

Chapter 3

Public Health and the Health System

LEARNING OBJECTIVES

Given a prevalent health problem (disease or condition), incorporate strategies of health-related and illness-related interventions impacting through each of the three levels of prevention in a plan to prevent further spread of the disease/condition and minimize its effects to the greatest extent possible. Key aspects of this competency expectation include being able to

- Describe three or more major issues that make the health system a public health concern
- Identify five intervention strategies directed toward health and illness
- Identify and describe three levels of preventive interventions
- Describe the approximate level of national expenditures for all health and medical services and for the population-based and public health activity components of this total
- Cite important economic, demographic, and utilization dimensions of the health sector
- Access and utilize current data and information resources available through the Internet's World Wide Web characterizing the roles and interests of key stakeholders in the health sector

After more than 5 decades of discussion, debate, and inaction later, significant health reform finally came to the health system in the United States in the second decade of the 21st century. Some believe it was too much, too quickly. Others found it too little and too late. The Patient Protection and Affordable Care Act (P.L. 111-148, more commonly known as the Affordable Care Act or “Obamacare”) was enacted in 2010 with its major provisions to be implemented piecemeal over the ensuing decade. The extent to which the Affordable Care Act addresses the major problems and issues facing the health system in the United States rests in large part on what those problems and issues were, are, and will be. This chapter picks up where the previous chapter left off—with influences on health. The influences

to be examined in this chapter, however, are the interventions and services available through the health system.

The relationship between public health and other health-related activities has never been clear. Some of the lack of clarity may be the result of the several different images of public health described previously, but certainly not all. In addition to the health system remaining poorly understood by the American public, there are different views among health professionals and policymakers as to whether public health is part of the health system or whether it is a separate, parallel enterprise. Most agree that these entities serve the same ends but disagree as to the balance between the two and the locus for strategic decisions and actions. The issue of ownership—which entity's leadership and strategies will predominate—underlies these different perspectives. In this text, the term health system will refer to all aspects of the organization, financing, and provision of programs and services for the prevention and treatment of illness and injury. Public health activities are an important component of this larger health system and, indeed, the entire health system serves the health of the public. This view differs from the image that most people have of our health system; the public commonly perceives the health system to include only the medical care and treatment aspects of the overall system.

Although their relationship may not be clear, there is ample cause for public health interest in the health system. Perhaps most compelling is the sheer size and scope of the U.S. health system, characteristics that have made the health system as much an ethical as an economic issue. More than 15 million workers and \$3.0 trillion in resources are devoted to health-related purposes.¹ However, this huge investment in fiscal and human resources may not be accomplishing what it can and should in terms of health outcomes. Lack of access to needed health services for an alarming number of Americans and inconsistent quality have been contributing to less than optimal health outcomes. Although access and quality have long been public health concerns, costs associated with excess capacity within the health system has emerged as another important issue for public health.

This chapter examines the U.S. health system from several perspectives that consider the public health implications of costs and affordability, as well as several other important public policy and public health questions:

- Does the United States have a rational strategy for investing its resources to maintain and improve people's health?
- Does the current strategy inequitably limit access to and benefit from needed services?
- Is the health system accountable to its end-users and ultimate payers for the quality and results of its services?
- Are the changes occurring from recent health reform legislation (Affordable Care Act) bringing meaningful reform to the U.S. health system?

It is these issues of health, excess, access, accountability, and quality that make the health system a public health concern.

Complementary, even synergistic, efforts involving medicine and public health are apparent in many of the important gains in health outcomes achieved during the 20th century. Underlying these synergies is an appreciation that a successful health system deploys and integrates a variety of strategies and activities that

differ in terms of their strategic intent, level of prevention, relationship to medical and public health practice, and community or individual focus. Key economic, demographic, and resource trends will then be briefly presented as a prelude to understanding important themes and emerging paradigm shifts. New opportunities afforded by sweeping changes in the health system will be apparent in the review of these issues.

OUTSIDE-THE-BOOK THINKING 3-1

Great debate: This debate examines contributors to improvement in health status in the United States since 1900. There are two propositions to be considered. Proposition A: Public health interventions are responsible for these improvements. Proposition B: Medical care interventions are responsible for these improvements. Select one—and only one—of these positions and present a compelling argument.

PREVENTION AND HEALTH SERVICES

Improved health status in the United States over the past 100+ years is due to a variety of intervention strategies and services.² Key relationships among health, illness, and various interventions intended to maintain or restore health are illustrated in Figure 3-1. Wellness and illness are dynamic states that are influenced by a wide

