## Chronic Conditions <br> A challenge for the 21st century



NATIONAL ACADEMY ON AN AGING SOCIETY

Chronic conditions are the major cause of illness, disability, and death in the United States. Almost 100 million Americans have chronic conditions and millions more will develop them as America ages. The continued growth in the number of elderly-as baby boomers age and as people live longer-will cause an increase in the number of people who are most vulnerable to and most affected by chronic conditions. Projections indicate that by 2040, almost 160 million people will have chronic conditions. The cost of medical care for Americans with chronic conditions was $\$ 470$ billion in 1995. By 2040 that cost could be as high as $\$ 864$ billion. ${ }^{1}$

## MOST <br> COMMON <br> CHRONIC CONDITIONS

ALL AGES
■ Sinusitis

- Arthritis
- Orthopedic impairments
- Hypertension
- Hay Fever

AGE 75+

- Arthritis
- Hypertension

■ Hearing impairments

- Heart Disease
- Cataracts

No one is immune to chronic conditions. Men and women, people of all racial and ethnic groups, and people of all ages and financial means have chronic conditions. The extent to which chronic conditions affect people's lives differs, however. Moreover, those who have the conditions are not the only ones affected. Family members and friends who arrange for or provide care may also have to modify their lives to accommodate chronic conditions.

## The elderly have more disabling conditions

The type of chronic conditions that are common varies considerably with age. For example, asthma is the most common condition among children, but is less common among adults, and arthritis is more common among adults, especially older adults. On the whole, the conditions that are most common among older age groups require more care, are more disabling, and are more difficult and costly to treat than the conditions that are more common for younger age groups.

The prevalence of conditions al so varies with age. For example, asthma affects 7 percent of children. Arthritis, the most common condition for 45 to 74 year olds affects 28 percent of that population and half of all people age 75 and older.

## WHAT ARE CHRONIC CONDITIONS?


#### Abstract

Chronic conditions have persistent or recurring health consequences lasting for years. They are illnesses or impairments that cannot be cured. Some of the most prevalent chronic conditions, such as sinusitis or hay fever, are generally not disabling; however, others, such as heart disease and arthritis, can cause significant limitations in people's ability to perform certain basic activities of daily living, or ADLs. Thus, in addition to medical services, people who have chronic conditions often need personal, social, or rehabilitative care over a prolonged period of time.


## Common conditions are different for middle-aged men and women

Four of the five most prevalent conditions for men and women are the same. They include orthopedic impairments, sinusitis, hypertension, and hay fever. But hearing impairments are more common for men. Arthritis is more common for women. Some 15 percent of women and 9 percent of men have arthritis. The five most common conditions are the same for boys and girls. Similarly, for people age 75 and older, regardless of gender, the five most common conditions are the same. But differences arise among young and middle-aged adults. For example, three of the most common condi-tions-orthopedic impairments, sinusitis, and hay fever-are the same for men and women in the 18 -to- 44 -year age group. However, hearing impairments and hypertension aretheother common conditionsfor men, while migraines and asthma are more common for women (see Table 1).

## Some conditions are associated more with blacks than whites

Overall, the five most common chronic conditions are the same for blacks and whites. They are sinusitis, arthritis, orthope-
dic impairments, hypertension, and hay fever. Some diseases are associated more with blacks than whites, however. For example, anemia is among the five most prevalent conditions for black children, but not for white children. Diabetes is among the five most common conditions in the 45-to-74year age group for blacks but not for whites.

The same conditions comprise the list of most common chronic conditions for black and white women, but there is some variation among men. Arthritis is among the most common conditions for the black male population, while hearing impairments are more common among white males (see Table 2).

TABLE 1
M ost Common Chronic
Conditions, by Age and Gender

|  | M ALE | FEM ALE |
| :---: | :---: | :---: |
| ALL AGES | - Orthopedic impairments <br> - Sinusitis <br> - Hearing impairments <br> - Hypertension <br> - Hay Fever | - Sinusitis <br> - Arthritis <br> - Orthopedic impairments <br> - Hypertension <br> - Hay Fever |
| 0-17 | - Asthma <br> - Hay Fever <br> - Sinusitis <br> - Bronchitis <br> - Dermatitis | - Sinusitis <br> - Asthma <br> - Hay Fever <br> - Bronchitis <br> - Dermatitis |
| 18-44 | - Orthopedic impairments <br> - Sinusitis <br> - Hay Fever <br> - Hearing impairments <br> - Hypertension | - Sinusitis <br> - Orthopedic impairments <br> - Hay Fever <br> - Migraine <br> - Asthma |
| 45-74 | - Hypertension <br> - Arthritis <br> - Hearing impairments <br> - Orthopedic impairments <br> - Heart Disease | - Arthritis <br> - Hypertension <br> - Sinusitis <br> - Orthopedic impairments <br> - Hay Fever |
| 75+ | - Hearing impairments <br> - Arthritis <br> - Heart Disease <br> - Hypertension <br> - Cataracts | - Arthritis <br> - Hypertension <br> - Hearing impairments <br> - Heart Disease <br> - Cataracts |

