HEALTH PROMOTION AND AGING
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The third edition of this book, Health Promotion and Aging, was selected for the 2004 Book of the Year Award by the American Journal of Nursing in two categories: Gerontologic Nursing, and Community and Public Health. Dr. Haber also authored Health Care for an Aging Society.

Dr. Haber has authored 85 academic journal publications and has been project director or principal investigator of 20 research or demonstration grants related to health and aging. Typically, these applied projects involved gerontology and health professional students leading community health promotion ventures with older adults. Dr. Haber’s current scholarly interest is life review.
HEALTH PROMOTION AND AGING

PRACTICAL APPLICATIONS FOR HEALTH PROFESSIONALS

SIXTH EDITION

David Haber, PhD
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As a gerontological nurse who has promoted wellness for older adults for over four decades, I have been a fan of David Haber’s *Health Promotion and Aging* for many years. As an author, researcher, and practitioner, I am impressed with the broad scope of his recent editions, which speak to many disciplines. The sixth edition of this book continues to provide a wealth of information to guide health care professionals whose goal is to promote health for older adults. In addition, the author’s approach is refreshing and positive, as well as reality based. I particularly admire—and totally agree with—Dr. Haber’s call for a “proaging movement” to challenge the common misperception that aging is primarily and necessarily associated with decline and disability. I also appreciate his emphasis on numerous, yet often overlooked, practical ways in which we as health care providers can address the many challenges inherent in aging.

*Health Promotion and Aging* contains many excellent evidence-based guides to essential topics such as nutrition, exercise and physical activity, nutrition and weight management, mental health concerns, complementary and alternative medicine, and numerous clinical preventive services. Dr. Haber also provides practical and well-founded guidance to health behavior change with regard to overall health promotion as well as specific topics. His approach to this topic is in stark contrast to an all too common perception that behavior change is not worthwhile or effective for people who are chronologically old. Another outstanding feature is that many aspects of diversity are addressed in the context of health promotion and current social trends. For example, Dr. Haber discusses gay aging and the influence of baby boomers on bringing issues such as same-sex marriage out of the closet, whether the closets are in community or institutional settings. In addition, the author does not shy away from addressing important but controversial topics, such as allowing physicians to prescribe life-ending medications to terminally ill patients. In this sixth edition, Dr. Haber has expanded on the following topics that are often underemphasized but increasingly important: long-term care, chronic care management, and social/emotional support. All topics are remarkably up to date and the content is relevant across many health care settings.

Dr. Haber’s professional qualifications in gerontology, as delineated in the author’s biographical sketch in the front matter of this book, are outstanding. All who read *Health Promotion and Aging* can benefit from the effective way in which he communicates his breadth of knowledge and helps readers apply evidence-based information to real-life situations with older adults. All content is supported by a strong and wide-ranging knowledge base, and the writing style reflects the high value that Dr. Haber places on humor and caring. Reading this book is not only enlightening and enriching but also enjoyable and sometimes even humorous. I can highly recommend *Health Promotion and Aging*.
Aging as an essential resource for those of us who have important roles in promoting health for older adults. This book provides essential tools and guidance so the terms “health” and “aging” are complementary—rather than contradictory—concepts.

Carol A. Miller, MSN, RN-BC
Clinical Nurse Specialist, Care & Counseling
Author: Nursing for Wellness in Older Adults

Fast Facts for Dementia Care: What Nurses Need to Know in a Nutshell
Fast Facts for Health Promotion in Nursing: Promoting Wellness in a Nutshell
I was trained at the University of Southern California as a sociologist specializing in gerontology, but I spent my career implementing and evaluating health promotion projects in the community. This contradiction between training and practice has informed me on why promoting health is possible but difficult.

From a sociological perspective it is clear to me that American society is not particularly health promoting. For example, computers are increasingly promoting sedentary behavior, both at work and at play. A fast-paced society encourages us to seek convenient food and drink choices, and ubiquitous advertising—to the tune of tens of billions of dollars per year—promotes questionable foods and drinks over good nutrition. And the considerable stress engendered by a dynamic society leads to smoking, excessive drinking of alcohol, or engaging in other risky behaviors.

At the same time, however, we are becoming increasingly well educated on health matters and eager to learn more from research findings that quickly reach the Internet, magazines, newspapers, books, radio talk shows, and television news. Primarily through public education we were able to cut smoking rates in half between 1965 and 1990, and perhaps we can do the same with obesity and inactivity if we direct a similar amount of attention to these problems.

Although sociological truths are not to be denied, there is still considerable potential to empower individuals, groups, and organizations to live a healthy lifestyle. And although a vacuum of leadership has been created by mostly hands-off federal and state governments, an increasing number of local organizations are taking the initiative in health promotion: religious institutions, businesses, community centers, hospitals, medical clinics, educational institutions, shopping malls, and city governments.

As we continue our journey in the new millennium, research is providing convincing evidence that health promotion works—regardless of one’s age and even after decades of practicing unhealthy habits. The findings are also providing specific ideas on what we need to do and how we ought to go about doing it. In some areas the strategies for improving health have proved a lot less onerous than we thought they had to be. For example, progressing from a sedentary lifestyle to engage in brisk walking for up to a half hour most days of the week can do your health a world of good.

Even the dreadful piece of legislation enacted in 1994, the Dietary Supplement Health and Education Act, may have some value in spite of the plethora of worthless and even harmful over-the-counter products that it allows to be promoted with ridiculous claims, such as “reverses aging.” Perhaps it will be valuable in helping the American public become a bit more judicious in evaluating claims about what swallowing a pill can accomplish.
I would also like to note that the terms in the title of this book, “Health Promotion” and “Aging,” are not as straightforward as they might seem. Matters relating to health, for instance, are often dominated by medical issues. And it is not clear which terms are most salient to aging people: health promotion, disease prevention, chronic disease management, health education, or some other designation.

And when does aging start? At the (supposedly) government-protected age of 40 for workers, at the AARP-eligible age of 50, at the traditional retirement age of 65, at the eligibility age of 75 for some geriatric clinics, or at the demographically significant age of 80 or 85? And how should we feel about the antiaging movement, which urges us to defy the aging process? The antiaging perspective appeals to many who have a vision of living vigorously and looking youthful for as long as possible. But what about us proagers, who embrace the aging process, accept its drawbacks, and creatively uncover its strengths?

This sixth edition of Health Promotion and Aging has been substantially revised and updated. There are multiple new subsections, topics, and terms in each chapter of this edition. To name a few, out of countless examples, there are the following new subjects: the Affordable Care Act; the future of Medicare and Social Security; the potential generational clash between boomers and millennials over upcoming health care policy; new recommendations for hepatitis C screening for boomers and new guidelines for depression and obesity screening; the utilization of complementary and alternative medicine by different age groups; new technology and its implications for older adults in the home and community; innovations in housing; rethinking retirement; and new or mostly new chapters on social/emotional support, long-term care and end-of-life care, and public health policy. In addition, all chapters have been significantly revised with topics carried over from the prior edition having been updated along with a majority of the tables and figures.

This book is focused on current research findings and practical applications, and includes detailed descriptions of two of my programs that have been recognized by the National Council on Aging and included in its Best Practices in Health Promotion and Aging. These consist of a comprehensive exercise program in the community that includes aerobics, strength building, flexibility and balance, and health education (Chapter 4); and a health contract/calendar used to help older adults change their health behaviors (Chapter 3). I have also done recent work on life reviews in the community and in educational settings, and some of that work is detailed in this edition.

This edition includes Key Terms and Learning Objectives at the start of each chapter; Questions to Ponder in each chapter; and boxes containing information to reflect upon.

I have attempted to make the book practical by including health-promoting tools, resource lists, assessment tools, illustrations, checklists, and tables; thoughtful by raising controversial issues and taking strong positions that you can agree or disagree with; and humorous, because humor is essential to health promotion. Through Springer Publishing Company there is also available an online Instructor’s Manual to stimulate student thinking and suggest evaluation alternatives. Qualified instructors may request the Instructor’s Manual by emailing textbook@springerpub.com.
ACKNOWLEDGMENTS

I would like to thank my wife, Jeanne St. Pierre, who has enriched my life in countless ways; my children, Benjamin and Rik (née Audrey), who, like most children, taught their parents many vital lessons; my 98-year-old mother-in-law, Beatrice, who retired in her early 90s and can still beat her daughters and son-in-law in Scrabble; my cat, Maurice, for allowing me to type even when it disturbed his nap on my lap; my university, Western Oregon University, for seeing the value in hiring an older professor; and for my publisher, Springer Publishing Company, and Sheri W. Sussman and the other fine folks there who encourage me and support each new edition of this book.
INTRODUCTION

Key Terms

<table>
<thead>
<tr>
<th>Healthy People 2020 Initiative</th>
<th>life expectancy and health expectancy</th>
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<tr>
<td>libertarian paternalism</td>
<td>primary, secondary, and tertiary</td>
</tr>
<tr>
<td>baby boomers, older adults, and</td>
<td>prevention</td>
</tr>
<tr>
<td>older old</td>
<td>seven dimensions of wellness</td>
</tr>
<tr>
<td>health promotion and disease</td>
<td>antiaging versus proaging</td>
</tr>
<tr>
<td>prevention</td>
<td>compression of morbidity</td>
</tr>
<tr>
<td>age rectangle</td>
<td>health expectancy versus life</td>
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<tr>
<td>chronic conditions and disability</td>
<td>expectancy</td>
</tr>
<tr>
<td>activities of daily living</td>
<td>intergenerational conflict</td>
</tr>
<tr>
<td>instrumental activities of daily living</td>
<td>Medicare, Medicaid, and Social</td>
</tr>
<tr>
<td>centenarians</td>
<td>Security</td>
</tr>
<tr>
<td>biogerontology</td>
<td>medical care, health care, and</td>
</tr>
<tr>
<td>labor force participation rates</td>
<td>quality care</td>
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</table>

Learning Objectives

- Critically evaluate the role of the federal government in promoting health
- Define libertarian paternalism
- Examine whether health promotion, disease prevention, and chronic disease management save money
- Describe the impact of sociodemographic trends on healthy aging
• Contrast the baby boomers, older adults, and the older old
• Differentiate chronic disease and disability
• Differentiate activities of daily living and instrumental activities of daily living
• Explore the future of centenarians
• Review trends in life expectancy
• Identify leading causes of death
• Examine medication utilization trends
• Identify labor force participation rates among older adults
• Contrast Internet use of boomers versus older adults
• Examine the consequences of rising educational levels on older adults.
• Describe older adult poverty
• Identify trends in older adult racial/ethnic composition
• Contrast definitions of healthy aging, and express your own definition
• Identify extraordinary accomplishments of older adults
• Distinguish among primary, secondary, and tertiary prevention
• Evaluate the antiaging movement
• Define compression of morbidity and analyze its likely future course
• Contrast health expectancy with life expectancy
• Review physical versus emotional aspects of aging
• Explore the potential for intergenerational conflict over health care
• Describe the Medicare, Medicaid, and Social Security programs
• Explain why medical care and health care are not synonymous

Youth, large, lusty, loving—youth full of grace, force, fascination. Do you know that Old Age may come after you with equal grace, force, fascination?