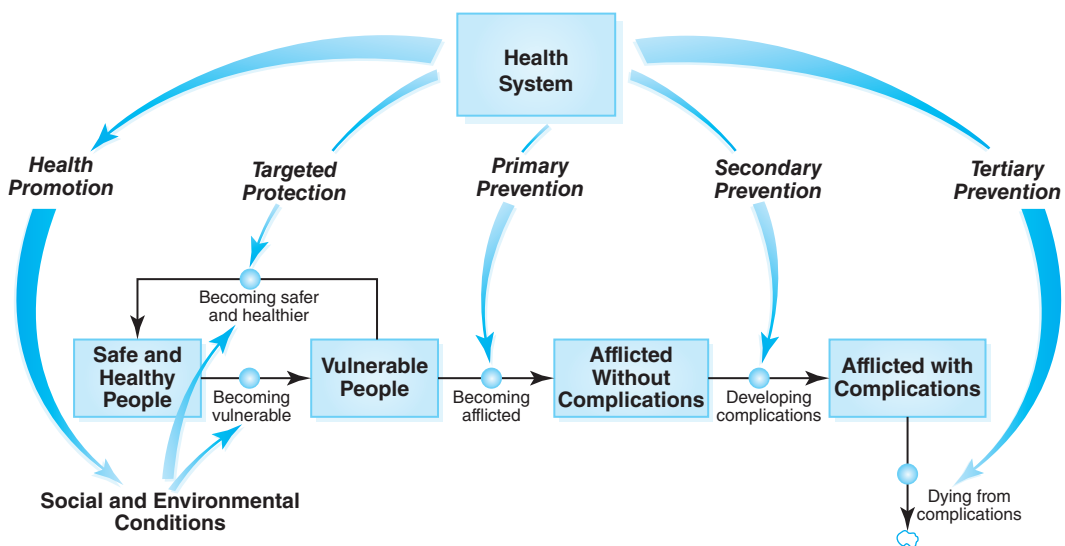


Figure 3-1 Public health intervention strategies and effects.

Adapted from U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Syndemic Prevention Network, 2008.

variety of biologic, environmental, behavioral, social, cultural, and health service factors that interact within a social-ecological framework. The complex interaction of these factors contributes to the occurrence or absence of disease or injury, which, in turn, contributes to the health status and well-being of individuals and populations.

Several different intervention points are possible, including two general strategies—health promotion and specific protection—that seek to maintain health by intervening prior to the development of disease or injury.³ Each involves activities that alter the interaction of the various health-influencing factors in ways that either avert or alter the occurrence of disease or injury.

Health Promotion and Specific Protection

Health promotion activities attempt to modify human behaviors to reduce those known to affect adversely the ability to resist disease or injury-inducing factors, thereby eliminating exposures to harmful factors. Examples of health promotion activities include interventions such as nutrition counseling, genetic counseling, family counseling, and the myriad activities that constitute health education. However, health promotion also properly includes the provision of adequate housing, employment, and recreational conditions, as well as other forms of community development activities. What is clear from these examples is that many fall outside the common understanding of what constitutes health care. Several of these are viewed as the duty or responsibility of other societal institutions, including public safety, housing, education, and even business. It is somewhat ironic that activities that focus on the state of health and that seek to maintain and promote health are not commonly perceived to be “health services.” To some extent, this is also true for the other category of health-maintaining strategies—specific protection activities.

Specific protection activities provide individuals with resistance to factors (such as microorganisms like viruses and bacteria) or modify environments to decrease potentially harmful interactions of health-influencing factors (such as toxic exposures in the workplace). Examples of specific protection include activities directed toward specific risks (e.g., the use of protective equipment for asbestos removal), immunizations, occupational and environmental engineering, and regulatory controls and activities to protect individuals from environmental carcinogens (such as exposure to secondhand or side-stream smoke) and toxins. Several of these are often identified with settings other than traditional healthcare settings. Many are implemented and enforced through governmental agencies.

Early Case Finding and Prompt Treatment, Disability Limitation, and Rehabilitation

Although health promotion and specific protection focus on the healthy state and seek to prevent disease, a different set of strategies and activities is necessary after disease or injury occurs. In such circumstances, the appropriate strategies are those facilitating early detection, prompt treatment, or rehabilitation, depending on the stage of development of the disease.

In general, early detection and prompt treatment reduce individual pain and suffering and are less costly to both the individual and society than treatment initiated after a condition has reached a more advanced state. Interventions to achieve early detection and prompt treatment include screening tests, case-finding efforts, and periodic physical exams. Screening tests are increasingly available to detect illnesses before they become symptomatic. Case-finding efforts for both infectious and non-infectious conditions are directed at populations at greater risk for the condition on the basis of criteria appropriate for that condition. Periodic physical exams and other screenings, such as those consistent with the age-specific recommendations of the U.S. Preventive Health Services Task Force, incorporate these practices and are best provided through an effective primary medical care system.⁴ Primary care providers who are sensitive to disease patterns and predisposing factors can play substantial roles in the early identification and management of most medical conditions.

Another strategy targeting disease is disease management through effective and complete treatment. It is these activities that most Americans equate with the term health care, largely because this strategy constitutes the lion's share of the U.S. health system in terms of resource deployment. Quite appropriately, these efforts largely aim to arrest or eradicate disease and to limit disability and prevent death. The final intervention strategy focusing on disease—rehabilitation—is designed to return individuals who have experienced a condition to the maximum level of function consistent with their capacities.

Links with Prevention

An important aspect of this view of the health system is that it emphasizes the potential for prevention inherent in each of the five health intervention strategies. Prevention can be categorized in several ways. The best-known approach classifies prevention in relation to the stage of the disease or condition.

Preventive intervention strategies are considered primary, secondary, or tertiary. Primary prevention involves prevention of the disease or injury itself, generally through reducing exposure or risk factor levels. Secondary prevention attempts to identify and control disease processes in their early stages, often before signs and symptoms become apparent. In this case, prevention is akin to preemptive treatment. Tertiary prevention seeks to prevent disability through restoring individuals to their optimal level of functioning after damage is done.

The relationship of the five health intervention strategies to the three levels of prevention is also illustrated in Figure 3-1. Health promotion and specific protection are primary prevention strategies seeking to prevent the development of disease. Early case finding and prompt treatment represent secondary prevention, because they seek to interrupt the disease process before complications occur. Disease management and rehabilitation are considered tertiary-level prevention in that they seek to prevent or reduce disability associated with disease or injury. Although these are considered tertiary prevention, they receive primary attention under current policy and resource deployment.