SOURCE: National Academy on an Aging Society analysis of 1994 National Health Interview Survey data.

TABLE 2
M ost Common Chronic Conditions, by Age, Gender and Race

|  | MALE |  | FEMALE |  |
| :---: | :---: | :---: | :---: | :---: |
|  | BLACK | WHITE | BLACK | WHITE |
| ALL AGES | Hypertension Orthopedic impaiments Sinusitis Arthritis Hay Fever | Orthopedic impaiments Sinusitis Hearing impairments Hay Fever Hypertension | Sinusitis <br> Hypertension <br> Arthritis <br> Orthopedic impairments Hay Fever | Sinusitis <br> Arthritis <br> Orthopedic impairments <br> Hypertension <br> Hay Fever |
| 0-17 | Asthma <br> Sinusitis <br> Hay Fever <br> Anemia <br> Orthopedic impairments | Asthma <br> Hay Fever <br> Bronchitis <br> Sinusitis <br> Dermatitis | Sinusitis <br> Asthma <br> Hay Fever <br> Dermatitis <br> Anemia | Sinusitis <br> Hay Fever Asthma Bronchitis Dermatitis |
| 18-44 | Orthopedic impairments Sinusitis Hypertension Hay Fever Arthritis | Orthopedic impaiments Sinusitis <br> Hay Fever Hearing impairments Hypertension | Sinusitis <br> Hay Fever <br> Orthopedic impairments <br> Migraine <br> Hypertension | Sinusitis <br> Orthopedic impairments <br> Hay Fever <br> Migraine <br> Asthma |
| 45-74 | Hypertension <br> Arthritis <br> Orthopedic impaiments <br> Diabetes <br> Sinusitis | Hypertension <br> Hearing impairments <br> Arthritis <br> Orthopedic impairments <br> Heart Disease | Hypertension <br> Arthritis <br> Sinusitis <br> Orthopedic impairments <br> Diabetes | Arthritis <br> Hypertension Sinusitis Orthopedic impairments Hay Fever |
| 75+ | Arthritis Hypertension Cataracts Diabetes Visual impairments | Hearing impairments Arthritis <br> Heart Disease <br> Hypertension Cataracts | Arthritis <br> Hypertension <br> Heart Disease <br> Orthopedic impairments Cataracts | Arthritis <br> Hypertension <br> Hearing impairments <br> Heart Disease <br> Cataracts |

NOTE: Estimate for black males age $75+$ is based on a small sample and should be interpreted with caution.
SOURCE: National Academy on an Aging Society analysis of 1994 National Health Interview Survey data.

## People with lower incomes have more serious conditions

In general, people with lower incomes are more likely to have conditions that are more difficult or costly to treat. For example, the most common conditions, including orthopedic impairments, hypertension, sinusitis, and arthritis, are more prevalent for men and women with annual family incomes of less than \$20,000 than for those with incomes greater than $\$ 50,000$. But hay fever is more prevalent among men and women with incomes greater than \$50,000 (see Figure 1).

FIGURE 1
Prevalence of M ost Common Chronic Conditions for Women, by Income Group $\quad \square>\$ 50,000$

source: National Academy on an Aging Society analysis of 1994 National Health Interview Survey data.

## Millions are disabled by chronic conditions

Many people who have chronic conditions lead active, productive lives, but some experience significant difficulties because of their conditions. Some 41 million of the almost 100 million people who have chronic conditions are limited in their daily activities by their condition. ${ }^{2}$ Generally, the elderly population is most affected (see Figure 2). In part, this is because the conditions common among

FIGURE 2
Percent of Individuals in Each Age Group Limited in Activities Because of Chronic Conditions

source: Trupin, Laura and Dorothy Rice, Health Status, Medical Care Use, and Number of Disabling Conditions in the United States, Disability Statistics Abstract Number 9 (June 1995), National Institute on Disability and Rehabilitation Research.
the elderly tend to be more disabling. In addition, some conditions begin in middle age but progress in severity as people age. For example, hypertension is among the most common chronic conditions for men and women age 45 and older. But in the 45 -to-74-year-old group 38 percent of men with hypertension report that they limit activities. By contrast, 44 percent of men age 75 and older who have hypertension limit activities.

