, nursing, and social work must develop continuing education programs in geriatrics for local professionals. Education programs should be geared to professionals who do not have any training in geriatrics and to those who need to maintain existing expertise. Academies and boards that represent specialties should work with universities on course development and encourage their members to take these courses.

- **Mandate a specified number of credits in geriatrics as a condition for license renewal.** This would apply to states with requirements for continuing medical education (CME) for the relicensing of physicians, nurses, pharmacists, and other health care professionals.

- **Base CME for physicians in geriatrics on new models of practicing-physician education.** Research shows that formal CME conferences are not effective (Oxman, 2002). The Practicing Physician Education Project funded by the John A. Hartford Foundation and the American Geriatrics Society, found that models using small groups, physician leaders in the community, and interactive case studies were able to make a difference. For example, toolkits on memory loss and incontinence help physicians to improve the way in which they evaluate and treat these conditions (Barry, 2002).

- **Require that state regulators, who oversee nursing homes, assisted living facilities, and home health agencies, provide specialized geriatrics training to their paraprofessional staff.** These workers should develop specific skills related to caring for patients with Alzheimer's disease, physical disabilities, and depression.

- **Congress must reconsider its reimbursement policies under Medicare.** Although Medicare reimburses for individual conditions, it does not reimburse primary care physicians or case managers for the time it takes to coordinate care among the many providers who may be treating an older person. Congress should pass the Geriatric Care Act (S. 2057/H.R. 3027), which would authorize Medicare coverage of geriatric assessment and care coordination services for frail or impaired older adults.

Appendix

Table 5	REPORT CARD INDICATORS AND *HEALTHY PEOPLE 2000* TARGETS
Indicator	***Healthy People 2000* Target**
Health Behaviors	
1. No Physical Activity During Leisure-Time	No more than 22% people age 65+ with no leisure-time activity
2. Overweight	No more than 20% people age 20+ who are overweight (BMI >= 27.3)*
3. Eating 5+ Fruits/Veg. Daily	At least 50% people age 2+ who eat 5+ servings of fruit/vegetables a day*
4. Current Smoker	No more than 15% people age 18+ who smoke*
Preventive Care and Cancer Screening	
5. Flu Vaccine in Past Year	At least 60% of people age 65+ who had a flu shot within the past year
6. Ever had Pneumonia Vaccine	At least 60% of people age 65+ who had ever received a pneumonia vaccination
7. Mammogram within Past 2 Years	At least 60% of women age 70+ who had a mammogram within the past 2 years
8. Ever had Colorectal Screening	At least 40% people age 50+ who have ever received a sigmoidoscopy*
Fall-related Deaths and Injuries	
9. Hip Fractures	No more than 607 per 100,000 hospitalizations for hip fractures, adults 65+
10. Fall-related Deaths	No more than 105 per 100,000 deaths from falls and fall-related injuries, adults 85+

** No specific target for people age 65+ identified.*

Data Sources

Behavioral Risk Factor Surveillance System

The BRFSS is the world's largest telephone survey used to track health risks in the United States. The Centers for Disease Control and Prevention created a standard questionnaire for states to collect data on an ongoing basis that can be compared across states. The BRFSS is administered and supported by the Division of Adult and Community Health, National Center for Chronic Disease Prevention and Health Promotion at the CDC. For more information, go to: http://www.cdc.gov/brfss

Health and Retirement Study

The Health and Retirement Study (HRS) surveys over 22,000 Americans age 50 and older every two years. The HRS collects data about the physical and mental health of Americans as well information about older Americans' insurance coverage, financial status, family support systems, labor market status, and retirement planning. For more information, go to: http://hrsonline.isr.umich.edu/

National Ambulatory Medical Care Survey

The National Ambulatory Medical Care Survey (NAMCS) is a national survey providing data about the availability and use of ambulatory medical care services. Information in the survey is taken from the perspective of the physician. Data results from the survey are based on a sample of visits to nonfederally employed office-based physicians, most of whom provide direct patient care. For further information, go to: http://www.cdc.gov/nchs/about/major/ahcd/ahcd1.htm

National Center for Health Statistics, Trends in Health and Aging Database

The NCHS electronic data warehouse on Trends in Health and Aging provides data about trends in health-

related behaviors, health status, health care utilization, and cost of care for the older population in the United States. The Trends in Health and Aging data source was developed by NCHS with support from the National Institute on Aging. For more information, go to: http://www.cdc.gov/nchs/about/otheract/aging/trendsoverview.htm

National Health Interview Survey

The National Health Interview Survey (NHIS) is conducted by the National Center for Health Statistics, providing data about the health of the civilian non-institutionalized population of the United States. The NHIS is a cross-sectional household interview survey for which sampling and interviewing occur throughout each year. For more information, go to: http://www.cdc.gov/nchs/nhis.htm

National Vital Statistics

The National Vital Statistics provide monthly and cumulative data on births, deaths, marriages, divorces, and infant deaths for the U.S. and individual states, including brief analyses of the vital statistics. For more information, go to: http://www.cdc.gov.nchs/nvss.htm

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