—Walt Whitman

Did you know that the federal government establishes goals for healthy aging? As far back as 1990, for example, the U.S. Public Health Service established the goal of increasing the number of years of healthy life remaining at age 65 from 11.8 years, as it was in 1990, to 14 years by 2000. It turned out, however, that this goal for the decade was not close to being met. Undeterred, many more goals were set during this and subsequent decades. Which raises some interesting questions: Why is the federal government doing this? Should it be doing this? Is it helping to promote healthy aging?

HEALTHY PEOPLE INITIATIVES

In 1979, one of the most influential documents in the field of health promotion, Healthy People: The Surgeon General’s Report on Health Promotion and Disease Prevention, was published (U.S. Department of Health and Human Services [USDHHS], 1979). Over the years this report was widely cited by the popular media as well as in professional journals and at health conferences. Many attribute to it a seminal role in fostering health-promoting initiatives throughout the nation.
It was closely followed by another report, and a call to action, by the U.S. Public Health Service in 1980, *Promoting Health/Preventing Disease: Objectives for the Nation*, which outlined health objectives for the nation to achieve over the following 10 years. A decade later, in 1990, another national effort, Healthy People 2000, was initiated by the U.S. Public Health Service in an effort to reduce preventable death and *disability for Americans* by the year 2000. This was followed by Healthy People 2010 and the one for the current decade, Healthy People 2020. As you can see in Table 1.1, I have selected several measurable objectives for this decade that specifically address the health of older adults. What the table does not inform you about, is that most objectives, gerontological or otherwise, are not supported by federal funds.

On the positive side, setting health care priorities is no longer a matter of tabulating the number of deaths from a few diseases and then organizing a campaign against the most prevalent ones, with 10% Improvement Targets for the Decade 2010 to 2020.

**TABLE 1.1 Healthy People 2020—Five Selected Older Adult Age 65+ Objectives With 10% Improvement Targets for the Decade 2010 to 2020**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Description</th>
<th>Baseline</th>
<th>Target</th>
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<tbody>
<tr>
<td>1. <strong>Objective:</strong> Increase the proportion of older adults who are up to date on a core set of clinical preventive services</td>
<td>Baseline: 47.3% of older adults were up to date in 2008</td>
<td>Target: 52.1% in 2020</td>
<td></td>
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<tr>
<td>2. <strong>Objective:</strong> Reduce the proportion of older adults who have moderate to severe functional limitations</td>
<td>Baseline: 28.3% of older adults had moderate to severe functional limitations (age-adjusted) in 2007</td>
<td>Target: 25.5% in 2020</td>
<td></td>
</tr>
<tr>
<td>3. <strong>Objective:</strong> Increase the proportion of older adults with reduced physical or cognitive function who engage in light, moderate, or vigorous leisure-time physical activities</td>
<td>Baseline: 33.7% of these older adults engaged in these activities in 2008</td>
<td>Target: 37.1% in 2020</td>
<td></td>
</tr>
<tr>
<td>4. <strong>Objective:</strong> Increase the proportion of the health care workforce with geriatric certification</td>
<td>4a. Physicians</td>
<td>Baseline: 2.7% of physicians had geriatric certification in 2009</td>
<td>Target: 3% in 2020</td>
</tr>
<tr>
<td></td>
<td>4b. Geriatric Psychiatrists</td>
<td>Baseline: 4.3% of geriatric psychiatrists had geriatric certification in 2009</td>
<td>Target: 4.7% in 2020</td>
</tr>
<tr>
<td></td>
<td>4c. Registered Nurses</td>
<td>Baseline: 1.4% of registered nurses had geriatric certification in 2004</td>
<td>Target: 1.5% in 2020</td>
</tr>
<tr>
<td>5. <strong>Objective:</strong> Reduce the rate of emergency department visits due to falls among older adults</td>
<td>Baseline: 5,235 emergency department visits per 100,000 older adults in 2007</td>
<td>Target: 4,711 in 2020</td>
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</tr>
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</table>
like heart disease and cancer. The Healthy People initiatives are health oriented, not disease oriented, and as such they recognize the complexity of the socioeconomic, lifestyle, and other nonmedical influences that impact our ability to attain and maintain health.

A second major benefit of the initiatives is that they are focused on documenting baselines, setting objectives, and monitoring progress. This at least informs us on what the health problems are and whether they are getting better or worse.

The initiatives are not, however, focused on providing support to achieve these objectives. Not surprisingly, only a minority of the objectives have been achieved. According to the National Report Card on Healthy Aging (Merck Company Foundation, *The State of Aging and Health in America*, 2007), only 36% of the objectives for the year 2010 would be met, and we were falling far short of achieving the remaining target goals.

For example, in an area in which there was no financial support for encouraging change—being overweight or obese—the trend in the United States for adults between the ages of 20 and 74 has been in the opposite direction. There has been a steady increase in weight gain for Americans over the decade. There has been a similar result with respect to sedentary behavior among Americans. In the absence of financial support for encouraging change in this area, the average amount of light to moderate physical activity performed on a near-daily basis by those between the ages of 18 and 74 had not improved over the decade.

Focusing on those age 65 and over, the Merck Institute on Aging & Health cited results from the Healthy People 2010 initiative and reported many failing grades. Older Americans were falling far short of the 2010 target goals for not only physical activity and obesity, but also eating fruits and vegetables, tooth loss, and reducing hip fractures and fall-related deaths. Again, financial support for achieving target goals was largely or completely absent.

In contrast to the mere monitoring of most Healthy People 2010 target goals, financial assistance was provided to older adults through Medicare for medical screenings and immunizations. Thus, cholesterol, colorectal, and mammogram screening goals were met. (Pneumococcal and influenza vaccination goals would have been met—after all, the percentage of compliance in these two areas doubled among older adults during the decade between 1990 and 2000, meeting Healthy People 2000 target goals—but the target goals were unrealistically raised to 90% of the population for Healthy People 2010.)

Another goal, to achieve less than 12% of the older adult population smoking, also received financial support and was met. This goal received financial support from some states through the tobacco industry settlement to cover Medicaid expenses caused by smoking-related illnesses and also through coverage by Medicare (see Chapter 7, “Selected Health Education Topics”).

This raises the question in the minds of those on the right of the political spectrum: conservatives and libertarians. Why should the federal government be involved at all? In the minds of liberals like myself, though, another question emerges: Should the federal government be doing *more* than setting lofty goals and monitoring data changes when it comes to promoting healthy aging?

A parallel question can be asked of state governments. The Healthy People initiatives often have a counterpart initiative at each of the state health departments. In my experience with several states, however, either this initiative establishes health baselines and, at times, monitors progress; has been ignored by the state health department altogether; or the state department accomplished a modest project more than a decade ago but did not follow up with additional activity. Many states, when given additional resources, which happened when they received tobacco settlement monies (see Chapter 7, “Selected Health Education Topics”), wound up diverting them to non-health purposes.
I will come back to this issue in Chapter 12, “Public Health Policy”: Should the federal and state governments be involved in health promotion and, if so, should they be doing more than setting goals and monitoring data changes? In the meantime, if you are interested in the Healthy People 2020 initiative, you can access information by going to www.health.gov/healthypeople/state/toolkit.

At this time, though, I will briefly get back to the question asked at the beginning of this chapter “Does establishing federal goals help to promote healthy aging?” and give you a succinct answer: Not if you are only setting goals and monitoring.

**Sociodemographic Trends**

It has been almost obligatory over the past 30 years to begin a gerontological book or article with comments about the rapid aging of society. About 15 years ago we began to see two slight variations of this ritual: many published works began with comments about the *aging of the aged*, and an additional spate of writings were on the coming onslaught of aging *baby boomers*, born between 1946 and 1964.
Today, with the vanguard of baby boomers and very old individuals receiving considerable media attention for different reasons, both ends of the older age spectrum command our full attention. The robust baby boomers—cum—gerontology boomers make it obvious to all but the most ageist that the vitality of aging persons can remain strong. The stereotype of aging as a process synonymous with physical and mental deterioration has been convincingly challenged. Also, an increasing number of boomers are now receiving Social Security checks, and this deserves our attention as well.

At the other end of the age spectrum, among persons age 85 and older, the growth in the percentage of the very old begins to startle—about a 40% growth per decade. In 1980 there were 2.2 million Americans aged 85 and over, in 1990 about 3 million, in 2000 around 4.3 million, and in 2010 about 6 million. They are also disproportional recipients of Medicare reimbursements.

Along with the increasing breadth of the age span of Americans comes increasing complexity. Fifty-year-olds are eligible for membership in AARP (formerly the American Association of Retired Persons), but they are quite different from 70-year-olds, who in turn are significantly different from 90-year-olds. Moreover, 90-year-olds are different from one another. A few of them are pumping iron and throwing away their canes, whereas others are waiting to die. This diversity is addressed in Chapter 11.

What aging Americans have in common, be they 50 or 90, robust or frail, is a future with an intensified demand for medical care (euphemistically referred to in America as health care) and the ongoing escalation of medical care costs. Driving these demands and costs are the increasing numbers of aging persons with both chronic and acute medical conditions and an expensive, high-tech, acute care—oriented medical system.

As we entered the third millennium, this demand for costly and sophisticated medical care collided with an unpredictable federal budget. In fewer than 6 months’ time during the year 2001, the United States went from a record-breaking, astoundingly huge budget surplus to budget deficits of enormous size and uncertain duration—thanks to the one-two punch of federal legislation that launched a 10-year tax cut and the surging costs of both domestic programs (and, a few years later, new programs such as Medicare Part D) and the launching of a war on terrorism.

Then, in September 2008 the United States and the rest of the world experienced the beginning of an economic meltdown unrivaled since the Wall Street crash of 1929. As retirement savings and home values plunged, a virtually unregulated financial system fueled by risky mortgage-lending practices gone bust led to many financial institutions failing, selling out, or being taken over by the government.

Paralleling the uncertainty of our overall economic future was the deterioration of Medicare finances. Medicare expenditures in 2011 totaled 500 billion—about 13% of the federal budget—and Medicare was expected to be unable to fulfill its obligations by 2017 if nothing was done. The American public’s voracious appetite for medical care combined with unmanageable medical cost inflation was unsustainable.

Some argue that the solution is to encourage health promotion, disease prevention, and chronic disease management. Health promotion advocates, however, often fail to consider that prevention/promotion/management entails substantial costs in the attempt to screen and educate everyone, and many will not benefit from an intervention. And even if these interventions were to prove effective for most people, healthier individuals will live longer on tax-payer-supported Social Security and Medicare, only to die of other costly medical conditions. (Perhaps supporting the philosopher/humorist Woody Allen’s contention that death is the best way to cut down on expenses.) Health promotion advocates respond to these concerns with data showing that people who are overweight and underactive are living nearly as long as those with healthier lifestyles but are much sicker for a longer period of time and require more costly interventions.
Whichever side is right, the media has taken a stand, allocating considerable time and space to the merits of promoting good health practices to improve quality of life and realize medical care cost savings. Joining the media are some federal and state government programs that have sponsored disease prevention and, to an increasing extent, health promotion and disease management; the health professions, which have proclaimed its importance in the education and training of students; the business community, which has firmly supported this approach for employees; and individuals who often discuss their attempts at these practices, both successful and otherwise.

