PART I

INTRODUCTION
INTRODUCTION TO THE U.S. HEALTH SERVICES SYSTEM

Introduction

A country’s health services system—the combination of resources, organization, financing, and management that culminates in the delivery of health services to a population—is an important, though not the sole, determinant of a population’s health status (Roemer 1991). A health services system is shaped by the country’s economic, political, and cultural values. In addition to affecting the health of its population, a country’s health services system may also be an important sector of the economy in terms of employment, research and development, and exports, such as drugs, devices, and other medical technologies.

Milton I. Roemer, whose extensive contributions to our understanding of these systems have brought him international renown, has identified several classes of health services systems, based on each country’s economic and political system (see Table 1.1).

The health services system in the United States is a market-based system in an affluent, industrialized economy, which nevertheless lacks universal access. In this book, the discussion of the U.S. system is structured around how health services are organized and managed, how resources such as the health workforce and technology are developed and deployed, what types of economic support drive the system, and how services are delivered. Limited historical information is provided to illuminate discussions of the system’s evolution; the principal emphases, however, are on the current system, the range of proposals for changing parts or all of the current system, and the implications of these potential reforms.

This third edition updates all health services expenditure and utilization information; expands the discussion of the public health sector, adding a discussion on health disparities in Chapter 3; provides additional information on the current status of and proposed changes to Medicare and Medicaid; looks at the changing role of the hospital; augments the discussion on the growing interest in complementary and alternative medicine; and examines the continuing evolution of managed care and managed care organizations.

Despite the failure to enact systemic reform such as that proposed in the 1993 Health Security Act, incremental reforms—particularly in the
TABLE 1.1
Types of National Health Systems, Classified by Economic Level and Health Systems Politics

<table>
<thead>
<tr>
<th>Economic Level (GNP per Capita)</th>
<th>Entrepreneurial and Permissive</th>
<th>Welfare-Oriented</th>
<th>Universal and Comprehensive</th>
<th>Socialist and Centrally Planned</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Affluent and Industrialized</strong></td>
<td>United States</td>
<td>West Germany*</td>
<td>Great Britain</td>
<td>Soviet Union*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada Japan</td>
<td>New Zealand Norway</td>
<td>Czech Republic</td>
</tr>
<tr>
<td><strong>Developing and Transitional</strong></td>
<td>Thailand</td>
<td>Brazil Egypt</td>
<td>Israel Nicaragua</td>
<td>Cuba</td>
</tr>
<tr>
<td></td>
<td>Philippines</td>
<td>Malaysia</td>
<td>Nicaragua</td>
<td>North Korea</td>
</tr>
<tr>
<td></td>
<td>South Africa</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Very Poor</strong></td>
<td>Ghana</td>
<td>India Myanmar</td>
<td>Sri Lanka Tanzania</td>
<td>China Vietnam</td>
</tr>
<tr>
<td></td>
<td>Bangladesh Nepal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Resource Rich</strong></td>
<td>Libya</td>
<td></td>
<td>Kuwait Saudi Arabia</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gabon</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SOURCE: Adapted from Roemer 1985.

*NOTE: Changes since 1991 in political systems in Germany and the Soviet Union and perhaps other countries may affect their classification.

way health services are financed and delivered—are rapidly changing the face of the U.S. health services system. A renewed focus on managing the system—including the provider’s ordering and delivery of services, patients’ utilization of services, and the associated expenses to all parties—is precipitating significant and constant change. Capturing this moving target presents a major challenge. This chapter provides a model developed by Dr. Roemer for analyzing the current system, from which future changes can be assessed. Three dominant values of care in the U.S. system—access to, costs of and expenditures for, and quality—are examined.

**Overview of the U.S. Health Services System**

The U.S. health services system is a study in contradictions. Per capita expenditures for health services ($6,280 in 2004) are the highest of any health services system in the world, and yet as much as 20 percent of the U.S. population may not have financial access to health services during a year, or for the entire year. Approximately 20 percent of the population accounts for 80 percent of all health expenditures (described by some as the “20:80 rule”) in the U.S. system. Although we are accustomed to referring to our health services system, which suggests the universal availability of a con-
Continuum of care from health promotion to palliative care (Figure 1.1), the majority of services rendered focus on the treatment of illness and disease. For this reason, some refer to our “disease treatment system” or “illness system,” rather than to our health services system.

Part I of this book focuses on the nature of the U.S. health services system, addressing such questions as:

- What factors influence health status?
- What factors influence the seeking of care?
- What are the effects of health services utilization on health status?
- Who has access to health services?
- Is access to health services a right?

**The Roemer Model of a Health Services System**

The U.S. health services system can be analyzed from many perspectives. For example, an historical approach would examine the emergence of the health services system as the economic and political systems of the country evolved. Another approach would analyze the development of the continuum of health services. A third would consider the roles of various system participants—the patient or care seeker, the provider, the insurer or third-party payer, the public or government unit that manages the system, and the employer that provides health insurance—in shaping the system.

This book uses a systems model developed by Dr. Roemer (1984) to discuss the organization of programs and their management, the production of resources that support the system, the sources of economic support, and how services are delivered. The system is driven by health needs or problems to produce health results or outcomes. The model provides not only
FIGURE 1.2
National Health System: Components, Functions, and Their Interdependence

a systematic way of examining any one system, but also a method for comparing health services systems across the more than 149 developed countries in the world. Figure 1.2 displays Dr. Roemer’s five-part model of a health services system. Dr. Roemer defines a health service as an activity whose primary objective is health—its maintenance, its improvement, or, if it is failing, its recovery. Because of the complexity of the U.S. system, our application of the model begins with the central component: the organization of programs.

Organization of Health Services
The U.S. health services system is an ever-shifting mixture of public or government sector, private sector, and voluntary or charitable services. The government’s role in health, once limited primarily to protecting the public from epidemics of infectious diseases, has expanded to that of:

1. a major payer for care through large public-sector programs such as Medicare and Medicaid;
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2. a major provider of health services to special populations such as the military and their dependents, veterans of military services, and indigenous populations; and

3. a major supporter of the education and training of many types of care providers.

The delivery of health services occurs primarily in the private sector, but the once-clear delineation of public and private sectors is becoming increasingly blurred. The voluntary sector is small but provides many services that may not be fully realized through either the public or the private sectors, including a focus on the prevention or cure of specific diseases, such as heart disease and cancer, and the championing of the care needs of special populations, such as children, people with mental illnesses, or persons living with AIDS. Part II of this book addresses the organization of U.S. health services.

Management of a Health Services System

Management of the U.S. health services system, which includes planning, administration, legislation, and regulation, is addressed in Part III of this book. Although these functions occur in both the public and private sectors, the focus in Part III is on management in the public sector. Private-sector management issues are integrated into the discussion of the delivery system in which the private sector dominates. The public health system also receives special attention in Part III.

Economic Support of Health Services

Economic support for the U.S. health services system is addressed in Part IV. Three types of health services organizations—those in the public, the private, and the voluntary sectors—influence the ways in which health services are financed in the United States. How the health services system is financed dictates which populations receive care and the kinds of care they receive. From this, it is possible to deduce the populations likely to receive little or no care, because the U.S. system lacks universal coverage. The primary financing mechanisms—private and public health insurance—are examined for their effects on access to, costs of, and expenditures for care.

Production of Health Services Resources

In addition to financial support, the provision of health services requires resources, such as a trained workforce, the availability of appropriate levels of facilities in which services can be provided, biomedical research to balance the art and the science of care, and medical technology, including drugs, devices, and advances in medical and surgical procedures. Part V discusses the development and deployment of health resources in the U.S. system.
Part I: Introduction

Delivery of Health Services

Four components of the Roemer model—organization, management, economic support, and resource production—all contribute to how health services are delivered, which is the focus of Part VI. The effects of managed care, broadly defined as care provided in a system that integrates the financing and delivery of health services, are emphasized in that section as well.

System Values: Access, Cost and Expenditures, and Quality

Health services analysts frequently assess access to, costs of and expenditures for, and quality of care. These values of the U.S. health services system have been recognized in legislation such as the National Health Planning and Resources Development Act of 1974 (PL 93-641) and the enabling legislation for the Agency for Healthcare Research and Quality (AHRQ, formerly the Agency for Health Care Policy and Research) and serve as the foundation for health services research. Access to health services has many dimensions, including geographic, physical, cultural, temporal, and economic. In a country that values social justice but provides neither uniform nor universal health services coverage, access is a particularly important consideration. Chapter 3 focuses on issues of access to care and their relationship to expenditures for care.

The cost of care—driven by inflation, the increased volume of services due to population demographics, health insurance coverage, and the increased intensity of services—has resulted in expenditures that in 2004 absorbed 16 percent of the gross domestic product (GDP). U.S. government expenditures for health are surpassed only by expenditures for Social Security; they significantly exceed expenditures for education, transportation, agriculture, and other government services (with the exception of defense, for the first time in several decades). Private expenditures for health services have shown commensurate growth, stimulating ongoing proposals for changing the ways in which health services are financed and delivered. The effects of costs of and expenditures for health services are examined in depth in Part IV and are discussed elsewhere in this book.

As we learn more about the outcomes of health services, quality of care becomes an increasingly important consideration. The examination of quality explores such questions as:

- How effective is an intervention?
- How appropriate is a particular intervention and under what conditions?
- Do the benefits of an intervention exceed its costs?

Chapter 19 is devoted to quality-of-care issues.
Access to, costs of and expenditures for, and quality of care are often inextricably linked. Increasing access to care, as occurred through the passage of Medicare and Medicaid legislation in 1965, inexorably leads to increases in utilization, and thus to increases in the costs of and expenditures—both public and private—for care. Unprecedented expenditure increases prompt decision makers to look for ways to reduce them, such as instituting controls on utilization and constraining provider payments. Increases and decreases in utilization bring quality of care into focus. Too many or too few services can compromise the quality of care, and poor quality of care can ultimately result in higher expenditures to correct the problem. Achieving a satisfactory balance among these values remains a major challenge as the U.S. health services system continues to change.

Organization of the Book

Dr. Roemer’s model of a health services system serves as the organizing principle for this book. Part I focuses on the needs or problems that drive the system, including access to care. How the U.S. health services system is organized and the roles of its public and private sectors constitute Part II. Part III addresses the management of the system, including its planning, administrative, legislative, and regulatory functions. How the system is financially supported and the significance of health insurance as the principal financing mechanism are discussed in Part IV. Part V examines the production of resources essential to the successful operation of a system, including the workforce, health facilities, knowledge, and biotechnology. How these various model components result in the delivery of care is the focus of Part VI. The results or outputs of this model are many and varied; Part VII addresses one way in which we measure results—by examining the quality of care that is delivered. Finally, Part VIII broadly summarizes the current and anticipated changes in the U.S. health services system.