Figure 3-2 further illustrates each of the three levels of prevention strategies in relation to population disease status and effect on disease incidence and prevalence. The various potential benefits from the three prevention levels derive from

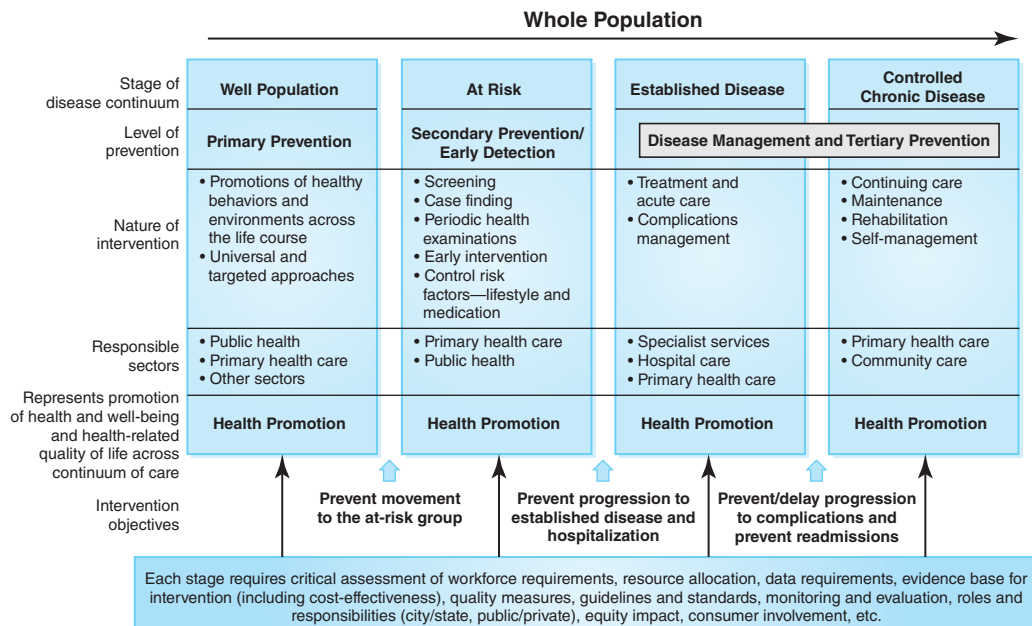


Figure 3-2 Comprehensive model of chronic disease prevention and control.

Modified from National Public Health Partnership. Preventing Chronic Disease: A Strategic Framework [Background paper]; 2001.

the basic epidemiologic concepts of incidence and prevalence. Prevalence (the rate of existing cases of illness, injury, or a health event) is a function of both incidence (the rate of new cases) and duration. Reducing either incidence or duration can lower prevalence. Primary prevention aims to reduce the incidence of conditions, whereas secondary and tertiary prevention seek to reduce prevalence by shortening duration and minimizing the effects of disease or injury. It should be apparent that there is a finite limit to how much a condition’s duration can be reduced. As a result, approaches emphasizing primary prevention have greater potential benefit than do approaches emphasizing other levels of prevention. The importance of the differential impact of prevention and treatment approaches to a particular health problem or condition cannot be overstated.

These same considerations are pertinent to the concept of postponement of morbidity as a prevention strategy. Increased life expectancy without postponement of morbidity may actually increase the burden of illness within a population, as measured by prevalence. However, postponement may result in the development of a condition so late in life that it results in either no or less disability in functioning.

Within this framework for considering intervention strategies aimed at health or illness, the potential for prevention as an element of all strategies is clear. There are substantial opportunities to use primary and secondary prevention strategies to improve health in general and reduce the burden of illness for individuals and for society. As noted in the discussion of measuring population health, reducing the

burden of illness carries the potential for substantial cost savings. These concepts serve to promote a more rational intervention and investment strategy for the U.S. health system.

OUTSIDE-THE-BOOK THINKING 3-2

Select an important health problem (disease or condition) and describe interventions for this problem across the five strategies of health-related and illness-related interventions (health promotion, specific protection, early detection, disability limitation, and rehabilitation) discussed in this chapter.

Links with Public Health and Medical Practice

Another useful aspect of this view of the health system is in its allocation of responsibilities for carrying out the various interventions. Three practice domains can be roughly delineated: public health practice, medical practice, and long-term care practice.³ This framework assigns public health practice primary responsibility for health promotion, specific protection, and a good share of early case finding. It is important to note that the concept of public health practice here is a broad one that accommodates the activities carried out by many different types of health professionals and workers, not only those working in public health agencies. Although many of these activities are carried out in public health agencies of the federal, state, or local government, many are not. Public health practice occurs in voluntary health agencies, as well as in settings such as schools, social service agencies, industry, and even traditional medical care settings. In terms of prevention, public health practice embraces all of the primary prevention activities in the model, as well as some of the activities for early diagnosis and prompt treatment.

The demarcations between public health and medical practice are neither clear nor absolute. In recent decades, public health practice has been extensively involved in screening and has become an important source of primary medical care for populations with diminished access to care.

The mix of population-based and personal health services considered to represent public health practice varies over time and by location and history. The essential public health services framework largely focuses on population-based activities, including monitoring health status, investigating health problems and hazards, informing and educating people about health issues, mobilizing community partnerships, developing policies and plans, enforcing laws and regulations, ensuring a competent workforce, evaluating effectiveness and quality of services, and researching for new insights and solutions. One of these essential public health services, however, focuses on personal health services by linking people with needed health services and ensuring the provision of health care when it is otherwise unavailable.