If disease prevention, health promotion, and chronic disease management strategies have been vying for center stage in society as a way of controlling medical costs, it has been the stage of a not very prosperous community theater. The federal government plays a limited role in disease prevention and chronic disease management, and rarely subsidizes health promotion. State governments have been more concerned about dealing with the additional expenditures that the federal government has passed along to them (Medicaid, for example) than on new disease prevention, health promotion, and disease management initiatives that require funding.

Health professionals, too, have provided mostly lip service to promoting health because they have not been reimbursed for it. Health science students have received only a modicum of health promotion instruction and training, and experience in applying it is the exception rather than the rule. The business community has devoted resources to health promotion (calling it worksite wellness) but has stopped short of focusing on those who need it most—older and more sedentary employees.

And last but not least, individuals have spent more time and money on health promotion. But they also have spent more time and money at fast-food restaurants, eating larger portions of food with higher fat content; and on computers, in front of which they sit for an increasing number of hours. (Not to mention it is dangerous to walk while looking at your smartphone.)

Perhaps the disparity between the promise of health promotion, disease prevention, and chronic disease management and the associated attention shown to these activities, on the one hand, versus the lack of government resource allocation adequate to supporting them, originates in the American value of individual responsibility. Unlike medicine, where we know we are not responsible for prescribing our own drugs or conducting surgery on ourselves or our family members, we feel capable of walking briskly and eating healthfully—if we choose—without the need of experts, health programs, or taxpayer financial support. Thus, though most people are not doing as good a job as they would like at promoting their health, we tend to believe it is up to the individual to take responsibility for it.

Individual responsibility is an important American value, but individuals are imperfect and need help. If support can be provided by some combination of government, business, the media, the community, health professionals, religious institutions, family, and friends, we will be able to do much better at promoting our own health and the health of the people we love.

The following chapters of this book offer ample ideas and information on health promotion and aging to provide some basis for optimism and to inspire additional initiatives—from the individual to all major institutions of society, including family, work, government, religion, health care, and education. Sociodemographic data suggest that aging adults not only may be the leading cause of escalating medical costs, but also have the potential to lead the way in the implementation of creative and cost-effective health promotion strategies. The data reveal that the educational level of aging Americans has risen, that these individuals are increasingly health conscious, and that they are active in community health-promoting endeavors.
Much of the information in the next section is taken from summaries of data provided by sources like the U.S. Bureau of the Census, the Administration on Aging’s *A Profile of Older Americans: 2011*, the National Center for Health Statistics, the Federal Interagency Forum on Aging-Related Statistics’ *Older Americans 2012: Key Indicators of Well-Being*, *The State of Aging and Health in America* from the Merck Company Foundation, and the Centers for Disease Control and Prevention.

**Population Growth Over Age 65**

All but the most uninformed know that the average age of the American population has been increasing dramatically. Between 1950 and 2050 the number of Americans age 65+ increases more than six fold, with more than two thirds of that growth taking place after 2000 (Figure 1.1). The percentage age 65 and over is projected to reach 20%.

The percentages in Table 1.2 show why the population “age pyramid”—a few older adults at the top and many children at the bottom—is rapidly becoming an “age rectangle.”

**The Baby Boomers**

The baby boomers are the 76 million persons who were born in the United States between 1946 and 1964. Most were conceived when the millions of soldiers, sailors, and marines returned home from World War II and created a surge in the number of births that started quickly—there were fewer than 2.8 million births in 1945 but more than 3.4 million in 1946—and lasted 19 years. The boomers challenged U.S. hospital capacity when they were born, the adequacy of the public school system a few years later, society

**FIGURE 1.1** Population age 65 and over and age 85 and over, selected years 1900–2010 and projected 2020–2050.

NOTE: These projections are based on Census 2000 and are not consistent with the 2010 Census results. Projections based on the 2010 Census will be released in late 2012.

Reference population: These data refer to the resident population.

TABLE 1.2 Becoming an Age Rectangle

<table>
<thead>
<tr>
<th>YEAR</th>
<th>UNDER AGE 18</th>
<th>OVER AGE 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>1900</td>
<td>40%</td>
<td>4%</td>
</tr>
<tr>
<td>1980</td>
<td>28%</td>
<td>11%</td>
</tr>
<tr>
<td>2030</td>
<td>20%</td>
<td>20%</td>
</tr>
</tbody>
</table>

in general when they reached draft age and spurned the politicians intent on expanding the Vietnam War, and still later the sufficiency of available housing for raising their families.

The baby boomers’ impact on society as they approach old age is still unclear. Will they be known as the spoiled descendents of the Greatest Generation or as pioneers in social reform and civil rights? Their impact on society as older persons raises an even more troublesome question, one posed by the Beatles in a song lyric that asks society if it would still need us when we’re 64. If the Beatles had been more knowledgeable about aging, they would have substituted 84 for 64, as it more accurately represents a threshold to frailty and incompetence. (As far as they were concerned 64 was the same as 84: too old to differentiate.) Hopefully we will be able to answer this question in the affirmative by the time the first boomers reach age 84 in 2030.

In 2010 the number of Americans between the ages of 45 and 64 was about twice that of those age 65 and over: roughly 79 million versus 39 million. And boomers will bring into retirement not only their large numbers and a history of advocacy, but also a powerful interest in, and impact on, the solvency of the Social Security and Medicare programs. Their influence on society is likely to be dramatic and widespread as they become retirees in increasing numbers.

As eloquently stated by Frank Whittington, director of Georgia State’s Gerontology Center (and paraphrased here),

On January 2, 2008, shortly after 9 a.m., a simple bureaucratic event was the harbinger of a fundamental change in American society. Kathleen Casey-Kirschling—the first baby boomer, who had been born one second after midnight on January 1, 1946—walked into the local office of the Social Security Administration and applied for retirement benefits. She celebrated her 62nd birthday on New Year’s Day and applied for early Social Security benefits at her first opportunity. Over the next couple of decades over 70 million of her peers will follow suit. We must not doubt that when Kathleen Casey-Kirschling strode up to the counter to ask for her benefits, all of our lives had begun to change.

As boomers retire they will make enormous demands on both the Social Security and Medicare programs, which, at the same time, will be supported by a shrinking taxpaying workforce. By the time the last boomer turns 65 in the year 2029, the retirees drawing Social Security and Medicare benefits will account for one in five Americans.

Will boomers be healthier than today’s cohort of older adults? We do not know yet. The boomers rate their overall health status better than today’s cohort of older adults, with a higher percentage reporting that their health is good to excellent. And death rates for heart disease and stroke continue to decline. But diabetes, chronic lower respiratory disease, high cholesterol, and hypertension are higher (www.bc.edu/agingandwork).
The Older Old, Chronic Conditions, and Disability

The older population itself is getting older. The percentage of persons age 85 and over is growing faster than any other age group. There was a 36% increase among Americans 85 and over from 1980 to 1990 (from 2.2 million to 3 million), a 43% increase from 1990 to 2000 (from 3 million to 4.3 million), and a 40% increase from 2000 to 2010 (from 4.3 million to about 6 million). Every decade there is another 40% increase in the number of persons aged 85 and over.

This demographic trend is significant for two reasons. On the positive side, the rapid growth of this segment of the population has made what was previously an age level rarely attained into an increasingly common stage of the life cycle. Moreover, the percentage of older adults age 75 and over who report good health or better is 66%.

Experts believe that today’s 70-year-old is more like the 60-year-old of previous generations (Trafford, 2000). Older adults have the same perception about themselves. The National Council on Aging (2002) together with the Harris National Survey reported that 51% of persons between the ages of 65 and 74 and 33% of persons age 75 and over perceive themselves as middle-aged or younger! This certainly is evidence that many older adults are redefining old age as beginning later in the life cycle.

On the challenging side, for both individuals and society, is the fact that the ability of this age group to function fully is significantly less than for the younger old. Activities of daily living (ADL) is the standard for assessing functionality and refers to difficulties with bathing/showering, dressing, eating, transferring, walking, and toileting. As you can tell from Figure 1.2, the older old, those over the age of 85, have three to four times the difficulties of the younger old, those age 65 to 74.

Whereas only 6% of individuals age 65 to 69 reported difficulties with at least one ADL task, 28% of those age 85+ had such difficulties. Similarly, only 1% of persons age 65 were residents of nursing homes, but 22% of persons age 85+ were residents. The older-old person places more demands on family caregivers and societal resources.

**FIGURE 1.2** Percentage of persons with limitations in ADL by age group: 2009.

The leading chronic conditions among older adults are listed in Figure 1.3. The prevalence of each condition increases in old age, and persons over age 85 often have multiple chronic conditions. The leading chronic conditions are hypertension, arthritis, heart disease, cancer, and diabetes. Women report higher levels of asthma, arthritis, and hypertension; men report higher levels of heart disease, cancer, and diabetes.

Although chronic conditions and functional limitations increase with age, disability rates for older Americans have been declining. 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 rose to only 7 million—less than a quarter of the increase that might have been expected. Another way to view this change is that in 1982, 26.2% of those age 65 and over had a disability that represented a substantial limitation in a major life activity; by 1999 this percentage had fallen to 19.7%. As of 2004–2005, the rate had declined to 19%. Analysts attribute this ongoing reduction to a general rise in socioeconomic status, enhancements in medical care and rehabilitation, and improvements in lifestyle.

Another hopeful research outcome in disability trends is the conclusion that among the long-lived, even longer lives do not mean significantly more disability. As more people today are living into their 90s and beyond (the fastest-growing age segment of society in developed countries), researchers have found that the percentage who are independent changed less than expected between the ages of 92 and 100. Overall, 39% of 92-year-old Danish adults were able to care for themselves, and the same was true of 33% of those who lived to the age of 100 (Christensen, McGue, Petersen, Jeune, &

![Figure 1.3](image-url)

**FIGURE 1.3** Percentage of people age 65 and over who reported having selected chronic health conditions, by gender, 2009–2010.

Note: Data are based on a two year average from 2009–2010. Reference population: These data refer to the civilian noninstitutionalized population.

Vaupel, 2008). In general, loss of independence among the very old appears to occur close to the end of life and is not significantly more severe or costly for the 100-year-old than for the 90-year-old.

**Centenarians**

In 2010 the Census showed that there were 53,364 people who were 100 years or older, an increase of 5.8% since the 2000 count. Some census projections forecast 15 times that many by the year 2050, when the baby boomers begin reaching age 100.

According to the *Guinness Book of World Records* (www.guinnessworldrecords.com), a French woman, Jeanne-Louise Calment, has lived the longest, reaching 122 years before she died in 1997. In 2005 the oldest living person was a Dutch woman, Hendrikje van Andel-Schipper, who had reached 115 years and who attributed her longevity to eating a piece of herring every day.