Data on U.S. Health Services

The complexity of the U.S. health services system is exemplified in the data that describe it. No central source for health services data exists. Lags between data collection and reporting affect the currency of the data. Data on various components of the system (e.g., resources and economic support) are collected by different agencies using different time frames. This text uses the most recent data available to describe the U.S. health services system, but the use of incomplete and sometimes fragmented data increases the potential for gaps and possible inconsistencies. Every graph and figure that could be updated with more recent data has been revised in this edition.
Some graphs and figures, used with permission from the juried literature, could not be updated but have been retained if they contribute to the understanding of the concepts presented.

**Aids to Understanding the Complexity of the U.S. Health Services System**

A language of specialty terms and acronyms accompanies the complex U.S. health services system. Three aids are included in this text to enhance understanding of the system:

1. The key words and concepts in each chapter are listed at the chapter’s end for ready reference and review.
2. A lexicon of acronyms and abbreviations is provided at the beginning of the text.
3. A glossary defining the most frequently encountered terms (key words) precedes the bibliography at the end of the book.

### Key Words

access to care  
Agency for Healthcare Research and Quality (AHRQ)  
continuum of care  
costs of/expenditures for care  
gross domestic product (GDP)  
health care outcomes  
health care reform  
Health Security Act of 1993  
health service  
hospital planning councils  
managed care  
Medicaid  
Medicare  
private sector  
public sector  
universal access or universal coverage  
utilization of health services  
voluntary sector

### References


AN OVERVIEW OF THE U.S. HEALTH SERVICES SYSTEM AND ITS USERS

Introduction

A general characterization of a health services system and the people who use it creates a context in which the component parts can be examined and better understood. This chapter provides an overview of the U.S. health services system and the demographics and health services utilization patterns of the U.S. population. Following the overview of the system, this chapter addresses such system characteristics as:

- distinguishing health from illness and disease;
- the cultural, economic, genetic, and perceived health status factors that influence care-seeking behaviors; and
- the utilization of health services by subpopulation groups.

The chapter concludes with an overview of the effects on health status of receiving, or not receiving, health services.

An Overview of the U.S. Health Services System

The $1.9 trillion U.S. health services system is a unique amalgam of public-, private-, and voluntary-sector programs. Elements of a health services system can be traced to the colonial and early Federalist periods. Public health programs, first organized at the local level, originated to protect the public from communicable diseases and unsanitary living conditions. One of the first public health programs was the U.S. Marine Hospital Service, established in 1798 to provide care to merchant seamen who transported goods—and sometimes diseases—from port to port.

Major forces in the development of health services in the private sector include the growing population, the population’s increasing mobility, the commensurate demand for services, and the resulting expansion of the health workforce. The provision of health services began as a private transaction between the provider and the recipient and remained primarily on that basis until the growth of private health insurance during and immediately following World War II.
The voluntary health services sector, which often addresses issues unclaimed by either the public or private sectors, has its origins in the establishment of almshouses for the care of the indigent during the American colonial period. Almshouses were antecedents of today’s hospitals, many of which were founded by charitable organizations.

The Organizational Component
The post–World War II economy spurred the conversion of a health services cottage industry into what has been described as the medical-industrial complex (Relman 1980). Growth occurred in all components of the system. Within the organizational component, a cabinet-level department—the U.S. Department of Health, Education, and Welfare (DHEW), now the U.S. Department of Health and Human Services (HHS)—was established in 1953 to administer the nation’s health programs. Attention to the safety of food and drugs increased. The government’s role in biomedical research blossomed. Public health programs expanded to address a range of environmental health issues, to serve as the collector of vital event data (i.e., births, deaths, marriages, divorces, adoptions, and abortions), and to provide leadership on such diverse health issues as immunizations, sexually transmitted diseases, and violence affecting the health of populations.

The private sector was growing too, fueled by an increasingly industrialized economy in which employers began to offer health insurance as a benefit of employment. Demand for more health services stimulated growth in the health workforce; the establishment of additional hospitals, nursing homes, and other health facilities; and technology development.

Filling the gaps created by the two other sectors, the voluntary sector met the challenge of both well-known and new diseases by forming such organizations as the March of Dimes for polio, the American Heart Association for coronary disease, the American Lung Association for respiratory diseases, and the American Cancer Society for malignancies.

The Management Component
The growth of public-sector and private-sector programs in a market economy increased the need for program management, including the functions of planning, administration, legislation, and regulation. Planning for health services was instituted at the national level with the 1966 Comprehensive Health Planning (CHP) Act (PL 89-749) and at the local level by hospital planning councils. Important health services legislation preceded World War II: the 1935 Social Security Act (SSA) (PL 74-271) included a number of titles authorizing health services for children, people with disabilities, and others. The SSA became the umbrella in the mid-1960s for other significant health legislation, including Medicare and Medicaid. A spate of addi-
tional health legislation was authorized independently of the SSA; these programs stimulated the development of multiple regulations for their full implementation.

The Economic Support Component
The growth of a health services system depends on the level of economic support available to it. Thirty-five percent of the economic support for the U.S. system in the year 2004 came from private health insurance, 45 percent came from the federal government in the form of tax-generated revenue and trust funds and from state revenues, 13 percent came from individual out-of-pocket payments, and 7 percent came from foundations and other charitable sources.

The Resources Component
Other resources, such as a workforce and facilities, are essential to a health services system. The health workforce continues to grow. Between 1960 and 1990, the supply of U.S. physicians increased 55 percent (Aiken and Salmon 1994). By the mid-1970s, the United States had doubled its capacity to train physicians in an effort to meet perceived workforce shortages (Cooper 1995; Mullan, Politzer, and Davis 1995). Over 871,000 physicians were licensed to practice in the United States in 2003. The number of nurses has remained relatively constant at about 2.2 million, yet many work settings continue to experience a nurse shortage. Growth in these and other professions has been aided by governmental support to expand educational opportunities. New professions have emerged to meet new needs: the number of billing and reimbursement specialists and business-trained administrators is growing to keep pace with the increasingly contractual nature of the U.S. health services industry.

The development of health facilities reflects the growing and changing health services system. Beginning in 1946, the growth in the number of hospitals and other kinds of health facilities was assisted by federal funds. Hospitals, until recently the hub of the system, grew in number and size until the 1980s. In the increasingly competitive 1990s through 2005, however, the overall number of hospitals declined, the number of licensed beds decreased, and the development of outpatient services and facilities mushroomed to reflect the changing delivery system. However, increases in hospital spending for both inpatient and outpatient services and also in Medicare hospital spending suggest that the hospital sector is once again growing.

The Delivery System Component
Much of the change in the U.S. system is occurring in the delivery system component. The growth of the health services system, the increasing expenditures required to sustain it, the significant number of people without access to care, and the projections of increased demand from an aging population are stimulating changes in both the financing and delivery systems.
The most pervasive change has been the shift away from the fee-for-service delivery system to managed care, with indications as early as 1998 of a backlash against managed care that portends further system changes (Blendon et al. 1998; Levit et al. 2002). Managed care, once considered the alternative delivery system, was recommended as early as 1932 in a report by the Committee on the Costs of Medical Care and has its modern origins in the 1973 Health Maintenance Organization Act, which encourages the integration of the financing and delivery of health services to achieve more efficient and cost-effective care.

Achieving a health services system that provides both equity and efficiency—two competing values in U.S. society—becomes a major challenge in a market economy; the struggle to balance these values is reflected in the unevenness of the U.S. health services system. Although great strides have been made to increase the equity in access to care, many may not have financial access to care at any given time. The majority of the uninsured, who often lack financial access to care, are in the U.S. workforce or are dependents of someone who is in the U.S. workforce but has been unable to secure health insurance.

**Proposed Changes to the U.S. Health Services System**

Although the U.S. health services system is the most costly and one of the most advanced in the world, recognition is growing that it is unbalanced and, in the view of some, out of control. This recognition has resulted in calls for reform from many quarters: the public, the providers, the payers for care (i.e., the government, the employer, or the individual), and politicians. Proposed wide-scale reforms have largely failed in their attempts to expand access to health services to the entire population, reduce costs of and expenditures for care, alter the incentives for provider payment, and change the ways in which health services are delivered.

Despite the failure to effect systemic reform, the health services system is changing significantly and continuously. Current changes that this book addresses are the:

- changing emphases on managed care and its multiple effects on the delivery system through the 1990s, and recent pressures from patients, providers, and others to effect yet another swing in the pendulum;
- recent initiatives to expand access to care, especially for expectant mothers and their children;
- continued pressures to reduce the costs of and expenditures for care;
- efforts to deal with workforce supply and distribution, including shortages in the work complement of nurses and a reorientation to
primary care in the 1990s, with recent skepticism about the success of that movement; and
• movement away from the hospital as the center of the U.S. health services system to care provided in outpatient and ambulatory settings.

To better understand each component and its interrelationship with the others, we first consider the distinctions between health and disease, review ways in which health status is measured, and explore factors such as population demographics that affect care-seeking behavior. A snapshot of current patterns of health services utilization provides a basis for understanding the interactions between the design of a health services system and its users.

Distinguishing Health from Illness and Disease

The purpose of a health service is to positively affect one’s health—its maintenance, its improvement, or its recovery. But what does health mean? The World Health Organization (WHO) defines health as not merely the absence of disease but as a state of physical, mental, and social well-being. This comprehensive definition provides a gold standard, but it is worthy to note that the U.S. health services system focuses largely on physical health. The First International Conference on Health Promotion, held in Ottawa, Canada, in 1986, provided another definition of health: health is a resource for living. What is now called the Ottawa Charter for Health Promotion identifies the fundamental conditions and resources for health as peace, shelter, education, food, income, a stable ecosystem, sustainable resources, social justice, and equity (WHO 1999).

Despite the general belief that the receipt of health services is one of the major influences on health status, other factors are of equal or greater importance. Figure 2.1 displays some of the determinants of health, including physical and social environments; personal traits; physical, mental, and social well-being; and access to a continuum of health services.

Measuring the Health of a Population

A health provider using a range of indicators can measure an individual’s health status, or health status can be self-assessed. One standard self-assessment measure is an individual’s report of his or her health status, using a scale of excellent, very good, good, fair, or poor. Many studies have documented the strong correlation between perceived and measured health status (LaRue et al. 1979; Wolinsky and Johnson 1992; Kaplan and Camacho 1983). Studies have also documented what seems a truism: people with perceived poorer health status are likely to utilize health services more often (Anderson and Knickman 1984; Blaum, Liang, and Liu 1994).
FIGURE 2.1
Determinants of Health

The health status of a population can also be described and measured in several ways. Common indicators used to assess and compare the health status of populations include fertility and natality, life expectancy, morbidity, disability days, years of productive life lost, and mortality. Each individual measure provides one dimension of the health status of a population; collectively, along with other measures beyond the scope of this discussion, they indicate the general health status of a population. Cultures may value these indicators differently: In one culture, high fertility and natality rates may be perceived as indicators of good health and general well-being in a population; in another culture, these same indicators may suggest diminished health status, poverty, or lack of population control measures.