Even as public health practice has branched into personal health services, medical practice continues to provide the major share of primary care services to most segments of the population. Medical practice—those services usually provided by or

Table 3-1 Healthcare Pyramid Levels

- Tertiary Medical Care
 - Subspecialty referral care requiring highly specialized personnel and facilities
- Secondary Medical Care
 - Specialized attention and ongoing management for common and less frequently encountered medical conditions, including support services for people with special challenges due to chronic or long-term conditions
- Primary Medical Care
 - Clinical preventive services, first-contact treatment services, and ongoing care for commonly encountered medical conditions
- Population-Based Public Health Services
 - Interventions aimed at disease prevention and health promotion that shape a community's overall health profile

Reproduced from U.S. Public Health Service. *For a Healthy Nation: Return on Investments in Public Health*. Hyattsville, MD: PHS; 1994.

under the supervision of a physician or other traditional healthcare provider—have long been viewed as including three levels as depicted in Table 3-1. Primary medical care has been variously defined but generally focuses on the basic health needs of individuals and families. It is first-contact health care in the view of the patient; provides at least 80% of necessary care; includes a comprehensive array of services, on site or through referral, including health promotion and disease prevention, as well as curative services; and is accessible and acceptable to the patient population. This comprehensive characterization of primary care differs substantially from what is commonly encountered as primary care in the U.S. health system. Often lacking from current so-called primary care services are those relating to health promotion and disease prevention.

Modern concepts of disease management have evolved from efforts to provide a more integrated approach to healthcare delivery in order to improve health outcomes and reduce costs, often for defined populations such as Medicaid enrollees. Disease management focuses on identifying and proactively monitoring high risk populations, assisting patients and providers to adhere to treatment plans that are based on proven interventions, promoting provider coordination, increasing patient education, and preventing avoidable medical complications.

Beyond primary medical care are two more specialized categories of care that are often termed secondary and tertiary care. Secondary care is specialized care serving the major share of the remaining 20% of the need that lies beyond the scope of primary care. Physicians or hospitals generally provide secondary care, ideally upon referral from a primary care source. Tertiary medical care is even more highly specialized and technologically sophisticated medical and surgical care for those with unusual or complex conditions (generally no more than a few percent of the need in any service category). Tertiary care is characteristically provided in large medical centers or academic health centers.

Long-term care is appropriately classified separately because of the special needs of the population requiring such services and the specialized settings where many of

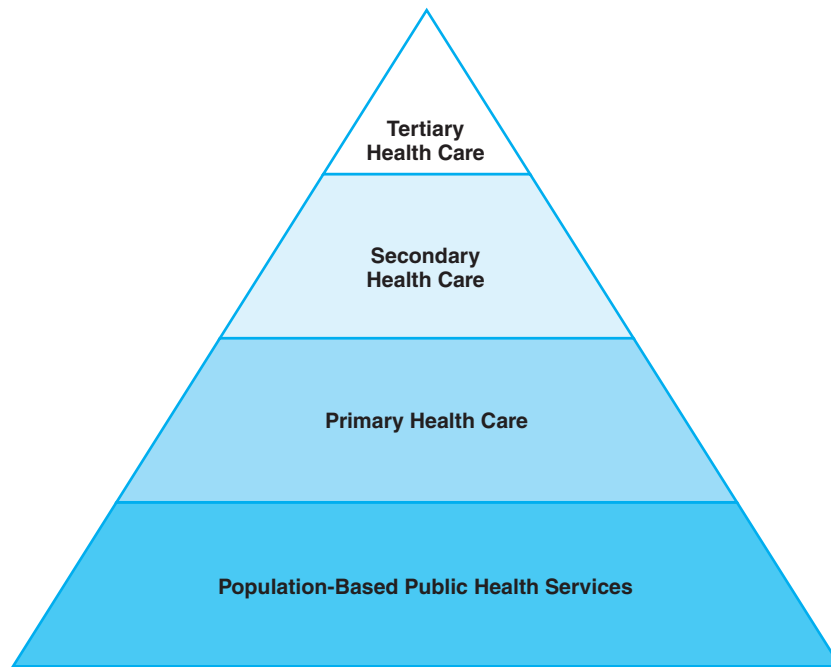


Figure 3-3 Health services pyramid.

Reproduced from U.S. Public Health Service. *For a Healthy Nation: Return on Investments in Public Health*. Washington, DC: PHS; 1994.

these services are offered. This, too, is changing as specialized long-term care services increasingly move out of long-term care facilities and into home and community settings.

These three levels of healthcare services are often portrayed as the upper tiers of a pyramid with population-based public health services included as a fourth tier, as illustrated in Figure 3-3. In this pyramid, primary prevention is largely represented by the bottom tier and secondary prevention activities are largely included in primary medical care. Tertiary prevention activities fall largely in the secondary and tertiary medical care components of the pyramid. The use of a pyramid to represent health services implies that each level serves a different proportion of the total population. Everyone should be served by population-wide public health services, and nearly everyone should be served by primary medical care. However, increasingly smaller proportions of the total population require secondary- and tertiary-level medical care services. This formulation suggests that the medical services should be built on a foundation of population-based services and that the system of services, like a pyramid, should be constructed from the bottom up. It would not be rational to build a pyramid or a health system from the top down; there might not be enough resources to address the lower levels that served the vast majority of the population. Nonetheless, there is ample evidence in later sections of this chapter that this is exactly what has occurred with the U.S. health system. An alternative