On June 9, 2005, the world’s oldest living married couple had an aggregate age of 205 years. Magda Brown, age 100, attributed her 74-year union to Herbert Brown, age 105, to her taking the lead (“I am the strong one”) and his following (“He is the easy-going one”). Apparently, Herbert is more than just easy-going. He survived the Nazi concentration camp at Dachau.

A USA Today/ABC News poll reported that only 25% of Americans want to live to be 100 or older. The majority of Americans are concerned that they will become disabled and a burden to their families. And yet many Americans are fascinated by the idea of an increasing number of people becoming centenarians. (There are also 70 verified supercentenarians—110 years or older—on the planet.)

The same holds true for scientists. One scientist, though, is not content with being a mere centenarian (or supercentenarian). Aubrey de Grey is a controversial practitioner of biogerontology, which focuses on the biology, physiology, and genetics of aging. He believes that the first person who will live to be 1,000 might be age 60 today. (A more credible assertion by Christensen and colleagues [2009] is that 50% of women born today in the most developed countries will celebrate their 100th birthday.) Although this Englishman’s ideas are far from the scientific mainstream, he has inspired considerable interest in his theories, having been invited to deliver dozens of presentations in the United States. This interest may have been stimulated in part by his offer of a $20,000 cash prize for anyone who can disprove the scientific basis of his theories, as determined by a review panel of independent molecular biologists. His provocative ideas on increased longevity range from stem cells that can regrow diseased tissue, to implanting bacteria to clean up waste that builds up inside cells.

**Life Expectancy**

The *life expectancy* of Americans born in 2012 is 78.9 years, the highest it has ever been, according to a United Nations study. Before we break out the champagne, though, it should be noted that the United States was behind 49 other countries in life expectancy, with 30 of these countries having a life expectancy over age 80.

Americans’ life expectancy has been rising almost without interruption since 1900, thanks to advances in sanitation, medicine, and health behavior (particularly smoking cessation). It is by no means certain whether these increases in life expectancy will continue unabated. Increases in obesity, and the related conditions of hypertension and diabetes, may reverse this trend; whereas the advent of cholesterol-lowering drugs and other advances in medicine may foster it. The future may also be determined by changes in the health behavior patterns of eating more nutritiously, exercising, and not smoking.
The longevity gender gap has been closing in the United States. Contemporary men will live to age 76.2 versus 81.3 for women. This 5-year gap is the smallest recorded since 1946. The population of men ages 85 to 94 grew by nearly half, whereas the number of women in the same age group increased by about a fifth. Medical experts speculate that women are working harder, smoking more, and undergoing more stress. The disparity between Blacks and Whites is also declining, with the gap between Black and White men being 6 years and the gap for women 4 years.

Heart disease continues to be the leading cause of death in 2009 (see Table 1.3), but during the prior 3 years the gap between heart disease and cancer continued to narrow steadily. Also during this time, respiratory diseases and strokes switched places in the rankings, and Alzheimer’s disease continued to rise in the table.

**Hospital Stays and Physician Visits**

The average length of a hospital stay for an older patient continues to decline, from more than 12 days in 1964, to 8.5 days in 1986, to 6.5 days in 1996, to 5 days in 1999, to 4.6 days in 2007. As a percentage of overall Medicare costs, hospital expenditures declined from 32% to 24% between 1982 and 2008, and instead of being the major cost driver, it is only two thirds of the amount Medicare spends on physician/outpatient costs.

Although quickening hospital discharges over the past few decades affect all age groups, the growing numbers of older adults in the United States results in a higher percentage of older patients in the hospital. Older adults accounted for 20% of hospital stays and used one third of the total days of hospital care in 1970; by 2008 they accounted for 40% of hospital stays and almost one half of the days of hospital care (Hall & Owings, 2002).

Older persons had more than seven office visits with their doctors in 2009, compared to persons aged 45 to 65, who averaged fewer than four office visits. It is estimated that older patients occupy 50% of the time of health care practitioners, and it is predicted with near certainty that the percentage of time that health care practitioners spend with older patients will continue to increase.

**Medication Use**

Although hospital stays declined, medication costs among Medicare enrollees went up, from 8% of overall costs in 1992 to 16% of overall costs in 2008. Older adults constitute about 13% of the population but consume 32% of all prescription drugs and 40% of over-the-counter drugs. Accompanying the volume of drug consumption among older adults

**TABLE 1.3 Ten Leading Causes of Death Among Older Adults Age 65+ in 2009**

<table>
<thead>
<tr>
<th>1.</th>
<th>Heart Disease</th>
<th>599,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Cancer</td>
<td>568,000</td>
</tr>
<tr>
<td>3.</td>
<td>Chronic Lower Respiratory Diseases</td>
<td>137,000</td>
</tr>
<tr>
<td>4.</td>
<td>Stroke</td>
<td>129,000</td>
</tr>
<tr>
<td>5.</td>
<td>Unintentional Injury</td>
<td>118,000</td>
</tr>
<tr>
<td>6.</td>
<td>Alzheimer’s Disease</td>
<td>79,000</td>
</tr>
<tr>
<td>7.</td>
<td>Diabetes</td>
<td>69,000</td>
</tr>
<tr>
<td>8.</td>
<td>Influenza and Pneumonia</td>
<td>54,000</td>
</tr>
<tr>
<td>9.</td>
<td>Kidney Disease</td>
<td>49,000</td>
</tr>
<tr>
<td>10.</td>
<td>Suicide</td>
<td>37,000</td>
</tr>
</tbody>
</table>

*Source: Centers for Disease Control and Prevention.*
adults has been the burden of rising prescription drug costs over the past several years. The growth in prescription drug expenditures was double-digit every year from 1994 to 2001. The annual rate of growth in such expenditures reached an astonishing 19.7% in 1999, although it declined in 2000 (16.4%) and 2001 (15.7%) as employers increased copayments.

Medicare Part D was launched in 2006 and stimulated medication price growth that was three times the rate of inflation (see Chapter 12). The good news was that beginning a few years later, new prescriptions were increasingly being filled with lower-priced generics. Many popular medications were coming off of patent protection, and there were few expensive, patent-protected breakthroughs to drive up costs.

A nationally representative sample of community-residing individuals aged 57 to 85 years revealed at least one prescription medication was used by 81% of the sample, at least one over-the-counter medication by 42%, and at least one dietary supplement by 49%. Also, at least five prescription medications were being used concurrently by 29% of the sample (Qato et al., 2008).

By 2010 the steady increase of prescription and over-the-counter drugs rose to 17% of all health expenditures, fueled by advertising of prescription drugs on television, and an increase in the number of prescriptions written by physicians. In 2011 spending on drugs suddenly leveled off, for two reasons: (1) the use of lower-cost generic drugs increased to 80% of all dispensed prescriptions, and (2) the cumulative effects of the recession of 2008, the increase in the uninsured, and the drop in physician office visits and hospital admissions, both places where drugs are most often prescribed.

Health Habits

On the brighter side, the health habits of older adults may, on balance, be slightly superior to those of younger adults. People age 65 and over, for instance, are less likely to smoke, drink alcohol, or report high stress. They eat more sensibly than do younger adults, are as likely to walk for exercise, and are more likely to check their blood pressure regularly. Older adults continue to increase their rate of participation in medical screenings and immunizations, and adults in general increased their seatbelt use.

On the darker side, older adults are more likely to be sedentary and malnourished. And their advantage in being less stressed may be merely the result of less awareness of or less willingness to report stress. The lower percentage of smokers may be due in part to the fact that smokers are more likely to die before age 65. Also, when older adults engage in risk behaviors such as excessive alcohol consumption, sedentary behavior, poor nutrition, and failure to use seatbelts, their vulnerability to morbidity and mortality is greater.

To put things in perspective, though, few adults in the United States, young or old, live a comprehensively healthy lifestyle. National data reveal that only 3% of the population engage in all four of the following lifestyle choices: nonsmoking, healthy weight, five fruit and vegetable servings per day, and regular physical activity (Reeves & Rafferty, 2005). Among older adults, one third do not get any leisure-time physical activity, two thirds do not eat five servings of fruit or vegetables a day, and one fifth are 30 pounds or more overweight.

Perceptions of Health

Most people who are older tend to view their health positively, according to the report, *Older Americans 2012: Key Indicators of Well-Being*. Seventy-six percent of older adults,
age 65 and over, rate their health as being good, very good, or excellent. Among those age 85 and over, this percentage declines to 67% who report good, very good, or excellent health. This percentage further declines to 63% among Black or Hispanic older adults age 65 and older, and to 56% among those without a high school diploma.

Volunteering

Many older adults are active and productive, and some choose to engage in volunteer opportunities. In any given year, almost one fifth of older Americans engage in unpaid volunteer work for organizations such as churches, schools, or civic organizations. In addition, an unknown percentage of older adults do other types of volunteer work, such as helping the sick or disabled, or assisting with the care of grandchildren.

Surprisingly, those who continue to work after age 65 are not less likely to volunteer than those older adults who retire (Caro & Morris, 2001). Researchers believe that the potential for increasing volunteerism among retired older adults is significant, and that “in the period immediately after retirement there is a heightened receptivity to volunteerism” (Caro & Morris, 2001, p. 349).

Marital Status

Older men are much more likely to be married, 72% versus 42%, and much less likely to be widowed, 13% versus 40%, than older women (see Figure 1.4). In absolute numbers, there were over four times as many widows (8.7 million) as widowers (2.1 million). Divorced or separated older adults represented only 12.4%, and single adults only 4.5% of the population. Both of these categories are likely to increase with the coming of the baby boomers and their greater acceptance of divorce, separation, and a single lifestyle.

Based on percentage alone, women should expect to spend all of, or part of, their later years without a husband (58%).

**FIGURE 1.4** Marital status of persons 65+, 2010.

Work

Labor force participation rate, that is, the percentage of a population that is in the labor force, of older men steadily declined throughout the 20th century, then began to rise in 1995 (see Figure 1.5). According to the Bureau of Labor Statistics, with the exception of the older male worker ages 55 to 61, a growing percentage of older adults are remaining in the workforce.

Among men ages 62 to 64, the participation rate increased from 45% in 1995 to 53% in 2011. Among men ages 65 to 69, the participation rate increased from 25% in the mid-1990s to 37% in 2011. Among men age 70 and over, the participation rate increased from 10% in the mid-1990s to 15% in 2011.

Labor force participation rates began to rise 10 years earlier for women than for men, around 1985 (see Figure 1.6). Also unlike for men, the greatest gains in participation for women occurred from ages 55 to 61 (men declined during this age interval), increasing from 46% in 1985 to 65% in 2011. For women ages 62 to 64, 65 to 69, and 70+, the increase in participation began in the mid-1990s, like it did for men.

The increasing labor force participation for older women reflects the aging of the huge cohort of baby boomers and the rising expectation that women will work. As the boomer women got older, the difference between the labor force participation of the sexes narrowed.

According to a 2012 Gallup survey, 81% of working people reported they thought they would work part time (63%) or full time (18%) when they reached retirement age.