**Fertility and Natality**

Figure 2.2 shows U.S. fertility rates according to live birth order for selected years between 1950 and 2003. The total fertility rate has declined by nearly 43 percent in the 53 years represented in Figure 2.2. The crude birth rate for 2003 was 14.1 live births per thousand women, and the fertility rate for that same year was 66.1 per thousand women (USDHHS 2005).
Chapter 2: An Overview of the U.S. Health Services System and Its Users

### FIGURE 2.2
U.S. Crude Birth Rates and Fertility Rates, All Races (Select Years, 1950–2003)

![Graph showing U.S. Crude Birth Rates and Fertility Rates, All Races](image)

**SOURCE:** USDHHS 2005.

**NOTES:** Crude birth rate is live births per thousand population. The fertility rate is the total number of live births regardless of age of mother per thousand women 15–44 years of age.

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**Life Expectancy**

Life expectancy at birth in the United States is shown in Figure 2.3. In this century, life expectancy has grown significantly, with people born in 2002 having 28 to 31 years of additional life expectancy over the 1900 cohort. Females continue to have several more years of life expectancy per cohort than males. Data for 2002 show that U.S. life expectancy at birth is 77.3 years, at age 65 is 18.2 years, and at age 75 is 11.5 years, all slight increases over the data for 2000 (USDHHS 2005).

**Birth Weight**

Birth weight is an indicator of a population’s health, with low-birthweight and very low birthweight babies at higher risk of both immediate and longer-term health problems. Figures 2.4 and 2.5 show the percentage of low-birthweight and very low birthweight babies, respectively, among live births for all mothers, white mothers, and black mothers for the year 2003. Black mothers are at higher risk of having both low-birthweight and very low birthweight babies. While the proportion of low-birthweight babies of black mothers has remained relatively stable for the past two decades, the proportion of very low birthweight babies to this group of mothers has increased. (See also Figures 2.29 and 2.30, which depict levels of prenatal care.)
FIGURE 2.3
U.S. Life Expectancy at Birth, Age 65, and Age 75 (Select Years, 1950–2002)

Years in Age


Age 65: Age 75

Birth

1950: 77.3
1960: 76.9
1970: 74.7
1980: 75.4
1990: 75.0
2000: 76.9
2002: 77.3

1950: 17.9
1960: 17.2
1970: 16.4
1980: 17.2
1990: 17.9
2000: 18.2
2002: 18.2

1950: 10.3
1960: 10.9
1970: 10.9
1980: 10.9
1990: 11.3
2000: 11.5
2002: 11.5


FIGURE 2.4
U.S. Low-Birthweight (<2,500 grams) Babies, by Mother’s Race or Ethnicity (2003)

Percentage of Live Births

White non-Hispanic: 6.94
Black non-Hispanic: 13.37
Hispanic: 6.69
American Indian/Alaska Native: 7.37
Asian/Pacific Islander: 7.78
All races: 7.93

Chapter 2: An Overview of the U.S. Health Services System and Its Users

FIGURE 2.5
U.S. Very Low Birthweight (<1,500 grams) Babies, by Mother’s Race or Ethnicity (2003)


Morbidity
One measure of morbidity (the effects of disease in a population) involves the limitations caused by chronic conditions. Figure 2.6 shows the percentage of the U.S. population, by age group, with activity limitations. As one may expect, the percentage reporting more severe or complete limitations increases with age. Disability days, not shown here, are another morbidity measure. Health services researchers often use quality-adjusted life years (QALYs) to measure the health status of individuals or populations. Another measure that incorporates aspects of both morbidity and mortality is the disability-adjusted life year (DALY). The loss of life from premature deaths is assessed by evaluating all deaths in a year and using them to estimate years of life lost (YLL) for each disease category. This measure has been helpful in making comparisons between and among countries (Merson, Black, and Mills 2001).

Mortality
Mortality or death rates are calculated separately for infants as an indicator of a population’s health status. Figure 2.7 shows mortality rates for infants (children younger than one year), neonates (younger than 28 days), early neonates (younger than 7 days), and for children in the post-neonatal period (28 to 365 days) for select years between 1950 and 2002. The total infant death rate in 2002 is 24 percent of what it was in 1950, a witness to overall increases in health status, due to improved environmental and living
FIGURE 2.6

FIGURE 2.7
conditions and advanced technologies to save newborns. Data for 2002 show 7.0 infant deaths per thousand live births, 4.7 neonatal deaths per thousand live births, 2.3 post-neonatal deaths per thousand live births; 4.7 deaths per thousand live births in those younger than 28 days, and 3.7 deaths per live births for those younger than 7 days (USDHHS 2005).

Table 2.1 shows the leading causes of death and the number of deaths in 2002 for all races and both genders. Heart disease, malignant neoplasms (cancers), and cerebrovascular disease continue to be the dominant causes of death. Examining cause of death by age group, gender, and race or ethnic origin gives a better understanding of mortality in a population. Tables 2.2 and 2.3 show eight leading causes of death for males and females, respectively, by race and/or Hispanic origin. Heart disease is the number one cause of death of males in all but American Indian and Alaska Native racial and ethnic groups (with no report for the Hispanic male population), and the number one cause of death for females in all racial and ethnic groups (with no report for the Hispanic female population). The second and third leading causes of death—malignant neoplasms and cerebrovascular disease—remain relatively constant across both genders and all racial and ethnic groups. Real differences in rank order of causes of death across racial and ethnic groups appear among other leading causes of death, particularly
### TABLE 2.2
Leading Causes of Death for U.S. Males, by Race and/or Hispanic Origin (2002)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Diseases of the Heart</th>
<th>Rank</th>
<th>Malignant Neoplasms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>White</td>
<td>2</td>
<td>White</td>
</tr>
<tr>
<td>1</td>
<td>Black</td>
<td>2</td>
<td>Black</td>
</tr>
<tr>
<td>2</td>
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<th>Rank</th>
<th>Chronic Lower Respiratory Disease</th>
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<th>Rank</th>
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NOTE: NR = no report.

Deaths from chronic obstructive pulmonary disease (COPD) and homicide. Gender differences in causes of death are particularly observable for diabetes mellitus.

Age-adjusted death rates are also useful indicators of a population’s health status. Figure 2.8 shows the U.S. age-adjusted death rates for selected causes for all races for select years between 1950 and 1999. Figure 2.9 concentrates on age-adjusted death rates from natural causes, including the top three—heart disease, malignant neoplasms, and cerebrovascular disease—as well as pneumonia and influenza and chronic lower respiratory disease.
### TABLE 2.3

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**SOURCE:** USDHHS 2005.

**NOTE:** NR = no report.

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## U.S. Health Status Compared to Other Industrialized Countries

To create a context in which to evaluate the overall health status of the U.S. population, comparing its health status with other industrialized countries is helpful. Table 2.4 compares infant mortality, life expectancy at birth, and life expectancy at age 65 for both males and females for select countries among the 24 member countries in the Organization for Economic Cooperation and Development (OECD), an entity that includes European countries, Australia,
FIGURE 2.8
U.S. Age-Adjusted Death Rates, Selected Causes, All Races
(Select Years, 1950–1999)

NOTES: Rates for 1999 are preliminary. External causes include unintentional injuries (including motor vehicle injuries), suicide, and assault (homicide).

FIGURE 2.9
U.S. Age-Adjusted Death Rates, Natural Causes, All Races
(Select Years, 1950–2002)

NOTE: Data intervals irregular.
Canada, Japan, the United States, and other countries in its databases. In the United States, the infant mortality rate is higher than in those select countries shown, and the United States ranks higher than other countries shown. Life expectancy at birth for U.S. males and females is lower than for their counterparts in the select countries shown. Life expectancy at age 65 for U.S. males and females is lower than for their counterparts in most other countries.

The lower health status for the United States along some of these measures is not due to lower overall spending or lower per capita spending on services. The United States allocates a greater proportion of its gross domestic product (GDP) to health than do other countries—nearly twice that of the United Kingdom and of Japan. The United States spends more than double the amount per capita on health services than does Australia, Japan, and the United Kingdom, yet it does not provide universal coverage, as do most of the other countries shown in Table 2.4.

Although maintaining or regaining health is the purpose of a health services system, the assessment of health and the focus of many health services systems is on the deviations from health—that is, on illness and disease. Illness is a relative term, generally used in the lay community to represent an individual response to a set of psychologic and physiologic stimuli. A disease state indicates the presence of pathology and is precisely defined by the provider community (May 1993). The extent of one’s illness or disease can be measured by a Sickness Impact Profile (SIP) or by various
measures of severity of illness. The SIP assesses sickness-related dysfunction in the following areas: sleep and rest, eating, work, home management, recreation and pastimes, ambulation, mobility, body care and movement, social interaction, alertness behavior, emotional behavior, and communication (Patrick and Erickson 1993). A number of severity-of-illness measures, including the Acute Physiological and Chronic Health Evaluation (APACHE), MedisGroups, Computerized Severity Index (CSI), disease staging, Patient Management Categories (PMCs), and the acuity index method, have been developed to improve the classification of hospital patients (Thomas and Ashcraft 1991).

Factors That Affect Care-Seeking Behavior

People enter the health services system for a variety of reasons. The person who is ill or injured seeks treatment; the person with a chronic disease seeks regular monitoring; the pregnant female seeks prenatal care to protect her health and that of her fetus; and the person with a terminal condition seeks relief from pain through palliative care. People also seek health services to prevent the occurrence of diseases, such as measles and influenza, and to detect and ameliorate the effects of other illnesses and diseases.

A number of factors govern care-seeking behaviors, including perceived health status, ease of access to providers, and risk factors affecting health. Perceived health status is a major reason why people seek services. People who perceive that their health status is fair or poor are much more likely to seek and use health services than those who rate their health status higher. Included in this group are the “worried well”—people whose measured health status is good but whose concerns about illness or disease result in their potential overutilization of services. Figure 2.10 shows the respondent-assessed health status for 2003, focusing on the proportion of the population that rates its health status as fair or poor. Poorer health status is associated with age, gender, and race. As people age, more of them report fair or poor health status.

As is discussed in Chapter 3, the multiple dimensions of access—geographic, physical, temporal, cultural, and financial—also affect care-seeking behavior.

Certain genetic, behavioral, and other traits known to increase the risk of poor health are referred to as risk factors. Common risk factors that inform the study of health status include hypertension, obesity, lack of physical activity, and smoking.
Utilization of Health Services

The study of health services utilization reveals not only who does and does not access care, but also what types of care are accessed, with what frequency, and under what circumstances. The study of utilization also provides insight into costs of and expenditures for health services. Demographic factors, such as gender, age, race and ethnicity, and socioeconomic status, as well as risk factors and other variables affect health services utilization.

**Gender**

Gender affects care-seeking behavior. Females, especially in their reproductive years, use more health services than do males in the same age groups. Females have a longer life expectancy than do males and as a group may use more health services. Figure 2.11 shows the distribution of gender in the U.S. population.