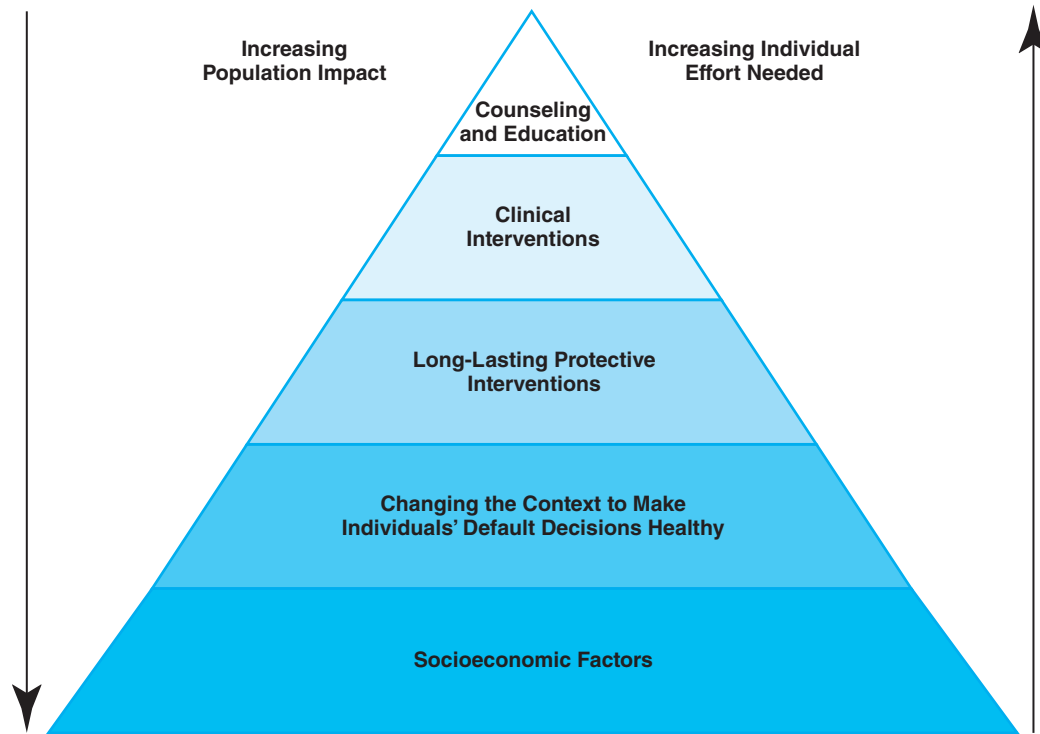


Figure 3-4 Health impact pyramid

Reproduced from A framework for public health action: the health impact pyramid. Fiedler TR. *Am J Public Health*. 2010 April; 100(4): 590–595. doi: 10.2105/AJPH.2009.185652

perspective to the health services pyramid, the health impact pyramid presented in Figure 3-4, suggests a more rational design for a health system.

Targets of Health Service Strategies

A final facet of this health system framework characterizes the targets for the various strategies and activities. Generally, primary preventive services are community-based and targeted toward populations or groups rather than individuals. Early case-finding activities can be directed toward groups or toward individuals. For example, many screening activities target groups at higher risk when these are provided through public health agencies. The same screening activities can also be provided for individuals through physicians' offices and hospital outpatient departments. Much of primary and virtually all of secondary and tertiary medical care is appropriately individually oriented. It should be noted that there is a concept, termed community-oriented primary care, in which primary care providers assume responsibility for all of the individuals in a community, rather than only those who seek out care from the provider. Even in this model, however, care is provided on an individual basis. Long-term care involves elements of both

community-based service and individually oriented service. These services are tailored for individuals but often in a group setting or as part of a package of services for a defined number of recipients, as in a long-term care facility.

Public Health and Medical Practice Interfaces

This framework also sheds light on the potential conflicts between public health and medical practice. Although the two are described as separate domains of practice, there are many interfaces that provide a template for either collaboration or conflict. Both paths have been taken over the past century. Public health practitioners have traditionally deferred to medical practitioners for providing the broad spectrum of services for disease and injuries in individuals. Medical practitioners have generally acknowledged the need for public health practice for health promotion and specific protection strategies. The interfaces raise difficult issues. For example, for one specific protection activity—childhood immunizations—the extensive role of public health practice may actually have served to fragment health services for children. It would be logical to provide these services within a well-functioning primary care system, where they could be better integrated with other services for this population. Despite occasional differences as to roles, in most circumstances, medical practice has supported the role of public health to serve as the provider of last resort in ensuring medical care for persons who lack financial access to private health care. This, too, has varied over time and from place to place.

OUTSIDE-THE-BOOK THINKING 3-3

What are the most critical issues facing the healthcare system in the United States today? Before answering this question, see what insights you can find at the web sites of these major health organizations: American Medical Association (www.ama-assn.org), American Hospital Association (www.aha.org), American Nurses Association (www.ana.org), and the Association of American Medical Colleges (www.aamc.org).

Advances in bacteriologic diagnoses in public health laboratories, for example, fostered friction between medical practitioners and public health professionals for diseases such as tuberculosis and diphtheria that were often difficult for clinicians to identify from other common but less serious maladies. Clinicians feared that laboratory diagnoses would replace clinical diagnoses and that, in highly competitive medical markets, paying patients would abandon private physicians for public health agencies.