**FIGURE 1.5** Labor force participation rates of men age 55 and over, by age group, annual averages, 1963–2011.

Two thirds of the part-time predictors and one third of the full-time predictors stated they would be working because they wanted to, the others because they would likely have to for financial reasons. Prior to the economic meltdown that began in September 2008, the total percentage planning to work in their so-called retirement years was 69%, considerably lower than the 81% of today. Expecting to work during one’s retirement years, obviously, will not be perfectly correlated with actually working, given the challenges of finding a job, sustaining good health, and/or dealing with onerous family caregiving responsibilities.

With increasing life expectancy, workers can anticipate a longer retirement phase to save for. Complicating matters is that employees are increasingly less able to take advantage of the security and predictability of defined benefit programs (i.e., traditional pensions provided by employers) and instead must rely on defined contribution programs (i.e., do-it-yourself retirement savings plans that are subject to the whims of the stock market).

Labor force participation among older adults in the United States is considerably higher than in most other countries, including France, Germany, Italy, Sweden, United Kingdom, and Canada; although it is lower than the rate in Japan.

**Educational Status**

In 1965, 24% of the older population had graduated from high school and only 5% had at least a bachelor’s degree or more. By 2010, 80% were high school graduates or more
and 23% had a bachelor’s degree or more (see Figure 1.7). When the last baby boomer reaches age 65 (replacing most of the current cohort of older adults) this percentage increases to 89% high school graduates, along with 36% college graduates. In 2010, older men had attained two thirds of the bachelor’s degrees, but if current trends hold, this percentage will be substantially reversed. Women have constituted about 57% of college matriculation for several years now.

The Sloan Center on Aging and Work at Boston College published a fact sheet in 2012 (www.bc.edu/agingandwork) that noted an important fact about the impact of education on older adults who want to continue working. The unemployment rate of workers age 65 or older who had completed 4 or more years of college was only one half that of older workers who had not completed high school.

Unfortunately, the percentage of older adults who had completed high school varied considerably by race and ethnic origin. In 2010, 84% of non-Hispanic Whites age 65 and over had completed high school, and 74% of older Asians. In contrast, 65% of older Blacks and 47% of older Hispanics had completed high school (see Figure 1.8). Regarding attainment of at least a bachelor’s degree, 35% of older Asians had accomplished this along with 24% of older non-Hispanic Whites. The proportions, however, were 15% and 10%, respectively, for older Blacks and Hispanics.

The boomers in 2008 (ages 44 to 62 at that time) reached the highest educational levels: 89% were high school graduates and 34% (and counting) were college graduates. If Nola Ochs and Phyllis Turner are role models, boomers have plenty of time to further increase their college graduation rate.

**FIGURE 1.7** Educational attainment of the population age 65 and over, selected years 1965–2010.

![Educational attainment graph](image)

NOTE: A single question which asks for the highest grade or degree completed is now used to determine educational attainment. Prior to 1995, educational attainment was measured using data on years of school completed.

Reference population: These data refer to the civilian noninstitutionalized population.

Nola Ochs got her undergraduate degree from Fort Hays State University in Kansas in 2007 at the age of 95. Nola was not the only nonagenarian that year with such an impressive educational achievement. Phyllis Turner, at age 94, received her master’s degree in medical science at the University of Adelaide in Australia. Not many boomers are likely to be discouraged from attending college because of their age.

By 2007 there were more than 400 lifelong learning programs targeted toward older adults in the United States and Canada, almost all of them linked with colleges and universities and many of them loosely associated with Road Scholar (formerly Elderhostel and Exploritas) or the Osher Lifelong Learning Institutes, funded by the Bernard Osher Foundation. There were also a variety of other lifelong learning opportunities, such as the Adventures in Learning programs at Shepherd’s Centers, the educational programs at OASIS Centers, and other innovative educational options at community colleges, community centers, art museums, and hospitals (see Chapter 9, “Community Health”).

As the educational level of older adults continues to rise, this may well correlate with an increase in their interest in seeking out health information and engaging in health-promoting activities in their communities.

**Political Power**

The Federal Election Commission reports that older adults are disproportionately likely to vote. Moreover, the percentage of voting elders has increased over the past
20 years. In 1978 older adults generated 19% of all votes cast, in 1986, 21%, and in 1998, 23%.

Older adults are more likely to demonstrate high levels of civic engagement, paying more attention to politics and public affairs than younger adults (Binstock & Quadagno, 2001). Voting differences, however, are greater among older adults than between younger and older adults, as socioeconomic class, ethnicity, gender, and religion are more important influences on voting patterns than age. One exception to this trend was when older voters in the 2008 presidential election were the only age group that gave a majority of their votes to John McCain who, coincidentally or otherwise, was the considerably older candidate (Binstock, 2009).

**Internet Access**

A 2012 national survey from the Pew Research Center’s Internet & American Life Project, reported that more than half—a majority for the first time—of adults ages 65 and older are now online. This is due to the tech-savvy baby boomers moving into the age 65+ ranks. Internet use among those over age 75 is, in contrast, only one third. Thus, the Internet access gap between younger adults and older adults will close rapidly in the near future.

Social-networking site use among Internet users ages 65 and older grew 150% in 2 years, from 13% in 2009 to 33% in 2011. The Pew study reported that people younger than age 50 used social-networking websites to stay in touch with friends, and people older than age 50 reported that they used them to connect with family.

Gender differences in overall computer usage have disappeared, with older women as likely to use the computer as older men—though usage of social-networking sites is likely to be greater among older females than older males. Income and education levels still govern differences in computer usage.

**Poverty**

The poverty rate among older persons had fallen from 35% of those age 65 and over, in 1969, to 9% in 2010. Without Social Security and cost-of-living increases, the rate would have risen to 50% over this time. Thanks to a variety of sources of income—Social Security (37%), public and private pensions (19%), earnings (30%), asset income (11%), and other (3%)—the poverty rate for older adults has, seemingly, fallen below the rate for persons age 18 to 64.

The declining poverty rate for older adults may be overstated, however. The U.S. Bureau of the Census assumes that the costs of food and other necessities are lower for older adults and it does not adequately take into account the rising costs of medical care, transportation, and housing expenses. Also, there are hidden poor among the older population who reside in nursing homes or who live with relatives and are not counted in the official census statistics (Hooyman & Kiyak, 2011).

The Supplemental Poverty Measure is a U.S. Census research tool that considers previously overlooked costs, like out-of-pocket medical expenses for older adults, and estimates the poverty rate of seniors to be 16% (Schwartz, 2011). The National Academy of Science estimates the poverty rate for older Americans at 19%.

The poverty rate is almost three times higher for older Hispanics and Blacks than for older Whites, and almost twice as high for older women than for older men, according to the 2011 Profile of Older Americans, published by the Administration on Aging. Combining gender and ethnicity, the highest poverty rates were experienced among Hispanic women (40.8%) who lived alone and by older Black women (30.7%) who lived alone.
Racial and Ethnic Composition

The diversity of the older adult population in America is increasing, and will continue to increase for the foreseeable future. In 2010, non-Hispanic Whites accounted for 80% of the older adult population in the United States, but this is projected to drop dramatically to 58% in 2050 (Figure 1.9). The fastest growing minority will be Hispanic elders of any race, almost tripling in percentage between 2010 and 2050. Comparable growth, but on a smaller scale, will be the tripling in percentage of older Asians.

Although health professionals will need to become more knowledgeable about the ethnic backgrounds of their older clients, there is great diversity within ethnic groups as well. Age, gender, region, religion, English-speaking skills, income, education, lifestyle, physical disability, marital status, place of birth, and length of residence in the United States are examples of important variables to consider within each ethnic group.

There is also a continuum of acculturation that occurs among elders within each ethnic group. Acculturation is the degree to which individuals incorporate the cultural values, beliefs, language, and skills of the mainstream culture. To avoid stereotyping ethnic groups, there needs to be recognition of the many distinctive ethnic subgroups (Haber, 2005a).

![Figure 1.9](image-url)
DEFINITIONS OF HEALTHY AGING

Health professionals need to be cautious about defining good health for older adults. This is the message delivered by Faith Fitzgerald in an editorial in the *New England Journal of Medicine* (Fitzgerald, 1994) cautioning against a narrow or rigid definition of health: “We must beware of developing a zealotry about health, in which we take ourselves too seriously and believe that we know enough to dictate human behavior, penalize people for disagreeing with us, and even deny people charity, empathy, and understanding because they act in a way of which we disapprove. Perhaps (we need to) debate more openly the definition of health” (pp. 197–198). Let us begin.

The Federal Government

One such “cautious” definition of health is provided by the federal government’s Public Health Service through its Health Objectives for the Nation. This broad definition of health includes the following three components:

1. Disease prevention, which comprises strategies to maintain and to improve health through medical care, such as high blood pressure control and immunization.
2. Health protection, which includes strategies for modifying environmental and social structural health risks, such as toxic agent and radiation control, and accident prevention and injury control.
3. Health promotion, which includes strategies for reducing lifestyle risk factors, such as avoiding smoking and the misuse of alcohol and drugs, and adopting good nutritional habits and a proper and adequate exercise regimen.

Extraordinary Accomplishments

The definition of good health in late life can be viewed from the unique perspective of extraordinary accomplishments by older adults.

**Arts:** *Falstaff*, Verdi’s last opera, was composed when he was age 80. George Burns won an Oscar, his first, also at age 80. And Anna Mary Robertson, better known as Grandma Moses, had her first showing of her paintings at, you guessed it, age 80, after beginning this artistic pursuit just a couple of years earlier.

Enough with the youngsters. Herman Wouk, Pulitzer Prize-winning author of *The Caine Mutiny*, published his latest novel, *The Lawgiver*, in 2012 at the age of 96. (At age 97, he is working on a new novel.) Mieczyslaw Horszowski, a classical pianist, recorded a new album at age 99. Johannes Heesters, a Dutch-born German singer–dancer–actor, was still appearing on stage at age 101. He announced at that age that he had no plans to take what he called “early retirement” because the stage was his life.

Jumping up to the age of 107, George Abbott collaborated on the revival of the musical *Damn Yankees*. George wasn’t the only 107-year-old with an artistic bent. After Sadie and Bessie Delany wrote their bestseller: *The Delany Sisters’ First Hundred Years*, Bessie died at age 104. Sadie then went on to author *On My Own at 107: Reflections on Life Without Bessie*. She died 2 years later at age 109.

**Politics:** In 2006 the average age of a United States senator was 62 years, the oldest it had ever been. Not surprisingly, the term *senate* derives from the Latin word for “old.” Golda Meir became prime minister of Israel at age 71. Former Senator John Glenn completed the rigorous physical preparation necessary to become the oldest space traveler
in history at age 77. Former President Jimmy Carter won the Nobel Prize as a global peacemaker at age 78.

**Sports:** Kozo Haraguchi ran the 100 meters in 22.04 seconds, setting a record for the 95 to 99 age group. This 95-year-old Japanese man said he had to run cautiously because the outdoor track was slick with rain. Another runner, Johnny Kelley, won the Boston Marathon twice. Even more remarkable was that he had started this annual race 61 times during his lifetime, completing the entire 26.2 miles 58 times. Mr. Kelley died in 2004 at the age of 97. Another nonagenarian, though, continued to race in 2004. Fauja Singh moved from India to England and decided to take up running at the age of 82. At the age of 92 he set a world record for his age group by running the Toronto Marathon in 5 hours and 40 minutes.