**Age**

Age affects utilization of health services. Very young people may be frequent users of preventive and routine checkup services. Utilization of services increases with age, as physical and mental health deteriorates and chronic
Part I: Introduction

**FIGURE 2.11**

![Pie chart showing gender distribution of the U.S. population in 2003.]

Male: 49%
Female: 51%

NOTE: Total population: 290,811,000. Estimates of the 2003 population are projected from the 2000 census.

**FIGURE 2.12**

![Bar chart showing the percentage of the U.S. population by age group in 2003.]

Source: USDHHS 2005.
NOTE: Based on total population of 290,811,000.

conditions progress. Figure 2.12 shows the age distribution of the U.S. population for 2003. Of major concern is the aging of a significant proportion of the U.S. population as baby boomers (those born between 1946 and 1964 in the post–World War II population explosion) reach older age categories and increase the demand for health services. The total population is expected to grow by 0.6 percent each year until the year 2020, but the elderly population will grow three times as much: 1.8 percent annually. The oldest old (people age 85 and older) will grow at the fastest rate of all: 2.9 percent annually over the next 30 years (USDHHS 1990).
**Race and Ethnicity**

Race and ethnicity may affect health services utilization in several ways. Some diseases are specific to or more prevalent in certain populations—for example, Tay-Sachs in people of Ashkenazic (central-eastern Europe) Jewish ancestry and sickle-cell anemia in African Americans. People with these conditions are likely to utilize the health services system because of their particular needs for treatment. Cultural beliefs associated with race or ethnicity may also affect utilization. For example, females from some cultures may be reluctant to seek health services from male providers. People from some cultures may be reluctant to obtain organ transplants or to serve as organ donors.

In addition, the ways in which health services are provided to members of certain racial or ethnic groups may differ. Studies have documented the differences in rates of angiography, angioplasty, and coronary artery bypass grafts among racial and ethnic groups, for example, that do not appear to be directly related to physiologic differences among these groups (Carlisle, Leake, and Shapiro 1995). Recognition of the differences in utilization, some of which may be traced to differences in access to health services among special populations, has led to a national focus on reducing disparities in health status (see Chapter 3). Several sources of federal funding for program development and research give preference to proposals that specify how such disparities can be reduced or eliminated.

Figure 2.13 shows the racial and ethnic composition of the U.S. population. About 13.7 percent of the total population is of Hispanic ethnicity; Hispanic people may be of any race.

**Socioeconomic Status**

Socioeconomic status (SES) affects utilization of health services. People with limited income and financial resources, particularly the uninsured, are likely to seek fewer health services. Figure 2.14 shows the proportion of the U.S. population, by race and ethnicity, whose family income is below the 2003 poverty threshold of $18,769 for a nonfarming family of four. The proportion of black and Hispanic families below the poverty level is more than twice that of white families. People with incomes below the poverty level are not necessarily precluded from obtaining services. Some of them may be Medicaid enrollees or have access to other health services. Nevertheless, a higher proportion of people at lower income levels may report poorer health status than other income groups and may, as a result of their socioeconomic status and other factors, be at a higher risk for health problems. People with higher educational levels, and thus typically at higher employment and income levels, are more likely to have health insurance or be able to obtain health services—particularly dental, mental health, and other preventive services—than people with lower educational levels.
Models of Health Services Utilization

Models to explain care-seeking behavior and the utilization of health services have been developed by Aday, Andersen, and Fleming (1980); Rosenstock (1974); and others. The health behavior model of services utilization developed by Aday, Andersen, and Fleming, shown in Figure 2.15, analyzes...
utilization in a health services system based on health policy factors, the characteristics of the population at risk, the characteristics of the services delivery system, and consumer satisfaction with health services. In the population characteristics component, predisposing characteristics include general health beliefs, attitudes, and knowledge, as well as demographics and employment status. Enabling characteristics include family income and place of residence. The model of access to care in Chapter 3 is based on this health behavior model.

The health belief model (Figure 2.16) suggests that utilization of health services is stimulated by one’s set of beliefs about disease and the effectiveness of a health services system in preventing and treating disease. Individual perceptions and modifying factors, such as demographic, sociopsychological, and structural variables, affect the likelihood of one’s action in seeking care and treatment.

These and other models draw attention to the complexities of analyzing utilization where some variables are explicit and measurable and others are highly specific to the individual and thus more difficult to measure.
**FIGURE 2.16**  
Expanded Health Belief Model

<table>
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<tr>
<th>Individual Perceptions</th>
<th>Modifying Factors</th>
<th>Likelihood of Action</th>
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<td>Perceived susceptibility to disease “X”</td>
<td>Perceived threat of disease “X”</td>
<td>Likelihood of taking recommended preventive health action</td>
</tr>
<tr>
<td>Perceived seriousness (severity) of disease “X”</td>
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<td></td>
</tr>
</tbody>
</table>

**Demographic Variables**  
(age, sex, race, ethnicity, etc.)

**Sociopsychological Variables**  
(personality, social class, peer and reference group pressure, etc.)

**Structural Variables**  
(knowledge about the disease, prior contact with the disease, etc.)

**Cues to Action**  
Mass media campaigns  
Advice from others  
Reminder postcard from physician or dentist  
Illness of family member or friend  
Newspaper or magazine article


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**Rates of Health Services Utilization**

Figures 2.17 through 2.28 provide data on the utilization of major health services, such as physician contacts, hospital discharges, and nursing home residency. Figures 2.17 through 2.22 show the per capita contacts to physicians by number of visits, demographic characteristics (i.e., age, gender, race, and income), health insurance, poverty status, and site of the contact or visit (i.e., physician’s office, home visit, hospital emergency department, or hospital outpatient department). The number of physician contacts per year is related to age, health status, financial access (such as health insurance coverage), and possible nursing home or other institutionalization for the oldest age group. Nearly 40 percent of those who report fair or poor health status have ten or more home visits and visits to physicians’ offices and emergency departments per year, whereas only 11 percent of those who report their health status as good to excellent have ten or more visits per year to these providers (Figure 2.17). The number of physician contacts, including hospital outpatient department and hospital emergency department visits, increases with age (Figure 2.18).
Chapter 2: An Overview of the U.S. Health Services System and Its Users

**FIGURE 2.17**
Health Services Home Visits and Visits to Physicians’ Offices and Emergency Departments Within the Past 12 Months, by Self-Assessed Health Status (2003)

![Percentage Distribution Chart]

**SOURCE:** USDHHS 2005.

**FIGURE 2.18**
U.S. Ambulatory Visits to Physicians’ Offices, Hospital Outpatient Departments, and Emergency Departments, by Age Group (2003)

![Age-Adjusted Number per Capita Visits Chart]

**SOURCE:** USDHHS 2005.

**NOTES:** ED = emergency department; OP = outpatient.
All other racial and ethnic groups generally have fewer physician contacts in the “4–9 visits” category in a 12-month period than do whites (Figure 2.19). A higher proportion of males have no visits in a 12-month period, compared with females, and a higher proportion of females have more than three visits in a 12-month period, compared with males. Health insurance status and financial status affect the number of visits. In Figure 2.20a, nonpoor persons have the lowest proportions in the “no visits” and “10+ visits” categories and the highest proportions in the “1–3 visits” and “4–9 visits” categories. Forty-two percent of people younger than age 65 who are poor and uninsured do not have a physician’s office visit or other physician contact in a 12-month period, compared with only 13 percent of the population who are nonpoor and insured (Figure 2.20b).

Most physician contacts occur in physicians’ offices, although some occur in hospital emergency departments and hospital outpatient departments. Figure 2.21 shows ambulatory care visits to physicians’ offices, hospital outpatient departments, and emergency departments by gender and race. Females have more visits to all locations than do males. Whites have more visits to all sites overall and more to physicians’ offices, whereas blacks have more visits per 100 persons to hospital outpatient departments and emergency departments.
FIGURE 2.20
Health Services
Home Visits
and Visits to
Physicians’
Offices and
Emergency
Departments
Within the Past
12 Months
(2003)
(a) By poverty
status. (b) By
health insurance
status and
poverty status,
under age 65.

FIGURE 2.21
Ambulatory Care Visits to Physicians’ Offices, Hospital Outpatient Departments, and Emergency Departments, by Gender and Race (2003)

NOTE: ED = emergency department.

Figure 2.22 provides another perspective on visits to physicians—by type of insurance coverage (including no insurance coverage) for both the population under age 65 and that over age 65. The majority of the latter group is entitled to Medicare, the social insurance program, if they meet Medicare’s eligibility criteria (see Chapter 3). As one would expect, a higher proportion of those with health insurance have physician contact in a 12-month period than those who are uninsured.

Figures 2.23 through 2.26 show hospital utilization by age group, gender, race/ethnicity, income, and insurance status. One person in 13 under the age of 65 is hospitalized each year; people age 65 and older have higher hospitalization rates due to chronic conditions and failing health. More females than males, and more blacks than whites per thousand are hospitalized each year. As was true for physician contacts, people in lower income categories have higher rates of hospitalization than do those in higher income categories.

Home health care has permitted many people with chronic illnesses and short- or long-term disabilities to avoid institutionalization by receiving health services in their homes. Until recently, home health care was the fastest growing Medicare-reimbursed service. Figure 2.27 shows home
Chapter 2: An Overview of the U.S. Health Services System and Its Users

FIGURE 2.22
Health Care Home Visits and Visits to Physicians’ Offices and Emergency Departments Within the Past 12 Months, by Health Insurance Status and Age (2003)

NOTE: FFS = fee-for-service.

FIGURE 2.23
Discharges from U.S. Short-Stay Hospitals, by Age Group (2003)

FIGURE 2.24
Discharges from U.S. Short-Stay Hospitals, by Age, Gender, and Race/Ethnicity (2003)

NOTE: Data for the Asian/Pacific Islander group are available only for the under-65 age group.

FIGURE 2.25
Discharges from U.S. Short-Stay Hospitals, by Poverty Status and Age (2003)

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**FIGURE 2.26**
Discharges from U.S. Short-Stay Hospitals, by Insurance Status and Age Group (2003)

![Bar chart showing discharges from U.S. short-stay hospitals by insurance status and age group in 2003.](chart)

**SOURCE:** USDHHS 2005.

**NOTE:** FFS = fee-for-service.

**FIGURE 2.27**
U.S. Home Health Care Patients, According to Age and Gender (2000)

![Bar chart showing home health care patients in the U.S. by age and gender in 2000.](chart)

**SOURCE:** USDHHS 2002.

**NOTES:** Total home health care patients = 1,355,290. Group <65 is crude rate; other groups are age-adjusted.
FIGURE 2.28
U.S. Nursing Home Residents Age 65+, by Gender and Race (1999)

![Bar chart showing residents per 1,000 population by gender and race for different age groups (65-74, 75-84, 85+ years).]


health care utilization in 2000, by age group and gender. More females than males utilize home health services, due in part to females’ greater longevity.