Some of the most serious conflicts have come in the area of primary care services, including early case-finding activities. Because of the increased yield of screening tests when these are applied to groups at higher risk, public health practice has sought to deploy more widely risk group or community case-finding methods (including outreach and linkage activities). This has, at times, been perceived by medical practitioners as encroachment on their practice domain for certain primary

care services, such as prenatal care. Although there has been no rule that public health practice could not be provided within the medical practice domain and vice versa, the perception that these are separate, but perhaps unequal, territories has been widely held by both groups.

It is important to note that this territoriality is not based only on turf issues. There are significant differences in the world views and approaches of these two domains. Medical practice quite properly seeks to produce the best possible outcome through the development and execution of individualized treatment plans. Seeking the best possible outcome for an individual suggests that decisions are made primarily for the benefit of that individual. Costs and resource availability are secondary considerations. Public health practice, on the other hand, seeks to deploy its limited resources to avoid the worst outcomes at the group or population level. Some level of risk is tolerated at the collective level to prevent an unacceptable level of adverse outcomes from occurring. These are quite different approaches to practice: maximizing individual positive outcomes, as opposed to minimizing adverse collective outcomes. As a result, differences in perspective and philosophy often underlie differences in approaches that initially appear to be concerns over territoriality.

An example that illustrates these differences is apparent in approaches to widespread use of human immunodeficiency virus (HIV) antibody testing in the mid- and late 1980s. Medical practitioners perceived that HIV antibody testing would be very useful in clinical practice and that its widespread use would enhance case finding. As a result, medical practitioners generally opposed restrictions on use of these tests, such as specific written informed consent and additional confidentiality provisions. Public health practitioners perceived that widespread use of the test without safeguards and protections would actually result in fewer persons at risk being tested and decreased case finding in the community. With both groups focusing on the same science in terms of the accuracy of the specific testing regimen, these differences in practice approaches may be difficult to understand. However, in view of their ultimate aims and concerns as to individual versus collective outcomes, the conflict is more understandable.

Perspectives and roles may differ for public health and medical practice, but both are important and necessary. The real question is how best to blend these approaches for purposes of improving health status throughout the population. There is sufficient cause to question current policy and investment strategies. Table 3-2 examines the potential contributions of various strategies (personal responsibility, healthcare services, community action, and social policies) toward reducing the impact of the actual causes of death discussed previously. This table suggests that more medical care services are not as likely to reduce the toll from these causes as are public health approaches (community action and social policies). Yet, there are opportunities available through the current system and perhaps even greater opportunities in the near term as the system seeks to address the serious problems that have brought it to the brink of major reform.

Medicine and Public Health Collaborations

The need for a renewed partnership between medicine and public health generated several promising initiatives in the final years of the 20th century. Just as

Table 3-2 Actual Causes of Death in the United States and Potential Contribution to Reduction

Causes	Deaths		Potential Contribution to Reduction*			
	Estimated No.	%	Personal	Healthcare System	Community Action	Social Policy
Tobacco	435,000	19	++++	+	+	++
Diet/activity patterns	400,000	14	+++	+	+	++
Alcohol	85,000	5	+++	+	+	+
Microbial agents	75,000	4	+	++	++	++
Toxic agents	55,000	3	+	+	++	++++
Motor vehicles	43,000	1	++	+	+	++
Firearms	29,000	2	++	+	+++	+++
Sexual behavior	20,000	1	++++	+	+	+
Illicit use of drugs	20,000	<1	+++	+	++	++

*Plus sign indicates relative magnitude (4+ scale).

Data from Fielding J, Halfon L. Where is the health in health system reform? *JAMA*. 1994;272:1292–1296 and Mokdad AH, Marks JS, Stroup DF, Gerberding JL. Actual causes of death in the United States, 2000. *JAMA*. 2004;291:1238–1245.

bacteriology brought together public health professionals and practicing physicians at the turn of the 20th century to battle diphtheria and other infectious diseases, technology and economics may become the driving forces for a renewed partnership at the dawn of the 21st century. In pursuit of this vision, the American Medical Association and the American Public Health Association established the Medicine/Public Health Initiative to provide an ongoing forum to define mutual interests and promote models for successful collaborations. As a result of this initiative, a variety of collaborations developed, foreshadowing several important components of the Affordable Care Act.⁵

Collaborations between public health and hospitals have also gained momentum. Even prior to the enactment of the Affordable Care Act in 2010, hospitals and managed care organizations had begun to pursue community health goals, at times in concert with public health organizations and at other times filling voids that exist at the community level. In many parts of the United States, hospitals play a leading role in organizing community health planning activities. More frequently, however, they participate as major community stakeholders in health planning efforts organized through the local public health agency. A variety of positive interfaces with managed care organizations have been documented. Hospital boards and executives now commonly include community benefit objectives in their annual performance evaluations. Examples of community health strategies include:

- Establishing “boundary spanner” positions that report to the chief executive officer but focus on community-wide, rather than institutional, interests

- Changing reward systems in terms of salaries and bonuses that executives and board members linked to the achievement of community health goals
- Educating staff on the mission, vision, and values of the institution, and linking these with community health outcomes
- Exposing board to the work of community partners
- Engaging board members with the staff and community
- Reporting on community health performance (report cards)⁶

THE HEALTH SYSTEM IN THE UNITED STATES

This section does not attempt to provide a comprehensive view of the health system in the United States. The intent here is to examine those aspects of the health industry and health system that interface with public health or raise issues of public health significance, with a special focus on the problems of the system that are fueling reform and change. Data from the *Health United States* series, published annually by the National Center for Health Statistics, will be used throughout these sections to describe the economic, demographic, and resource aspects of the American health system.