Ken Mink was a basketball player at Roane State, a junior college about 35 miles west of Knoxville, Tennessee. The 6-foot, 190-pound player was listed as a senior on the basketball roster. No kidding! Ken Mink was 73 years of age in 2008, more than a half-century older than his teammates. In fact, this septuagenarian was the oldest person ever to play college basketball.

**Mountain climbing:** Japanese mountaineer Tamae Watanabe set a world record in 2012 by becoming the oldest woman to scale Mount Everest, the tallest mountain in the world. She did this at the age of 73. She may have a couple of more decades to add to this achievement. Hulda Crooks, for instance, climbed Mount Whitney, the highest mountain in the continental United States, at the age of 91.

**Work:** U.S. District Court Judge Wesley E. Brown became the oldest working judge in the nation’s history. Near the end of his life, he had to transfer some of his work from his Wichita, Kansas, courtroom to his bedroom at home—because of his health—where he died a few weeks later at the age of 104. Judge Brown, however, was not the oldest worker in the United States. Ray Crist still worked as a research scientist at Messiah College in Pennsylvania at the age of 104. He had earned his doctorate in chemistry from Columbia University at the age of 26 and was still putting it to good use 78 years later.

**Religion:** In 2009, 10 women ranging in age from 89 to 96 each memorized Hebrew in order to become a bat mitzvah, a Jewish girl who is marking the transition into religious adulthood. Unlike a bar mitzvah for a boy, a bat mitzvah was rare until the 1960s, and these women decided to make up for what they were denied as children. They met weekly for several months with a rabbi to study Hebrew to prepare for their rite of passage at the synagogue of the Menorah Park senior residence in Cleveland, Ohio. Although three used walkers and another carried a small oxygen tank to the podium, all successfully completed their deferred quest.

**Birthing:** A California woman named Arceli Keh lied about her age (she said she was 51 but was actually 61) in order to become eligible for a fertility program in which she was implanted with an embryo from an anonymous donor. In 1996, at age 63, she became the oldest woman on record to have a baby. Her record was surpassed in 2006 when Maria del Carmen Bousada, a 66-year-old Spanish woman, who had become pregnant after receiving in vitro fertilization treatment, gave birth to twins by Cesarean section in a hospital in Barcelona. The wisdom of this accomplishment was, however, called into question in 2009, when she died from cancer at age 69, leaving behind boys not yet 3 years old.

**Bank robbing:** Red Rountree, at the age of 91, became the oldest known bank robber in U.S. history in 2004. Sentenced to a 12-year term—likely a life sentence—in Texas, Red said he robbed banks for fun: “I feel good, awfully good for days after robbing a bank.” After two successful heists, the third time apparently was not the charm. The teller at the third bank, responding to his demand for money, asked, “Are you kidding?”
Although I marvel at these examples of unusual achievement by aging adults, I do not use them as inspiration for older, or even younger, persons. These models are astonishing, but they do little to enhance the confidence of aging adults who do not believe they can—and perhaps do not want to—come close to achieving similar milestones.

As Betty Friedan (1993) noted in her book The Fountain of Age, as an older adult one may “attempt to hold on to, or judge oneself by, youthful parameters of love, work and power. For this is what blinds us to the new strengths and possibilities emerging in ourselves.”

Nonetheless, I had an uproariously good time compiling these accomplishments.

Prevention

Prevention is often categorized as primary, secondary, or tertiary (Figure 1.10). Primary prevention focuses on an asymptomatic individual in whom potential risk factors have been identified and targeted. Primary preventive measures, such as regular exercise, good nutrition, smoking cessation, or immunizations, are recommended to decrease the probability of the onset of specific diseases or dysfunction. Primary prevention is different from health promotion in that it is less broad in scope and tends to be the term used by clinicians in a medical setting.

Secondary prevention is practiced with an asymptomatic individual in whom actual (rather than potential) risk factors have been identified even though the underlying disease is not yet clinically apparent. A medical screening, as an example of secondary prevention, is cost-effective only when there is hope of lessening the severity or shortening the duration of a pathological process. Blood pressure screenings, cholesterol screenings, and bone densitometry are the most widely implemented forms of secondary prevention.

Tertiary prevention, which takes place after the individual with a disease or disability becomes symptomatic, focuses on the rehabilitation or maintenance of function. Health professionals attempt to restore or maintain the maximum level of functioning possible, within the constraints of a medical problem, to prevent further disability and dependency on others.

Tertiary prevention corresponds to phase 2 (rehabilitation of outpatients) and phase 3 (long-term maintenance) of the rehabilitation of a cardiac patient (phase 1 is the care of a hospitalized cardiac patient). Randomized clinical trials with patients who had myocardial infarctions revealed that programs of tertiary prevention reduced the likelihood of cardiovascular mortality by 25%.

A focus on prevention may be more appealing to some older adults than an emphasis on health promotion. Older adults are likely to be coping with chronic conditions, and the prevention, delay, or reduction of disability and dependency is a much more salient issue for them than it is for most younger adults.

**FIGURE 1.10** Three levels of prevention.
Moreover, among medical professionals the relevancy of the term prevention is enhanced, because the costs of several prevention activities, such as mammograms, are reimbursable through Medicare. Prevention has gotten its foot in the door, so to speak, in the system of health care reimbursement, whereas the activities of health promotion have lagged considerably behind.

One advantage of the use of the term health promotion, however, is that it encompasses mental and spiritual health concerns. In contrast to clients and health professionals fixated on risk factors and the prevention of disease or disability, health promotion or wellness can be viewed as an affirming, even joyful, process. As health professionals who promote health, for instance, we can encourage playing with grandchildren or the joy of bird watching to an older client and not concern ourselves with its ability to prevent disease or illness.

Health promotion is also a more proactive approach than primary prevention, which tends to imply a reaction to the prospect of disease. Directing a client’s anger or frustration into political advocacy work, for example, is a proactive, health-promoting enterprise that benefits both the individual and society.

Wellness

Although the term wellness has had many supporters in the health professions over the years (Jonas, 2000), particularly among persons who conduct health programs at large U.S. corporations (Jacob, 2002), it tends to be embraced less than the terms health promotion and disease prevention. Nonetheless, wellness conveys an important message—that good health is more than physical well-being. In fact, seven dimensions are usually touted among wellness advocates, as shown in Table 1.4.

Wellness sends a welcome and important reminder about the breadth of health promotion that is not conveyed by most other terms. The only limitation to the term wellness is that it tends to be identified with “alternative” activities—acupuncture, homeopathy, spiritual healing, aromatherapy—to the exclusion of more mainstream activities such as exercise and nutrition. Thus, it suggests fringe pursuits or even flakiness to some.

Anti-old and Anti-aging

Who is healthier, an old person or an older adult? Is this a preposterous question? Maybe not. Do the terms old and older reflect our prejudices? One of the leaders in the field of gerontological language, Erdman Palmore, thought so. Palmore suggested that

<table>
<thead>
<tr>
<th>TABLE 1.4 Seven Dimensions of Wellness</th>
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<tr>
<td>Physical—Exercise, eat a well-balanced diet, get enough sleep, protect yourself.</td>
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<tr>
<td>Emotional—Express a wide range of feelings, acknowledge stress, channel positive energy.</td>
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<tr>
<td>Intellectual—Embrace lifelong learning, discover new skills and interests.</td>
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<tr>
<td>Vocational—Do something you love, balance work with leisure time.</td>
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<tr>
<td>Social—Laugh often, spend time with friends/family, join a club, respect cultural differences.</td>
</tr>
<tr>
<td>Environmental—Recycle daily, use energy-efficient products, walk or bike, grow a garden.</td>
</tr>
<tr>
<td>Spiritual—Seek meaning and purpose, take time to reflect, connect with the universe.</td>
</tr>
</tbody>
</table>
most of the synonyms for old are unhealthy in some way—words like debilitated, infirm, and frail. Older adult, on the other hand, is a more neutral term; and perhaps the term elder connotes an even healthier role for older persons in society (Palmore, 2000).

And yet I am reminded of an anecdote about Maggie Kuhn, the founder of the advocacy organization the Gray Panthers. She reported on an exchange that she had with President Gerald Ford at a hearing on a pension bill in Washington, DC. Once she had gotten President Ford’s attention, he asked, “And what do you have to say, young lady?” Maggie replied, “First of all, I’m not a young lady. I’m an old woman.” She was making the statement that she was proud of being old, and that she had earned that label.

A related concern is the antiaging movement and its chief proponent, the American Academy of Anti-Aging Medicine. This professional society is “pursuing the fountain of youth with their lucrative nostrums and illusory interventions, [while] we geriatricians remain solidly in the trenches caring for our patients, the most aged, complex, frail, and vulnerable—far removed from the fantasies of eternal life, much less the fountain of youth” (Hazzard, 2005, p. 1435).

Most proponents of the antiaging movement are focused not on the most aged, but on the middle-aged and the young-old, those most concerned with combating the signs of aging. One key weapon in their arsenal is the cosmeceutical, a combination of the terms cosmetic and pharmaceutical that refers to a topical skin treatment formulated to eliminate the wrinkles and other signs of aging. If the cosmeceutical intervention proves insufficient, there are Botox injections, microdermabrasion, chemical peels, collagen injections, and plastic surgeries. Antiagers deliver a clear message that aging is a disease that needs to be cured—at least cosmetically and temporarily.

Another segment of the antiaging movement believe in the power of human growth hormone (HGH). A review of 31 randomized, controlled studies, however, concluded that the risks outweigh any potential antiaging benefits of HGH when taken by healthy older adults (Liu et al., 2007). Side effects may include diabetes, hypertension, hardening of the arteries, and abnormal growth of bones or internal organs. Nonetheless, government officials estimate that 25,000 to 30,000 American take injections of HGH for antiaging purposes, paying up to $1,000 a month. Although it is illegal to prescribe HGH for healthy people in the United States, speakers at the annual conference of the American Academy of Anti-Aging Medicine have told physicians in the audience how they can diagnose a mild hormone deficiency so that they can legally prescribe HGH (Wilson, 2007).

I think, however, that we need a proaging movement, one that emphasizes the healthy aspects of aging and the benefits that accrue with age. No longer needing to impress employers, in-laws, or peers, older adults are free to be themselves. The old have the opportunity to be not only freer, but also wiser, more conscious of the present, and more willing to be advocates for a healthy future. Maggie Kuhn certainly practiced a proaging lifestyle.

I am not the first to use the term proaging. Over the last few years advertisements for Dove beauty products have consistently asked the question “Are you antiage or proage?” Unfortunately, Dove’s proage movement consisted entirely of selling moisturizers and other skin products. This is not what I have in mind when I talk about promoting a healthy attitude toward aging. (Not that I have anything against reasonably priced moisturizers.)