Nursing Home Utilization

An estimated 4.5 percent of the population age 65 and older is in a nursing or personal care home, although not all of them remain there for the duration of their lives (U.S. Bureau of the Census 2002). The sixth National Nursing Home Survey was conducted in 1999 by the National Center for Health Statistics (within the Centers for Disease Control and Prevention [CDC]). Survey results indicate that the average length of stay for a discharge was 272 days (Jones 2002). Figure 2.28 shows the proportion of the elderly, by age group, gender, and race, who were residents of nursing or personal care homes in 1999. A seventh version of the survey was conducted in 2004, with data to be released sometime in 2006.

Although these aggregated data provide important encounter information, they neither inform of the range of physician visits per person, for example, nor the number of rehospitalizations included in the hospital utilization figure. More importantly, these data reflect only the usage of services; they cannot inform of the unmet need for services due to access
or other barriers that people who needed services but could not obtain them faced.

The Effects on Health Status of Receiving Health Services

Receiving health services is assumed to have an ameliorative effect on health status. For those services proven to be effective, positive outcomes are likely. Timely prenatal care, for example, is known to improve birth outcomes. Figure 2.29 shows the percentage of live births to mothers who began prenatal care in their first trimester of pregnancy for all mothers, white mothers, black mothers, and Hispanic-origin mothers for select years between 1970 and 2003. Figure 2.30 shows the percentage of mothers, by race, who either did not begin receiving care until the third trimester of their pregnancies or who received no care at all. Lower utilization of prenatal care in all trimesters of pregnancy is correlated with a lower percentage of live births.

Despite the significant advances in medical care, however, much remains to be learned. Long-recognized diseases such as polio, for example, are taking on new manifestations as the polio victim ages. Recently identified diseases such as HIV and the Ebola virus are not yet fully understood. We know little about the long-range effects of some interventions, and we still know too little about the patient outcomes for many therapies and treatments in current use. The number of studies of the outcomes of care is growing to expand our knowledge of the effects of health services on health status.

Receiving health services may, in certain instances, have pejorative effects on health status. Hospitalized patients may acquire nosocomial infections as a direct result of their hospitalizations. Patients may also develop iatrogenic illnesses, such as drug interactions, as a result of the treatments they receive.

It is important to remember that the receipt of health services is only one factor affecting health status. Roemer’s determinants-of-health model shown in Figure 2.1 lists other factors, including genetic heritage, demographics, an individual’s living and working environments, and the safety of the physical environment. Some posit that the overall health of a population, as well as individual health status, would be more improved by the provision of a guaranteed minimum income than by the provision of more health services. The effects of lifestyle and behavior, including violent behavior, on health status—many of which are outside the domain of the health services system—must also be acknowledged.
**FIGURE 2.29**
Prenatal Care for U.S. Live Births, by Race and Hispanic Origin of Mother (Select Years, 1970–2003), First Trimester

**FIGURE 2.30**
Prenatal Care for U.S. Live Births, by Race and Hispanic Origin of Mother (Select Years, 1970–2003), Third Trimester
Summary

Many factors affect the health of individuals and populations, including demographic factors (e.g., age, gender, and socioeconomic status), as well as access to and utilization of services. The U.S. population’s health status, as measured by crude birth rates and fertility rates, birth weight, life expectancy, morbidity, and mortality, is graphed and, where possible, compared with status reported for other countries. Two models that attempt to explain health services utilization—the health belief model and the health behavior model—are explained, and the U.S. utilization of key health services is graphed. Although appropriate health services utilization can be important in maintaining personal health, it is possible to overutilize services in a way that can negatively affect health status.

Key Words

- acuity index
- Acute Physiological and Chronic Health Evaluation (APACHE)
- almhouses
- baby boomer
- Committee on the Costs of Medical Care (CCMC)
- Comprehensive Health Planning (CHP) Act
- Computerized Severity Index determinants of health
- disability-adjusted life years (DALYs)
- disability days
- disease
- disease staging
- fee-for-service delivery system
- gross domestic product (GDP)
- health
- health behavior model
- health belief model
- health maintenance organization (HMO)
- health outcomes
- health status
- iatrogenic illness
- illness
- life expectancy
- managed care
- Medicaid
- medical-industrial complex
- Medicare
- morbidity
- nosocomial infection
- Organization for Economic Cooperation and Development (OECD)
- Patient Management Categories (PMC)
- poverty level
- quality-adjusted life years (QALYs)
- risk factors
- self-assessed health
- severity of disease
- Sickness Impact Profile (SIP)
- Social Security Act (SSA)
- socioeconomic status (SES)
- U.S. Department of Health, Education, and Welfare (DHEW)
- U.S. Department of Health and Human Services (HHS)
- World Health Organization (WHO)
References


Chapter 2: An Overview of the U.S. Health Services System and Its Users


ACCESS TO HEALTH SERVICES

Introduction

Until the breakup of the Soviet Union, only two major industrialized countries—South Africa and the United States—did not provide universal access to health services. Neither South Africa nor the United States has a national health system such as Canada’s or a national health service such as Great Britain’s to provide a basic set of services to their entire populations. In the free-market economy of the United States, health services are among many goods and services that individuals are generally expected to provide for themselves. Despite years of debate about whether its citizens have a right to health services, the U.S. system assures only the right to emergency care in most hospitals under certain circumstances. Medicare beneficiaries are also entitled to inpatient hospital care, hospice services, and home health care.

This chapter discusses how people in the United States, in the absence of a national health system or service, obtain access to care and also focuses on the care seeker’s access to a provider. Issues of access among providers also exist (e.g., a generalist’s access to a specialist, or a provider’s access to backup support, rehabilitation, or long-term care services for patient referrals) but are beyond the scope of this book.

Defining Access

The term access connotes different things to analysts of health services. To Penchansky and Thomas (1981), access is the measure of fit between characteristics of providers and health services, and characteristics and expectations of clients, incorporating five reasonably distinct dimensions: availability, accessibility, accommodation, affordability, and acceptability. Access may describe the entry into or use of services. Access may also be defined by factors influencing entry or use of services. For purposes of this discussion, the latter definition of access is employed.

Access to care has a direct bearing on the two other important dimensions of the health services system: cost/expenditures and quality. Increasing access to health services can actually decrease unit costs in some instances but inevitably increases expenditures. Limited or no access to care can
decrease a person’s health status and quality of life, but excessive access can also be detrimental.

As Figure 3.1 indicates, access to care has many dimensions: geographic, physical, temporal, sociocultural, and financial. **Geographic access** is influenced by where the care seeker lives in relationship to where the provider practices. A full range of medical services is unlikely to be available in a coastal village in Alaska, a mountain mining town in Nevada, or a rural farming community in the Midwest, even though physician-to-patient ratios suggest that physician supply is adequate to serve the population. Medical care is most likely to be found where a population base and related services to support it exist. Those who live outside such areas may have to travel considerable distances, often over difficult terrain and through imposing weather, to reach care. Transportation is a factor in geographic access. Public transportation systems do not serve all areas where people live, and private transportation may not be available to the care seeker.

**Physical access** to care is influenced by the care seeker’s physical mobility and mental competence in reaching a provider, as well as by the ease of access to the provider’s facility. Today’s system of health services usually requires that the care seeker be present to the provider. In-home services, while growing, still do not typically include home visits by physicians for routine care. The ease of access to a provider’s facility has been assisted by the Americans with Disabilities Act (ADA) of 1990, which recommends appropriate access and imposes sanctions for noncompliance. Another potential way to increase access to a provider is through the use of telemedicine and through remote monitoring of chronic diseases. Such mechanisms have not yet begun to reach their full potential (Freed and Grigsby 2002).
Temporal access may be inhibited when, because of an inflexible work schedule, the unavailability of care for young and old dependents, or other time constraints, a care seeker is unable to obtain care during the hours it is provided. Temporal barriers may also include waiting or queue times between the request for an appointment and the provider’s availability.

Multicultural societies such as the United States experience sociocultural barriers to access. The provider and care seeker may speak different languages or may come from differing cultures that value health services in quite disparate ways and employ conflicting customs and beliefs. These differences may inhibit an individual from seeking needed care because of the frustrations inherent in communicating or may prevent the care seeker from obtaining the full benefits of the recommended treatment because of the potential for misunderstandings.

Financial access to health services in the United States is largely governed by the individual’s access to health insurance coverage—either private insurance or public or social insurance. Health insurance, addressed more fully in Chapter 6, became the dominant payment mechanism for health services in the last half of the twentieth century. This trend stems from the growth of private health insurance coverage during and immediately following World War II and the establishment of public or social health insurance in the mid-1960s. In addition to private and public health insurance, financial access to health services is attained by private payment, by qualifying for governmentsponsored programs, or through the provision of charity care.

Given these varying dimensions of access, what factors affect an individual’s ability to access health services in the U.S. system? This question is explored by examination of the model in Figure 3.2. This model was adapted from one developed by the congressional Office of Technology Assessment (OTA), based on work done by Ron Andersen, LuAnn Aday, and other researchers in the utilization of health services. Factors affecting health that may not be influenced by access to personal health services are considered briefly. Three types of factors—predisposing, need, and enabling—that potentially affect access are then examined. Finally, the potential adverse health outcomes associated with both lack of access to care and unconstrained access to care are considered.

Factors Affecting Access to Health Services

Some factors affecting an individual’s health status may not be influenced by access to personal health services. Figure 3.2 identifies three such factors: (1) individual factors, (2) the physical environment, and (3) the social environment. Individual factors include inherited (i.e., genetic) characteristics and individual behaviors that reflect a person’s beliefs, attitudes, and
values. Physical environmental factors include air and water quality, as well as the presence or absence of disease vectors. A person’s friends and social relationships are examples of societal environmental factors that may not be influenced by access to personal health services.

**Predisposing Factors**

As shown in Figure 3.2, predisposing, need, and enabling factors affect potential access. These factors vary in their importance in affecting access, and they do not operate independently; rather, their effect is interactive in influencing access.
Predisposing factors are an individual’s demographic characteristics: age, gender, education, occupation, and race/ethnicity. The two ends of the age spectrum—the young and the old—often require increased access to services. Because these age groups are often dependent on others to secure their care, access may be directly affected by their ability to get assistance in obtaining care.

Gender also influences access to care. For example, females of childbearing age are likely to access health services more frequently than their male counterparts. Gender may also affect participation in clinical research studies. Criticism has been directed at the National Institutes of Health (NIH) for supporting large-scale research studies that limited their investigations to male subjects, even though the studied condition affected both genders (Finnegan 1996). NIH has made strides in correcting this imbalance.

Educational levels influence access. People with higher educational levels more frequently access health services.

A person’s occupation may affect access in several ways. First, a hazardous occupation, such as mining, puts one at greater risk for injuries and some types of illness (e.g., black lung disease), requiring more frequent contact with the health services system. Second, a person’s occupation has a direct influence on income and health insurance status, two enabling factors covered later in this discussion.