Blacks are more likely than whites to have limitations in daily activities when chronically ill. For example, among black children with asthma, 21 percent of boys and 24 percent of girls missed some school or had to attend special classes. The proportions are much lower for whites, 12 percent for boys and girls. Among people
age 75 and older with arthritis, the condition is most likely to cause activity limitations for black women and black men.

## Chronic conditions and poor health

When people are asked to rate their health, those with chronic conditions are generally more likely than the population as a whole to report that they are in fair or poor health. Among the general population, gender differences for self-reported health status are not great, but the proportion of people reporting fair or poor health increases with age. In each age group, black men and women are more likely to report fair or poor health than white men and women (see Table 3).

Patterns are similar for those with specific conditions. In most cases, black males are most likely to report fair or poor health. In each age group, high proportions of black females with specific conditions al so report fair or poor health.

TABLE 3
Percent of the Population Reporting Fair or Poor Health, by Age, Gender and Race


NOTE: Estimate for black males age $75+$ is based on a small sample and should be interpreted with caution.

SOURCE: National Academy on an Aging Society analysis of 1994 National Health Interview Survey data.

FIGURE 3
Number of People with Chronic Conditions

sOURCE: The Robert Wood Johnson Foundation (1996), Chronic Care in America: A 21st Century Challenge.

The number of Americans with chronic conditions is expected to increase
Projections indicate that by 2040 the number of people in the U.S. with chronic conditions will increase by 50 percent (see Figure 3).

The U.S. already faces the challenge of providing appropriate and accessible care for people with chronic conditions and of making accommodations so that those with disabling conditions can lead lives that are more active and productive. In planning for the future it will be important to consider not only how to achieve these goals for growing numbers of people, but also to recognize that different groups of chronically ill people will have different needs.

## Hospitalization rates are higher for people with chronic conditions

Among people 45 years and older, hospitalization rates are higher for those with arthritis and hypertension-the two most
common chronic conditions for that age group-than for the general population that age (see Figure 4). Expenditures for hospital care and related services contribute to the high costs associated with chronic conditions.

FIGURE 4
Percent of People Hospitalized in the Past Year


SOURCE: National Academy on an Aging Society analysis of 1994 National Health Interview Survey data.

# Chronic conditions also have an emotional impact 

Chronic conditions affect emotional as well as physical well-being. For example, 51 to 61 year olds with chronic conditions are more likely than the general population that age to rate their emotional health as fair or poor. Among those with three of the most common chronic conditions for that age group, women are more likely than men to say that their emotional health is fair or poor (see Figure 5). Black women with chronic conditions give the least positive assessment of their emotional wellbeing. For example, among those with arthritis, the proportions of people reporting that their emotional health is fair or poor are 22 percent for white men, 23 percent for white women, 33 percent for black men, and 39 percent for black women. Relative to other conditions, the proportion of people reporting fair or poor emotional health is particularly high for those with hearing impairments.

1. The Robert Wood Johnson Foundation (1996). Chronic Care in America: A 21st Century Challenge, Princeton, New Jersey. Note: Costs are expressed in 1990 dollars.
2. Ibid.

## ABOUT THE PROFILES

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The National Academy on an Aging Society is a Washingtonbased nonpartisan policy institute of The Gerontological Society of America. The Academy studies the impact of demographic changes on public and private institutions and on the economic and health security of families and people of all ages.

FIGURE 5
Percent of the Population
Age 51 to 61 Reporting Fair or Poor Emotional Health

source: National Academy on an Aging Society analysis of 1992 Health and Retirement Study data.

## ABOUT THE DATA

Unless otherwise noted, the data presented in this Profile come from three national surveys of the community-dwelling population living within the United States. The 1994 National Health Interview Survey (NHIS) was conducted by the National Center for Health Statistics. The NHIS provides data for the entire population, including children. Wave 1 of the Health and Retirement Study (HRS) provides information for a population age 51 to 61 in 1992. Wave 1 of the study of Asset and Health Dynamics Among the Oldest Old (AHEAD) provides information about respondents age 70 and older in 1993 and 1994. The HRS and AHEAD data sets were sponsored by the National Institute on Aging and conducted by the Institute for Social Research at the University of Michigan.


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