Economic Dimensions

The health system in the United States is immense and growing steadily, as illustrated in Figure 3-5. Total national health expenditures in the United States doubled in the first dozen years of the 21st century to over \$2.8 trillion, four times the sum expended in 1990 and 10 times more than in 1980. Health expenditures are on a pace to reach \$4.5 trillion by the year 2020. In order to understand how public health interfaces with other components of the health system in the United

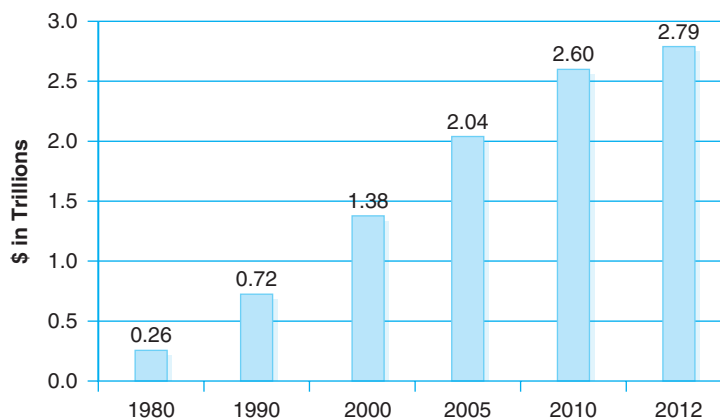


Figure 3-5 National health expenditures, United States, selected years, 1980–2012.

Data from Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group.

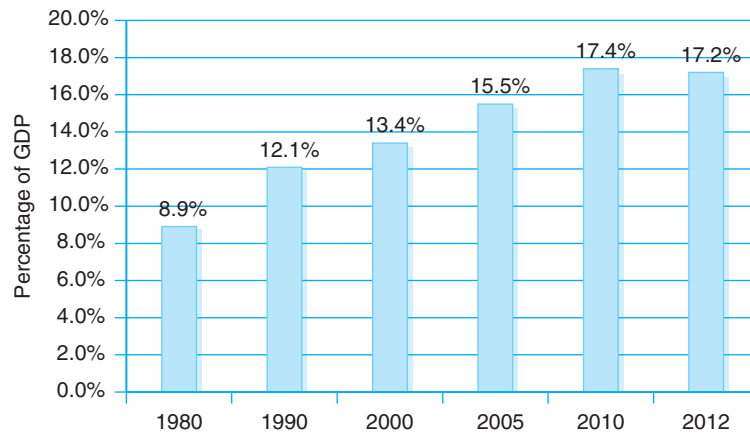


Figure 3-6 Percentage of national gross domestic product (GDP) expenditures spent for health-related purposes, United States, selected years, 1980–2012.

Data from Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group; U.S. Department of Commerce, Bureau of Economic Analysis.

States, it is important to consider the context in which these interactions take place—the health sector of modern America. The first decade of the new century witnessed weak economic growth and employment in the United States until the economy deteriorated even further into the recession of 2008–2009. Nonetheless, through periods of both economic prosperity and retrenchment, the health sector has remained a powerful component of the overall U.S. economy accounting for more than one-sixth of the total national gross domestic product (GDP) in 2012. Figure 3-6 traces the growth in health expenditures as a proportion of GDP.

The United States spends a greater share of its GDP on health care than any other industrialized nation. Health expenditures in the United Kingdom and Japan are about one-half and in Germany and Canada about two-thirds the United States figure. Per capita expenditures on health show the same pattern, with United States per capita spending on health more than twice that of Germany, Canada, Japan, and the United Kingdom. Several factors, illustrated in Figure 3-7, suggest that this is too much; such as (1) the current system is reaching the point of no longer being affordable; (2) the U.S. population is no healthier than other nations that spend far less; and (3) the opportunity costs are considerable.

Figures 3-8 and 3-9 trace where the money comes from and what it purchases in the U.S. health system. Expenditures for personal healthcare services comprise 85% of all health expenditures. A little more than one-half of the nation's health expenditures (52%) pay for hospital, physician, and other clinical services; 5% goes for nursing home care, 9% purchases prescription drugs, and 7% supports program administration. Another 24% covers a wide array of other services, including oral health, home health care, durable medical products, over-the-counter medicines, other personal care, research, and facilities, with only 3% devoted to government public health activities (about \$75 billion in 2012).