Finally, a person’s race and ethnicity may affect access in several ways. Some diseases—Tay Sachs or sickle-cell anemia, for example—affect only certain racial or ethnic groups. Racial and ethnic groups may also face cultural barriers or discriminatory practices that affect their ability to access health services.

**Need Factors**

A range of need factors—perceived health, interpretation of illness, and other health status measures—affect access to care. Numerous studies have shown that individuals who perceive their health status as fair or poor are more likely to access care (McCall et al. 1991; Short and Lair 1994/95), assuming they have the financial means to do so. A patient’s understanding and interpretation of his or her illness affects access. Health status measures such as levels of disability and functioning also affect access to care.

**Enabling Factors**

The third category of factors affecting potential access—the enabling factors—constitutes the major focus for the remainder of this section. Enabling factors include convenience, income, insurance coverage, and system characteristics. Convenience embodies temporal, geographic, and physical dimensions of access, as discussed earlier. Individuals’ income directly affects
their financial access and frequency of access to health services, and also influences whether they have private health insurance coverage. Private and public insurance coverage is the major route of financial access to health services in the United States. Although health insurance is explored comprehensively in Chapter 6, an overview of its effects on access follows. This section concludes with a discussion of other characteristics of the U.S. health services system affecting access—principally, the availability of governmental and other programs that provide access to special populations. Following the discussion of these enabling factors, the problems of people who lack financial access to care are addressed.

Financial Access to Health Services

Private insurance and public or social insurance are first discussed as means of financial access to health services. Private payment (out-of-pocket payment) for health services is then addressed. Finally, the important role of government-sponsored programs, such as the U.S. Department of Veterans Affairs (VA) system and the military system of health services, is described.

Private Health Insurance

Private health insurance is the greatest source of health insurance coverage for people under age 65. Medicare, discussed in the next section, provides public or social insurance for the majority of people who are age 65 and older, as well as for people with certain types of disabilities, including end-stage renal disease (ESRD). In 2003, 68.9 percent of the population under the age of 65 reported some form of private health insurance coverage (U.S. Department of Health and Human Services [USDHHS] 2005). Figure 3.3 shows the percentage of the population with private health insurance by age, gender, race/ethnicity, and various poverty levels. Children under age 18 below the federal poverty level had the lowest insurance coverage rates of any of these demographic groups.

Two types of private health insurance are available in the United States: individually purchased policies, which are usually limited in coverage and relatively expensive to purchase, and insurance provided as one of the benefits of employment. Employer-sponsored insurance is generally more comprehensive in scope because the risk of insuring is spread over a group of employees and because those in the workforce are generally healthier than those of working age who are not in the workforce and are not the dependents of an insured worker. Group insurance is thus less expensive per person than individual policies. In most cases, employers and employees
share the cost of this insurance. Many employers are beginning to shift a
greater proportion of these costs to their employees.

Individual policies are purchased by people who can afford them, who
may be self-employed, who work in industries such as mining or fishing in
which insurance is difficult to obtain, or who otherwise do not have access
to a group health insurance policy. Individual high-deductible policies may
also be purchased by people who do not anticipate much utilization of health
services but want the security of catastrophic coverage. Individual policies often impose stringent limitations for preexisting conditions.

About 63 percent of the nonelderly who have health insurance are likely to have insurance as a benefit of employment, either as the employee or as the dependent of an insured employee. Health insurance provided as a benefit of employment varies by size of firm, type of industry, the employee’s work status (full-time or part-time), and other factors. Midsized to larger firms (100 or more employees) typically offer one or more types of health insurance coverage to their full-time workers, whereas smaller firms (25 or fewer employees) may not offer health insurance as a benefit. Certain industries, such as farming, logging, floral businesses, and interior design—viewed as high risk by insurers because of the potential for physical injury or the perceived high-risk lifestyles of the employees—may typically not offer health insurance as a benefit (U.S. Bipartisan Commission 1990). Many employers, regardless of firm size, do not offer health insurance to contingent, seasonal, or part-time workers.

Private health insurance coverage for the nonelderly varies by race/ethnicity: a greater proportion of whites than nonwhites are more likely to be insured (Figure 3.4), and a greater proportion are likely to have employment-related insurance (66 percent versus 52 percent). As a bridge to the next section on public health insurance, Figure 3.5 shows the percentage of the U.S. population that had any kind of health insurance coverage in 2004.
FIGURE 3.4
Private Health Insurance Obtained Through the Workplace, <65 Years of Age (2003)
(a) By age group and gender. (b) By race/ethnicity. (c) By federal poverty level (FPL).

Public or Social Health Insurance
Many consider Medicare and Medicaid, two government-supported programs initiated as amendments to the Social Security Act (SSA, titles XVIII and XIX, respectively) in 1965 and implemented the following year, to be public insurance programs. Both are entitlement programs, meaning that eligible individuals have a legislative entitlement to all the covered services they require. Only the Medicare program really fits an insurance model and was designed to conform to the structure of private health insurance. Because
FIGURE 3.4
Continued

![Bar chart showing percentage of population by income level and age group.]


FIGURE 3.5
Health Insurance Coverage, All Ages (2004)

![Bar chart showing percentage of population by type of health insurance.]

the programs are so frequently compared—and confused—both are discussed in this section.

The Medicare and Medicaid programs, a legacy of President Lyndon Johnson’s Great Society, resulted from compromises following the failure to enact some form of national health insurance (Anderson 1968). Medicare was intended to provide mandatory hospitalization benefits (Part A) to qualified beneficiaries, and optional physician services and outpatient coverage (Part B) to beneficiaries who could afford the monthly premium. Medicare beneficiaries initially were persons age 65 and over, which was retirement age in that era; later amendments included people with ESRD (1972) and long-term disabilities (1973).

The Medicaid program, a welfare program, was established to pay for a mandated set of health services to low-income children and their caretakers who were the recipients of, or eligible to receive, public assistance funds from the Aid to Families with Dependent Children (AFDC) program or the Supplemental Security Income (SSI) program. The Medicaid program has been amended over time to include people who have developmental disabilities (1972) and to expand eligibility to other low-income groups, including children, pregnant women, and the elderly. The Personal Responsibility and Work Opportunity Reconciliation Act (PL 104-93) of 1996 replaced the AFDC program with the Temporary Assistance for Needy Families (TANF) program.

Although the Medicare and Medicaid programs were established in the same congressional session and were intended to provide health services access to the two ends of the population spectrum—the elderly and children with their adult caretakers—the programs differ widely in their requirements for eligibility, covered benefits, financing, and proportion of the population each covers. These differences are illustrated in Table 3.1 and discussed in more detail in Chapter 6.

**Private Payment for Health Services**

Private, out-of-pocket payment for health services is another way in which a person obtains financial access to care. Private out-of-pocket payment includes payment for all health services expenditures by uninsured people who can afford to do so. It also includes payment for health services not covered by private, public, or social health insurance and payment for the deductibles, copayments (set dollar amounts), and co-insurances (percentages of total charges) that various insurance companies require. (Premiums are not usually considered out-of-pocket payments in the calculation of the National Health Accounts.) Out-of-pocket payments constitute an important revenue source for financing health services. In 2004, 13 percent of health services revenues came from private out-of-pocket payments (see Chapter 7).
### TABLE 3.1
Comparison of Medicare and Medicaid Programs

<table>
<thead>
<tr>
<th>Eligibility</th>
<th>Medicare</th>
<th>Medicaid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 65+</td>
<td></td>
<td>Categorical welfare (AFDC, SSI)*</td>
</tr>
<tr>
<td>Disabled persons</td>
<td></td>
<td>Persons living with AIDS</td>
</tr>
<tr>
<td>End-stage renal disease</td>
<td></td>
<td>Low-income pregnant women</td>
</tr>
<tr>
<td>Retired railroad employees</td>
<td></td>
<td>Low-income children</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Low-income elderly</td>
</tr>
</tbody>
</table>

| Financing | Part A: | 50% federal funds (at minimum) |
|          | Employer/employee contributions | 50% or less state funds |
|          | Copayments and deductibles | Limited copayments (cost sharing) |
|          | Part B: | General revenue (federal funds) |
|          | Premiums | |
|          | Deductible | |
|          | Part C: Medicare Advantage (formerly Medicare+Choice) | |
|          | Capitation payment funded by Part A Trust Fund and Part B account | |
|          | Part D: Outpatient prescription drug coverage | |
|          | Premiums and general revenue (federal funds) | |

| Benefits | Part A: | Hospital (inpatient and outpatient) |
|          | Hospital inpatient | Rural health clinic |
|          | Skilled nursing facility care | Laboratory |
|          | Home health care | X-ray |
|          | Hospice | Skilled nursing facility, age 21+ |
|          | Part B (optional): | Home health care |
|          | Physician services | EPSDT |
|          | Outpatient services | Physician services |
|          | Nurse midwife (where permitted) | Family planning |

| Population Covered | 39 million persons, including 5 million persons with disabilities | 40.6 million persons |

| Means Test | None required | Income and asset limits |

*Medicaid eligibility may differ from state to state, depending on how the state redefines the linkage between welfare programs and Medicaid eligibility as a result of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996.

NOTES: AFDC = Aid to Families with Dependent Children; EPSDT = Early and Periodic Screening, Diagnosis, and Treatment Program; SSI = Supplemental Security Income.
**Government-Sponsored Programs That Provide Access to Health Services**

A range of government-supported health programs provide direct access to health services for special populations. A select set of these programs, including the U.S. Department of Veterans Affairs system, Department of Defense programs (including TRICARE), the Indian Health Service, and the prison health services system, are discussed in the sections that follow.

The U.S. Department of Veterans Affairs (VA) health services system, established in 1921 as the U.S. Veterans Bureau (Shonick 1995) to provide inpatient, outpatient, and long-term care services to veterans with military-service–connected conditions, provides care through a system of 172 hospitals and 381 community-based outpatient clinics (Maciejewski and Chapko 2002). Some states have several VA hospitals; others, such as Alaska, have none.

VA health services facilities provide care to an important segment of the U.S. population and serve as training sites for medical students and residents. In 1972, in what was perceived as an era of physician shortages, the VA linked with other organizations to establish eight new medical schools to increase the supply of physicians.

Congress, given the declining number of eligible veterans and the unused capacity at many VA hospital facilities, periodically questions the future of the VA system. Proposals to expand VA services to include dependents of veterans, to serve other community members, or to dismantle the VA system have been discussed at the congressional level but have not yet reached legislative status. With the advancing technologies to treat war wounds and injuries, the VA system has a new focus in treating veterans of military actions in Afghanistan and Iraq.