**Compression of Morbidity**

By definition, chronic diseases are not curable. The onset of chronic disease, however, may be postponed through the modification of risk factors. As the onset is delayed to later ages approaching the limit of the human life span, the result is a compression of
morbidity. The goal is to live in robust health to a point as close as one can come to the end of the life span, so that one can die after only a brief period of illness. In short, spend a longer time living and a shorter time dying.

For most people, though, the prospect of living long past one’s 65th birthday is a mixed blessing. With Americans living longer today than ever before, we have come to dread a prolonged period of disability and dependency in late life.

One definition of healthy aging, then, is to be able to live life fully until death. Unfortunately, very few Americans who die at age 65 or later are fully functional in the last year of life. Moreover, the longer one has lived, the longer the period of disability before death. At age 65 the average American has about 17 years left to live, with 6.5 (38%) of those years spent in a dependent state. In contrast, at age 85 we have an average of 7 years left to live, with 4.4 (63%) of those years spent in a dependent state.

Pessimists argue that the period of morbidity preceding death will lengthen in the future as a result of (a) limited biomedical research funds available to improve the physical and mental capacity of the very old; (b) the fact that some major diseases, such as Alzheimer’s, do not have recognized lifestyle risk factors that we can modify; and (c) medical advances, such as dialysis and bypass surgery, that will increase the life expectancy of individuals with disease rather than prevent the occurrence of disease.

Optimists, on the other hand, claim that there will be a compression of morbidity (see Figure 1.11) in the future due to (a) the likelihood of advances in biomedical research that will prevent or delay the occurrence of disease and (b) the continued potential for reducing risk factors such as smoking, high blood pressure, poor nutritional habits, and sedentary lifestyles, which will result in better health.

Even as the general population further delays the onset of chronic disease due to these risk factors, the life span (the maximum number of years for a member of the species) is likely fixed. Thus, argue the compressionists, we will not only delay morbidity, but we will also shorten it.

Studies by Manton and colleagues (Connolly, 2001; Manton, Gu, & Lamb, 2006; Manton, Stallard, & Corder, 1998) analyzed data from the 1982 to 2004–2005 results of the National Long Term Care Survey, a federal study that regularly surveys almost 20,000 people age 65 and older. The researchers arrived at the unexpected conclusion that the percentage of chronically disabled older persons—those having impairments for 3 months or longer that impede daily activities—has been slowly falling. Whereas 26%
of people over age 65 reported chronic disability in 1982, only 20% reported this to be the case in 1994 and 19% did so in 2004–2005. Also, the percentage of persons over age 65 reporting no disabilities continued to rise.

Another study did not support evidence of a compression of morbidity. Over the past decade, length of life with disease and deteriorating function of mobility increased (Crimmins & Beltran-Sanchez, 2010). Although mortality rates declined, the prevalence of living with disease had increased.

Will we be able to compress morbidity? Unfortunately, we do not even know which factors most affect the compression of morbidity: Initiatives in health promotion, such as better diet, more exercise, and smoking cessation? Improved medical access and advances such as treatment for arthritis and cataracts? Increased use of devices such as canes, walkers, walk-in showers, support rails, and handicapped-accessible facilities? Socioeconomic improvements such as increased education and income levels? Improvement in any of all of these areas would be greatly welcomed by an aging population.

### HEALTH PERSPECTIVES AND AGING

**Health Expectancy Versus Life Expectancy**

Those who live to the age of 65 are likely to live into their 80s or beyond. Of the remaining years, on average, of life after age 65, two thirds are likely to be healthy and one third will be years in which there is some functional impairment. Place yourself in the shoes of the person who has just reached age 65. Are you primarily interested in extending your life beyond the expected years you are likely to remain alive, or are you most interested in how many of these remaining years will find you healthy and independent?

Your *health expectancy*, or the number of healthy years you can expect to have left, depends to a great extent on your level of physical activity, nutritional intake, social support network, access to good medical care, health education, and utilization of health services. Health expectancy is more important to older adults than life expectancy. Unfortunately, we have not made adequate progress on this front. The goal of Healthy People 2000, for example, was to increase the number of years of healthy life remaining after age 65 to 14. It increased only to 12.2 years, an advance of only 0.4 of a year.

**Physical Versus Emotional Aspects of Aging**

There is a strong reciprocal relationship between the physical and emotional aspects of health. When our physical health is threatened, so typically is our emotional health. The converse is equally true.

As we age, however, it may be the case that good health becomes less dependent on our physical status than on our emotional status. Studies report shifting perspectives of health over time, with older participants expecting physical health problems because of their age and discounting them somewhat, when they do appear, because of this expectation.

A study of 85-year-olds living in the Netherlands reported that physical function was not the most important component of successful aging. These older adults were able to adapt successfully to physical limitations. The researchers reported social contacts as the most important factor in well-being, and the quality of the contacts was more important than their number (Von Faber et al., 2001). Open-ended interviews reveal more than 100 characteristics of health that are important to older adults besides physical health,
including the ability to enjoy life and good personal relationships. Many older adults who are frail and sometimes disabled do not evaluate their health or life negatively.

Most health professionals subscribe to the notion that health is more than the absence of illness. Were this not the case, they would have to label the vast majority of older adults, 90% of whom are coping with a chronic condition, unhealthy. The chronic diseases that older persons contend with do not necessarily relate to their ability to perform daily activities. Disease, in fact, may not be evident even to the person who has it.

The presence or absence of disease, therefore, may not be a source of great concern to older adults. The ability to perform ADL, however, is of great concern to older adults, who desire as much independence as possible. The definition of health, especially among older adults, should not be linked with disease or its absence, as the medical model suggests, but with independence, the ability to accomplish one’s goals, and the presence of satisfying relationships.

A health perspective that emphasizes the psychological status of older adults does not view health as a physical continuum ranging from disability and illness at one end, to a high level of robustness at the other. Critics of this type of health continuum argue that even a person who is functionally impaired or disabled, and thus residing at one end of the physical continuum, can focus considerable attention on a high level of wellness and psychological growth.

Finally, health professionals need to walk a fine line with older clients. On the one hand, they have been accused of ignoring the medical needs of older adults by discounting the viability of certain medical interventions due to advanced patient age. In fact, patients in their 80s can benefit as much from surgical interventions as can younger patients (Varghese & Norman, 2004). On the other hand, health professionals can unduly focus on the (reimbursable) medical needs of very old clients and neglect the personal values that inform the quality of life of the older adult and how they might shape a decision to risk surgery and its aftereffects.

**Intergenerational Conflict Over Health Care?**

Creating a name for a generation and then generalizing about it is fraught with complexity, and some analysts shy away from it—but many do not. I personally think it is a type of intellectual fun that analysts find hard to resist. Moreover, there is an interesting argument to be made that there will be generational conflict over health care expenditures in the future. But first, there are three generations to define.

The baby boomers refer to those born between 1946 and 1964. Many argue that people born up to two decades apart are too diverse for one label (Pruchno, 2012). In fact, some differentiate between leading-edge boomers (1946–1955) and trailing-edge boomers (1956–1964). Leading-edge boomers are 76% Caucasian, 9% never married, 38% without postsecondary education, and 29% who served in the military. Trailing-edge boomers, in contrast, are 68% Caucasian, 14% never married, 44% without postsecondary education, and 13% who served in the military (the draft ended after all the leading-edge boomers had turned age 18). Smartphone ownership of leading-edge boomers is two thirds that of trailing-edge boomers.

The boomers are differentiated from generation X born between 1965 and 1981 and generation Y, also referred to as the millennials, born between 1982 and 2000. Some argue that these two generations not only differ from each other but are too diverse within each generation for one label. Within each of these generations are there shared values about hard work, trust, respect for authority, teamwork, competition, privacy, independence, optimism, and so forth, as some analysts claim without much data?
In one area, though, I can see the potential for intergenerational conflict, and that is over health care. Let’s face it, the boomers use a lot more of it (see Medicare in the next section) than generation X and the millennials. There is insufficient national wealth for all Americans to get all the medical care they desire. One can see the boomers wanting to preserve the benefits of Medicare that the current cohort of older adults gets, and to even quest for improvements in the current (and miserable) state of long-term care insurance—both of which will be costly to all taxpayers.

The younger generations, conversely, may resent the expensive cost of Medicare and other resources that older adults disproportionately use; versus education and the other needs disproportionately affecting younger adults. Young millennials, though, may have complex feelings about their boomer parents. They may resent the debt and high unemployment rate facing them, but those between ages 20 and 25 who are living with their parents increased to 43% in 2009. This could add to their resentment or mitigate it, as this is a voluntary generosity on the part of the boomer parents.

Intergenerational conflict over jobs may be less likely than health care. According to one study (Munnell & Wu, 2012), there is no evidence that increasing the employment of older persons reduces the job opportunities or wage rates of younger persons.

LEGISLATION

We will revisit the following pieces of legislation—Medicare, Medicaid, and Social Security, plus the Affordable Care Act, when we examine the future of these landmark legislative acts in Chapter 12, “Public Health Policy.” Below, however, are overviews of these legislative acts because the reader needs to know what they are if she or he is to understand health and aging in America. Many people do not even understand the difference between Medicare and Medicaid, so we begin there.

Medicare

Medicare was enacted in 1965 to help persons age 65 or older pay for medical care. In 2010 Medicare covered almost 40 million older adults and 8 million younger persons with disabilities. Medicare is a major player in the U.S. health care system, spending $523 billion in 2010. Ironically, despite the generous reimbursements they receive through the Medicare program ($11,000 per beneficiary in 2008), older Americans spend more money out-of-pocket now (almost $5,000 per beneficiary in 2008), after controlling for inflation, than they did prior to the inauguration of Medicare. Medical care has become increasingly desired and expensive.

Medicare Part A is referred to as hospital insurance, and most people do not have to pay a monthly premium for this insurance because they are eligible through the taxes they paid while working. Part A includes hospital care ($1,156 deductible in 2012), inpatient psychiatric care (190-day lifetime maximum), skilled nursing facility care (100 days), rehabilitation or home care following a hospitalization, and hospice care for the terminally ill. There are restrictions on what kinds of conditions are covered and the length of coverage. Copayments apply as well.

Medicare Part B is referred to as medical insurance and covers physician services, outpatient hospital care, and other medical services such as physical and occupational therapy and some home health care. Part B requires a premium of $99.90 per month in 2012 and generally pays 80% of physician and outpatient services after an annual $140 deductible. Part B includes most medical screenings and clinical laboratory tests but does not cover dental services, hearing aids, eyeglasses, and most long-term care services. Chronic conditions are, for the most part, not covered by
Medicare, and prevention coverage is limited primarily to medical screenings and immunizations.

Beginning in 2007 Medicare shifted, for the first time, to \textit{means-based testing} for Part B premiums. In 2012, only individuals earning less than $85,000 a year ($170,000 for married couples) paid the $99.90 premium; individuals who exceeded this income level had their premiums increased, based on how much additional income they earned. Use of this type of \textit{income indexing} will continue to increase in the coming years, and some project that beneficiaries with high incomes may pay at least three times the basic premium amount.