The Department of Defense (DOD) is an important provider of health services to active military members and their dependents. The army, navy, and air force each operates its own medical services, and the DOD operates eight “tri-service” joint medical facilities that serve the army, air force, and navy. TRICARE serves more than nine million beneficiaries in 76 military hospitals and 460 clinics around the world that are referred to as military treatment facilities (MTFs) (TRICARE 2002; U.S. Government Accountability Office [USGAO] 2005a). Contractual services are negotiated with the private sector in places where no military facilities exist. A medical school to train physicians for military service—the Uniformed Services University of the Health Sciences—was established in 1972.

Military dependents and retirees, and their dependents and survivors, receive health services through TRICARE, formerly known as the Civilian...
Part I: Introduction

Indian Health Service

The Indian Health Service (IHS), first established as a unit of the War Department in 1802 (Shonick 1995), and now a part of the U.S. Department of Health and Human Services (HHS), provides health services to an estimated 1.5 million of the estimated 2.6 million American Indians and Alaska Natives enrolled in more than 557 tribes, villages, bands, and pueblos throughout the United States. IHS maintains 49 hospitals and 364 health centers in a number of states for its beneficiaries, but may also contract with the private sector for provision of services to individuals who live outside the service areas of these facilities (IHS 2002; USGAO 2005b). Through the Indian Self-Determination Act of 1975, many tribal authorities have assumed responsibility for the provision of health services, contracting with IHS for the funds to support the development and implementation of tribal-specific health plans.

Prison Health Services

No group within the U.S. population has a constitutionally established right to health services. Prison inmates, however, are described by some as having the nearest thing to a constitutional right to care of any population group. This description stems from the provision of services that has resulted from inmate lawsuits claiming the right to care under the auspices of the Eighth Amendment to the U.S. Constitution, which prohibits “cruel and unusual punishment.”

Inmates in federal and state prison systems receive government-funded health services that vary in extent and coverage by individual facility. Prisons may have staff physicians on site, contract for physician services on an as-needed basis with nearby communities, maintain on-site clinics staffed by midlevel practitioners, provide care through the use of telemedicine, or arrange for health services in other ways. Few prisons maintain full-scale inpatient hospital facilities; they obtain such services from nearby communities on an as-needed basis. Dental services may also be provided according to a variety of arrangements.

Correctional facility administrators are concerned about the increasing demand and expenditures for health services due to the aging of the prison population, with more inmates receiving and serving longer sentences. Additional concerns include the incidence of HIV positivity and
AIDS, the increase in tuberculosis and other communicable diseases, the prevalence of chronic diseases in an aging population, the prevalence of mental illnesses, and other serious health problems in an incarcerated population.

Potential Adverse Outcomes Associated with Lack of Access or Unconstrained Access to Health Services

The access-to-health-services model (Figure 3.2) incorporates the potential adverse health outcomes associated with lack of access and excessive access. Having financial access to health services directly affects care-seeking behavior. A lack of health insurance is associated with reduced access to medical care, a lower prevalence of recommended preventive services, potentially avoidable hospitalizations, and subsequently higher mortality independent of other risk factors (Franks, Clancey, and Gold 1993). Uninsured adults and children have fewer provider visits than people with insurance. Uninsured adults use about one-half of the nonemergency ambulatory visits, two-thirds or fewer emergency department visits, and a much smaller fraction of inpatient hospital days—12 percent for men and 20 percent for women—than their insured counterparts. While uninsured children appear to use emergency care on a par with insured children, they still use only 70 percent as much nonambulatory care and are only 25 percent as likely as children with insurance to enter a hospital (Spillman 1992). Children with health insurance gaps are at increased risk of having more than one care site (Kogan et al. 1995), thus jeopardizing continuity of care. They are less likely to receive medical care from a physician, even when it seems reasonably indicated, and are at risk for substantial avoidable morbidity (Stoddard, St. Peter, and Newacheck 1994).

Table 3.2, taken from a 1993 study by Davis et al. (1995), shows that 71 percent of those without insurance postponed seeking care and 34 percent went without care because of financial reasons, in contrast to 23 percent of people with insurance postponing care and 9 percent with insurance going without care because of financial reasons. In a 1992 report, the OTA reported that the uninsured are more than three times as likely as those with private insurance to experience a lower utilization of services, potentially worse health services, and adverse outcomes. The OTA also reported that people with public insurance (Medicaid in particular) are up to two and one-half times more likely than those with private insurance to experience potentially inadequate health services and four times more likely to have an adverse outcome.

Since these seminal studies were reported, others have continued to document the effects of lack of health insurance on health status. A
study by Ayanian et al. (2000) showed that a significantly higher proportion of those who were uninsured for more than one year could not see a physician because of the cost and had no routine checkup within the last two years compared to those who were uninsured less than one year or who had not lost insurance. The Institute of Medicine (IOM) is currently examining the issue and has issued three of a planned series of six reports on the problems of the uninsured in the United States. Members of an expert panel are examining findings from more than 130 research studies. In the report “Care Without Coverage: Too Little, Too Late,” issued in May 2002, the IOM reported that adult health status changes when adults remain uninsured: adults in late middle age (especially between ages 55–65) and adults with low incomes are especially susceptible to deteriorating health if they never had or they lost health coverage (IOM 2002). A study by Baker et al. (2002) corroborates the IOM findings: adults ages 51–61 who lost all health insurance were at increased risk of major declines in overall health and had increased risks of developing a new mobility difficulty within two years of their health insurance coverage losses.

Although it seems a smaller problem when compared to the magnitude of the uninsured population whose access to care is limited, unconstrained access to care may also contribute to, rather than alleviate, health problems. Iatrogenic (physician-induced) illness and nosocomial (hospital-acquired) infections may occur as a result of treatment. Adverse drug interactions are more likely when a patient’s treatment by a range of providers is not coordinated. Despite their widespread use, not all therapies have been proven to be effective. Between one-quarter and one-third of care given to insured people in the United States falls in the inappropriate or equivocal area in which medical benefit does not exceed its risk (Brook 1991). Andrew Booth, with contributions from others, provides a resource guide that analyzes 18 studies to assess what proportion of medical practice is evidence-based (www.shef.ac.uk/scharr/ir/percent.html).

<table>
<thead>
<tr>
<th></th>
<th>Percentage Insured</th>
<th>Percentage Uninsured</th>
<th>Percentage Total U.S. Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postponed seeking care</td>
<td>23</td>
<td>71</td>
<td>30</td>
</tr>
<tr>
<td>Going without care</td>
<td>9</td>
<td>34</td>
<td>13</td>
</tr>
<tr>
<td>because of financial</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>reasons</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SOURCE: Davis et al. 1995.
Access to Health Services for the Uninsured

An estimated 96 percent of people age 65 and older have financial access to health services through the Medicare program, and nearly 84 percent of the population younger than 65 access health services through private health insurance, Medicaid, Medicare (for people with disabilities under age 65 and those with ESRD), private out-of-pocket payments, or government-sponsored programs such as the VA system (USDHHS 2002; Iglehart 2002).

How do people not covered by these programs—an estimated 16 percent of the population younger than 65—get health services when they need them? Who are the uninsured? What are some reasons why people are uninsured? This section addresses these questions.

People who have no health insurance, limited ability to pay out-of-pocket, and limited or no access to other governmental health programs may access care from public hospitals and clinics; neighborhood, community, or migrant health centers; or clinics established by charitable organizations or other volunteers that provide low-cost or no-cost care. Although many of these facilities and the providers who staff them offer comprehensive care, patients may not always be able to avail themselves of it. Thus, such sites may serve as stopgaps, providing urgent or emergency outpatient care, rather than the comprehensive care that a person with insured access to the system can experience. Individuals seeking care in hospital emergency departments are likely to get such care if their situations are truly emergent or to be referred to more appropriate care, in large part because hospitals participating in the Medicare program are required to provide emergency care, regardless of the patient’s ability to pay. Such patients constitute a significant economic burden to hospitals, particularly public hospitals, whose provision of charity care (also called uncompensated care or bad-debt care) may jeopardize their ability to remain financially viable.

Physicians and other providers often provide free or pro bono care to a limited number of patients. Clinics, particularly in inner-city areas, may be established as “free clinics,” providing basic care to all who seek their services, to the extent that their resources permit them to do so. Such clinics may be staffed by volunteer providers, with supplies and other services donated by community members or underwritten by community institutions. Helpful as these free clinics are, they cannot begin to replace a regular source of care for everyone who needs it.

Demographic Characteristics of the Uninsured

Who are the uninsured? Figure 3.6 shows the proportion of the population that is uninsured, by age, gender, race/ethnicity, and poverty level status. The 18- to 44-year-old age group has the highest proportion of uninsured persons. American Indians and Alaska Natives have the highest proportion of uninsured
FIGURE 3.6
No Health Insurance Coverage among Persons <65 Years (2003)
(a) By age group and gender. (b) By race/ethnicity. (c) By federal poverty level (FPL).

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;18</td>
<td>9.8</td>
<td>23.5</td>
</tr>
<tr>
<td>18-44</td>
<td>13.6</td>
<td></td>
</tr>
<tr>
<td>45-54</td>
<td>17.7</td>
<td>15.3</td>
</tr>
<tr>
<td>55-64</td>
<td>10.9</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>White only</td>
<td>16.0</td>
<td></td>
</tr>
<tr>
<td>Black only</td>
<td>18.4</td>
<td></td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>35.0</td>
<td></td>
</tr>
<tr>
<td>Asian only</td>
<td>18.2</td>
<td></td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>34.7</td>
<td></td>
</tr>
</tbody>
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(continued)

persons (35 percent), followed closely by those of Hispanic/Latino ethnicity at 34.7 percent. Rates of uninsurance decrease with increases in income.

Reasons Why People Lack Health Insurance
Individuals lack health insurance for many reasons. They may not have access to employer-sponsored health insurance either because their employer does not offer it or because they are not in the workforce. They may not be able to afford the premiums of an individual health insurance policy. They may
not qualify for Medicare or Medicaid or be eligible for other government-supported health programs, such as military care.

One sometimes-overlooked reason that individuals lack health insurance is that they decline employer-sponsored coverage. Cooper and Schone (1997) found an 8.2 percentage point decrease in the number of workers who accepted health insurance between 1987 and 1996. They attribute this decline to a number of factors, including declining real incomes, especially among workers who are the least likely to have coverage (e.g., healthy young males in the workforce); increasing costs of insurance; rising employee contributions to health insurance premiums; and expansions in Medicaid coverage.

**Initiatives to Expand Financial Access to Health Services**

Despite the fact that arranging for financial access to health services has largely been left to the individual, with the exception of Medicare beneficiaries who have assured access, the public periodically expresses concern that more than one-sixth of the U.S. population has no health insurance and thus has limited access to care. Recommendations for national health insurance were introduced as early as the Roosevelt administration in 1935 (Litman and Robins 1991) and again in 1993 with the unsuccessful Health Security Act (HSA). Such proposals failed for a variety of reasons—not the least of which is the likely increase in federal expenditures to support them.
A range of other proposals, each of which is briefly described in the sections that follow, have been offered in the last several decades, including:

- expanding the Medicare program to include other beneficiaries;
- expanding the Medicaid program to include even more of the uninsured;
- providing health insurance coverage to special populations, such as children;
- creating a single-payer system similar to that in Canada;
- creating risk pools for the uninsurable; and
- establishing statewide health insurance programs.

At the federal level, the Medicaid program has been expanded to cover more of the uninsured (see Appendix 6.2 in Chapter 6), the State Children’s Health Insurance Program was established in 1997, some states have created risk pools for the uninsurable, and a number of states have established statewide health insurance programs. These changes are addressed in Chapter 6.

### Expanding Medicare

The 1993 HSA was one of several proposals to expand eligibility to Medicare. The HSA proposed adding a Part C to Medicare that would provide coverage to many of the uninsured. Expenditure projections and a distaste for a larger governmental role in health services contributed to the defeat of this bill. A different Part C, the Medicare+Choice plan (discussed in Chapters 6 and 19), was added to Title XVIII by the 1997 Balanced Budget Act and has since been replaced by the Medicare Advantage program established by the 2003 Medicare Prescription Drug Improvement and Modernization Act (MMA).

### Expanding Medicaid

Although a broader expansion of Medicaid eligibility has been discussed at the national level, the only action on this idea is occurring at the state level. After years of grassroots development, the state of Oregon was granted a waiver from the Health Care Financing Administration (HCFA—now the Centers for Medicare and Medicaid Services [CMS]) to initiate the Oregon Health Plan, which enrolls people whose incomes are below 100 percent of poverty into the Medicaid program, even if they are not categorically eligible. Oregon proposed even more comprehensive coverage through its state plan, but Oregon voters rejected this expansion in the fall 2002 elections. In January 1994, the state of Tennessee replaced its Medicaid program with TennCare to cover more of the low-income uninsured. Managed care organizations (MCOs) and behavioral health organizations (BHOs) provided care to enrollees through three products: TennCare Medicaid, TennCare Standard, and TennCare Assist (TennCare 2003). The Oregon and Tennessee programs are examples of Medicaid expansions; a number of other states have established similar expansions or are piloting such expansions.
In 1997 Congress added Title XXI to the Social Security Act, creating the State Children’s Health Insurance Program (SCHIP), which provided $40 billion in matching funds to states over ten years to support health insurance coverage for children. States could choose to expand their Medicaid programs, start or augment a separate insurance program for children, or devise a hybrid of these strategies (Demkovich 1997).

Twenty-one states chose to expand their Medicaid programs, 12 to have separate SCHIP programs, and 21 to operate combination programs. Despite slow enrollment starts in many SCHIP programs, by the end of March 2005, 4.4 million children had been enrolled in the SCHIP program at some point during the prior fiscal year (CMS web site). Since 1997, Congress has changed how the SCHIP funds are allocated; between 2002 and 2004, states experienced a 26 percent decline in the amount of federal funds available to them (Ryan 2002).

Canada’s health services system, in which the government serves as the single payer for care, has been proposed as a model for the U.S. system to emulate. The Canadian system achieves a comparable—and some would claim a higher—health status at significantly lower per capita expenditures. The likelihood of the United States following Canada’s lead seems slim for several reasons. One reason is the difference in roles that the health insurance industry holds in the two systems: in the United States, the health insurance industry has been a dominant influence on how the system has developed, whereas the Canadian system has no major counterpart to the U.S. industry. Additionally, the Canadian system, under considerable pressure to change because of increasing expenditures and an oversupply of physicians, imposed controls on physician training and practice sites, the availability of hospital beds, and other services in the late 1990s. More recently, an improving economy and belt tightening by the Canadian federal government has led to the development of budget surpluses. Workforce planning has shifted to programs that encourage increasing the education slots available for nursing and medical students (Canadian Institute for Health Care 2002).

The unsuccessful 1993 HSA proposed several reforms to the health insurance industry, including the establishment of uniform billing and the streamlining of other administrative procedures. Although Congress did not enact the sweeping reforms proposed by the HSA, incremental changes in the industry are occurring. The 1996 Health Insurance Portability and Accountability Act (HIPAA) makes retaining coverage easier for insured people when they leave a job (portability); establishes federal insurance requirements for carriers offering coverage in the individual, small-group, and large-group markets; and imposes specific insurance reforms on self-funded health insurance plans (see Chapter 6).
Part I: Introduction

Creating Risk Pools for Uninsurables

Thirty states have established subsidized health insurance plans for people with chronic conditions or other risk factors that have made them uninsurable (Gates 2002). Health insurance from a state risk pool is likely to be limited in scope and more expensive. It is less likely to cover dependents than private health insurance but fills a crucial health insurance need for those who can afford it.

Establishing Statewide Insurance Programs

Several states have established or are considering the establishment of statewide health insurance programs. Washington’s Basic Health Plan, established in 1988, began as a three-county demonstration insurance plan for low-income residents and expanded statewide in 1993. As of 2002, approximately 124,000 people had enrolled in the basic health plan, with additional slots available for small employer groups that had never before been offered health insurance (Health Care Authority 2003). Massachusetts is the most recent state to establish a health insurance plan. The 2006 Massachusetts legislature passed a universal insurance program that the governor signed into law.

Other Proposals

New proposals for group purchasing—HealthMarts, association health plans (AHPs), health insurance purchasing cooperatives (HIPCs), and multiple employer welfare arrangements (MEWAs)—are emerging (see Chapter 6). How these proposed new products will survive in a complex market remains to be seen. Analysts suggest that these new products warrant cautious and careful consideration but are not likely to produce a significant overall reduction in premiums or an increase in insurance coverage (Hall, Wicks, and Lawlor 2001). Many of these products appear to be eclipsed by newer initiatives, including the interest in consumer-directed health plans (see Chapter 6).

A Focus on Health Disparities

Individuals have differences in health status for a variety of reasons. The determinants of health (see Chapter 2) affect each person differently. Income differences are believed by some to be the most influential factor in differences in health status, or health disparities. Other factors that might influence disparities in health status include demographic factors, such as race/ethnicity and age.

A national focus on health disparities centers on those disparities that can be corrected through improved access or other interventions. The Healthy People 2010 objectives (and prior versions of the objectives) aim to reduce disparities that are amenable to change (USDHHS 2000).
Chapter 3: Access to Health Services

This chapter has focused principally on disparities related to financial access to health services. Figure 3.6 is particularly telling regarding the part of the U.S. population that is uninsured.

Summary

Access to health services has several dimensions—geographic, physical, temporal, sociocultural, and financial—that can ensure or inhibit access to care. Potential access is affected by predisposing factors (age, gender, education, occupation, and race/ethnicity); need factors (perceived health, interpretation of illness, and other health status measures); and enabling factors (convenience, income, insurance coverage, and system characteristics). Of the enabling factors, financial access to care in the United States is usually predicated on insurance coverage, either private or public, or personal income (ability to make out-of-pocket expenditures for care). For those who do not have health insurance, government health programs, such as those sponsored by the Department of Veterans Affairs, Department of Defense, and the Indian Health Service, provide care to eligible populations. People ineligible for health insurance or these governmental health services programs may be able to access care through low-cost or no-cost clinics.

As much as 20 percent of the U.S. population may have limited or no financial access to health services in a given year. This population is at greater risk of morbidity and mortality and frequently presents on an emergency basis with poorer health status than those people who have no financial impediments to receiving care.

Major changes in health insurance, the primary health services financing mechanism in the United States, seem unlikely, given the defeat of the Health Security Act. Instead, incremental reforms, such as those incorporated in the Health Insurance Portability and Accountability Act of 1996, appear to be the most likely to effect change.

Notes

1. Penchansky and Thomas (1981) define the dimensions of access as follows: Availability is the relationship of the volume and type of services (and resources) to the client’s volume and type of needs. It refers to the adequacy of the supply of physicians, dentists, and other providers; of facilities such as clinics and hospitals; and of the specialized programs and services, such as mental health and emergency care. Accessibility is the relationship between the location of
clients, taking account of client transportation resources, travel time, and cost. Accommodation is the relationship between the manner in which the supply resources are organized to accept clients (including appointment times, hours of operation, walk-in facilities, and telephone services), the client’s ability to accommodate to these factors, and the client’s perceptions of their appropriateness. Affordability is the relationship between prices of services and providers’ insurance or deposit requirements to the client’s income, ability to pay, and existing health insurance. The client’s perception of worth relative to total cost is a concern here, as is the client’s knowledge of prices, total cost, and possible credit arrangements. Acceptability is the relationship between clients’ attitudes about personal and practice characteristics of providers to the actual characteristics of existing providers, as well as to provider attitudes about acceptable personal characteristics of clients.

2. Insurance coverage does not, however, guarantee access to care. If providers are unavailable or if they will not accept the insurance company’s payment for services, an insured individual still may not have access to health services.

3. The OTA’s version of the chart, which did not include the final column on potential adverse outcomes associated with excessive access, was based on Aday, Andersen, and Fleming (1980), Weissman and Epstein (1992), Mechanic (1989), and studies reviewed for the interim report.

4. The Supplemental Security Income (SSI) program is a federal cash assistance program for low-income aged and disabled people that has standard eligibility requirements. It was established to replace state-provided cash assistance programs to low-income and aged and disabled people.

5. The focus of this discussion is on prisoners with long-term sentences. Jail inmates who may be awaiting trial or a hearing or who are serving out a short sentence may not be eligible for other than emergency services.
Chapter 3: Access to Health Services

Aid to Families with Dependent Children (AFDC)
Americans with Disabilities Act (ADA) of 1990
association health plans (AHPs)
bad-debt care
behavioral health organizations (BHOs)
Centers for Medicare and Medicaid Services (CMS)
charity care
Civilian Health and Medical Program of the Uniformed Services (CHAMPUS)
co-insurance
copayments
Emergency Maternal and Infant Child Care Program (EMIC)
end-stage renal disease (ESRD)
etitlement programs
Health Care Financing Administration (HCFA)
Health Insurance Portability and Accountability Act (HIPAA)
health insurance purchasing cooperatives (HIPCs)
HealthMarts
Health Security Act (HSA) of 1993
iatrogenic illness
Indian Health Service (IHS)
Indian Self-Determination Act of 1975
Institute of Medicine (IOM)
managed care organizations (MCOs)
Medicaid
Medicare (Parts A and B)
Medicare+Choice plans
Medicare Prescription Drug Improvement and Modernization Act (MMA)
multiple employer welfare arrangements (MEWAs)
nosocomial infection
Office of Technology Assessment (OTA)
Oregon Health Plan
out-of-pocket payment
portability of health insurance
preexisting condition
private health insurance
public/social health insurance
single payer system
Supplemental Security Income (SSI)
TennCare
uncompensated hospital care
Uninsured Services University of the Health Sciences (USUHS)
uninsurable
uninsured
U.S. Department of Defense (DOD)
U.S. Department of Health and Human Services (HHS)
U.S. Department of Veterans Affairs (VA)
Washington Basic Health Plan
References