\textit{Part C} refers to private health insurance plans that provide Medicare benefits. At the time of this writing, the Affordable Care Act would soon be eliminating the additional subsidy, at taxpayers’ expense, granted to private insurers during the Bush Administration, when this subsidy was unavailable for those opting for the traditional Medicare option (see Chapter 12, “Public Health Policy”).

\textit{Part D} refers to the Medicare Prescription Drug plan, which went into effect on January 1, 2006. This part is also administered by private health insurance companies (and will also be examined in Chapter 12).

A little over one fourth of the federal outlay for older adults is for Medicare, and these expenditures have been rising (and continue to rise) rapidly. Between 1960 (5 years before the onset of Medicare) and 1990, the proportion of the federal budget spent on programs serving older adults had doubled, from 15% to 30%. Much of this increase occurred between 1975 and 1988, when personal health care expenditures under Medicare increased an average 14.4% per year, more than twice the rate of inflation! Stated in absolute dollars, Medicare spending increased from $7.5 billion in 1970 to $114 billion in 1991, and although the rate of increase has slowed since then, annual increases have been relentless.

In 2012, the nonpartisan Congressional Budget Office (CBO) reported that even under its most conservative projections, health care spending would rise by 8% a year from 2012 to 2022, mainly as a result of an aging U.S. population and rising treatment costs. Medicare, according to the CBO, will account for about half of this projected growth. Moreover, government spending for Medicare and Medicaid will more than double over the next decade to $1.8 trillion, or 7.3% of the country’s total economic output.

It is not surprising, therefore, that even though the single largest component of out-of-pocket costs for older adults is much needed long-term care, the federal government has resisted overtures to include substantial long-term care coverage under Medicare. (The CLASS act, as proposed under the Affordable Care Act, was quickly dropped as a federally coordinated long-term care program because it was not financially feasible as designed.) Even without the additional expense of long-term care, Medicare will be unable to meet its financial obligations by 2017 unless substantial cost containment is implemented (more on this in Chapter 12).

An interesting line of research has shown that Medicare spending across the country varies greatly, but health outcomes tend to be the same no matter how much money is spent in a particular region. Some argue, therefore, that Medicare costs could be reduced significantly if the entire nation could bring its costs down to match the lower-spending regions. Landrum and colleagues (2008) agree with this premise, with one caveat. Although increased area-level spending does not correlate with improved patient outcomes overall, in certain cases increased spending is beneficial. The problem is that high-spending areas also spent too much money on health care problems where little or no benefit results. The authors concluded that Medicare could save money not by capping costs, but by applying \textit{comparative effectiveness studies}, that is, determining which treatments work best for which patients, and whether the benefits are commensurate with the costs.
The Centers for Medicare and Medicaid Services oversees all financial and regulatory aspects of the Medicare and Medicaid systems. For additional information, call 800-MEDICARE (800-6334227) or go to the Medicare website at www.medicare.gov.

**Medicaid**

Medicaid is different from Medicare in that it is not focused primarily on older adults; it is a state-run, not a federally managed, program; and it is funded jointly by the states and the federal government, not by the federal government alone. The most significant difference is that Medicaid is the largest source of funding for medical and health-related services for people with limited income—what used to be referred to as a welfare program—as opposed to Medicare, which is partially financed by users through payroll taxes.

Because it is state run, Medicaid policies for eligibility, services, and payment vary considerably (and thanks to the Supreme Court decision on June 28, 2012, which allows states to opt out of the Medicaid component of the Affordable Care Act, the variation will be even more extreme). One aspect of Medicaid that has not varied much across states is that costs have increased steadily throughout the years, and now constitute, on average, a quarter of each state’s budget. Medicaid spending totaled $399 billion in 2011 and was projected to increase rapidly in the coming years if the economy continues to struggle.

On a gerontological note, one third of Medicaid’s budget, about $130 billion, goes to fund long-term care for the frail elderly and the disabled, most of it to nursing homes. It pays for nearly 60% of nursing home care, and an increasing amount of home- and community-based, long-term care. Medicaid is based on the premise that individuals pay out of pocket until they become impoverished and eligible for coverage. Moreover, an older person cannot shelter money by giving it away to a relative within a 5-year period of qualifying for Medicaid-subsidized long-term care.

Medicaid, unlike Medicare, has no influential constituency advocating on its behalf. It is recognized by the general public as a program for low-income people and many do not feel generous with their tax dollars for supporting it. With federal deficits looming as far as the eye can see, and with Medicaid the largest cost item in most states’ budgets, the pressure to reduce Medicaid expenditures is and will continue to be enormous. This is likely to have a strong and negative impact on the quality of long-term care for older adults and disabled persons.

**Social Security**

Few would argue that inadequate income is irrelevant to health. It is important, therefore, in a book focused on health and aging to examine Social Security. Social Security is a federal program designed to protect individuals and their families from loss of earnings due to retirement, disability, or death (when signed into law in 1935, it covered only retired workers). It was believed by historians that President Franklin Roosevelt was interested not only in the economic security of older adults, but in reducing the politically sensitive high unemployment rate at the time.

Social Security is a progressive benefit, replacing a higher proportion of preretirement earnings of low lifetime earners than higher lifetime earners. Additional protection was provided in 1975 when the Social Security benefit was adjusted to reflect increases in prices (the Cost of Living Adjustment or COLA).
It is an entitlement in that to receive retirement benefits, a person must contribute through payroll tax contributions for about 10 years. Workers and employers are both responsible for paying half of the payroll tax—6.2% each, with the self-employed paying the full 12.4%, up to a taxable maximum of $110,100 of earnings.

In 2012, about 56 million Americans—retired workers (64%); spouses, children, and survivors (20%); and the disabled (16%)—received Social Security benefits, including about 90% of those age 65 and older. The average monthly benefit for retired workers in 2012 was $1,231, and for disabled workers was $1,111.

In 2009, Social Security helped more than 14 million Americans aged 65 and older stay above the poverty line. Without access to Social Security, 58% of women and 48% of men above the age of 75 would be living below the poverty line. Even with Social Security being a program initially designed to be a partial replacement of lost income, it has become almost the entire income of many retired persons. In 2011, although it replaced 42% of past annual earnings for an average worker, more than a third of older men and half of older women relied on their Social Security check for 80% or more of their income.

Another problem is a societal one: meeting the financial obligation. In 1935 only 6% of the population was age 65 or over; present day that percentage has increased to 13%. Reflecting this increase in older adults, there were approximately 4 workers per beneficiary in the 1960s, 2.9 workers in 2012, and a projected 2.1 workers in 2036. The widening gap between those paying into Social Security and those receiving Social Security means that full benefits will be reduced in 2033 to about 75% of scheduled payments, but only if changes are not made.

**QUALITY CARE, HEALTH CARE, MEDICAL CARE**

In a democratic society there is stiff competition for societal resources that are taxpayer subsidized. Health care, however (typically referring primarily to medical care), has consistently maintained its status in this country as a very high priority for these limited resources. Moreover, the growth in national expenditures for health care has been nothing short of phenomenal. Spending for national health care grew from 5.2% of the gross domestic product (GDP) in 1960 to an astonishing 17.6% in 2009. This represents an increase from $27 billion in 1960 to $2.5 trillion in 2009 (see Figure 1.12).

The United States spent almost 18% of its GDP on health care in 2009, whereas other developed countries spent between 6% and 11%. Much of this discrepancy in health care costs compared to other countries began in 1980 with the rise of private health care insurers in the United States (and their profit-making motivation) and the greater use of sophisticated medical technology in this country. In the past three decades health expenditures doubled in other countries, but more than tripled here. This disparity would be even greater if we did not have almost 50 million younger Americans lacking health insurance coverage in 2012. (This will change when the Affordable Care Act takes effect in 2014, a topic we will examine in Chapter 12, “Public Health Policy.”)

Although we spend more on health care than any other country, this does not necessarily mean we have the best health care. “Best” can be defined in a number of ways—for example, as access to medical care by the greatest number of citizens, or as a system that prioritizes disease prevention and health promotion, or, as in contemporary America, a system that prioritizes costly specialized medical procedures. Many of us are hoping that the Affordable Care Act makes large inroads in the first two areas, along with judicious use of the third area, without jeopardizing quality care.

Until then, though, the World Health Organization (WHO) and others have measured quality of health care and by most any measure we do not do well. WHO ranked
the United States 37th in the quality of health care. We are 50th in life expectancy. We just do not get enough “bang for our buck.” Regarding number of healthy years we have to live—a more important measure of quality of life in my opinion than mere life expectancy—we spend more than double in health care expenditures per capita than Japan, but have almost 5 fewer healthy years to live than they do.

Another international study of health care quality was conducted in 2006, and the United States ranked last compared with Australia, Canada, Germany, New Zealand, and the United Kingdom. The per capita health expenditures of these five countries ranged from 33% to 53% of the United States, yet among 51 indicators—including such health promotion measures as use of mammograms, flu shots, medication reviews, and diet and exercise advice—the United States ranked last or tied for last on 27 (Monaghan, 2006).

One international study compared the United States, Australia, Canada, France, Germany, the Netherlands, New Zealand, and Britain, and suggested that the supremacy of American health care may be limited to a handful of preeminent medical centers. Although the United States does well in such important aspects of health care as providing prompt access to some of the best specialists in the world, 43% of insured (!) Americans skipped care at some point during the year because they could not afford the high out-of-pocket costs (Schoen, Osborn, How, Doty, & Peugh, 2009).

**Health Care Versus Medical Care**

It is estimated that 60% of early deaths in the United States are due to behavioral, social, and environmental circumstances, versus 10% that result from shortfalls in medical care (with genetic predisposition responsible for the remainder) (McGinnis, Williams-Russo, & Knickman, 2002). Paradoxically, however, the behavioral, social, and environmental
components of health care have not constituted a high priority for the health care dollar. In fact, only about 3% of the nation’s health care expenditures are targeted toward health-promoting and disease-preventing activities.

Most of that 3% goes either to the physician’s office or to other clinical settings for preventive measures, such as medical screenings and vaccinations (about a third), or toward health protection in the physical environment, such as toxic agent and radiation control (also about a third). And only a portion of the remainder is spent on changing unhealthy behaviors.

Although there has been undeniable financial stinginess at the federal level in addressing unhealthy lifestyles among the American people, public attention has at least been engaged by this problem behavior ever since the publication of the landmark document Healthy People: The Surgeon General’s Report on Health Promotion and Disease Prevention (USD-HHS, 1979). This report provided considerable credence to the idea that any major gains in health and independence in the future will likely come from personal lifestyle changes.

Dr. John Rowe, director of the MacArthur Foundation’s Consortium on Successful Aging, supported this report’s message by concluding that our vigor and health in old age are mostly a matter of managing how we live. A classic article in the Journal of the American Medical Association (McGinnis & Foege, 1993) suggested that we no longer should view death as being due to heart disease, cancer, stroke, and chronic obstructive pulmonary disease; rather, we should see it as the result of tobacco use, inactivity, poor diet, alcohol abuse, microbial and toxic agents, risky sexual behavior, motor vehicle injuries, and illicit or inappropriate use of drugs.

Even if we continue to devote most of our money to medical care, we need to focus more of our attention on health care.