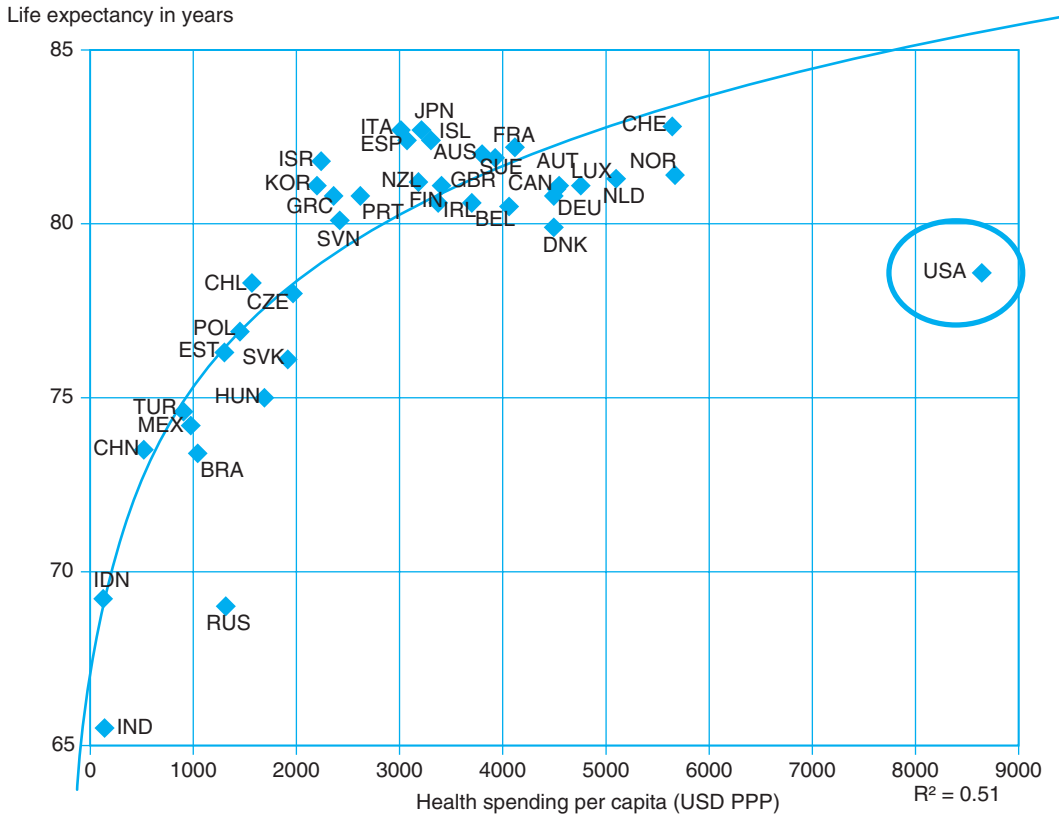


Figure 3-7 Life expectancy at birth and health spending per capita, United States and other OECD countries, 2011 (or nearest year).

Reproduced from OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>; World Bank for non-OECD countries.

There are three main sources for overall national health expenditures, which include government at all levels, private health insurance, and individuals paying out of pocket. Steadily increasing costs for health services have hit all three sources in their pocketbooks, and each is reaching the point at which further increases may not be affordable. The largest single purchaser of health care in the United States is the federal government, but for all three sources, the ultimate payers are individuals as taxpayers, employees, and consumers. Individuals and families covered by health insurance plans have been experiencing a steady increase in the triple burden of higher premiums, increased cost sharing, and reduced benefits. Health reform provisions of the Affordable Care Act seek to address some of these concerns as we will encounter in later sections of this chapter.

Only limited historical information is available on expenditures for prevention and population-based public health services. A study using 1988 data estimated that total national expenditures for all forms of health-related prevention (including

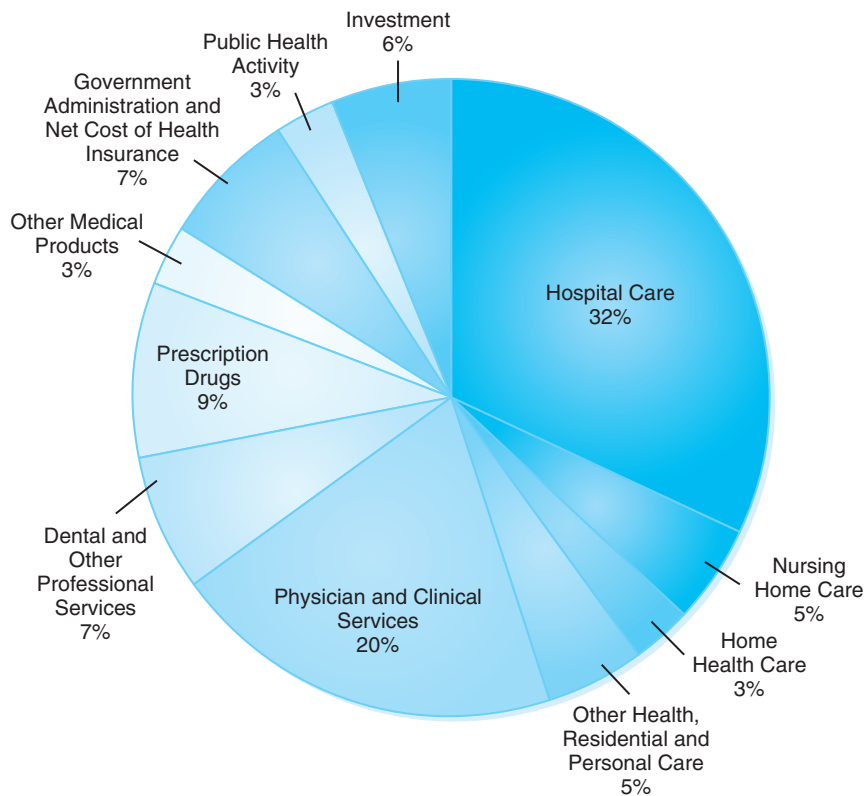


Figure 3-8 Health services purchased by national health expenditures, United States, 2012. Data from Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group.

clinical preventive services provided to individuals and population-based public health programs, such as communicable disease control and environmental protection) amounted to \$33 billion.⁷ The analysis sought to include all activities directed toward health promotion, health protection, disease screening, and counseling. Included in this total, however, was \$14 billion for activities not included in the calculation of national health expenditures (such as sewage systems, water purification, and air traffic safety). The remaining \$18 billion in prevention-related health expenditures that was included in the calculation of total national health expenditures represented only 3.4% of all national health expenditures for that year. The share of these expenditures that represents population-based public health services cannot be determined precisely from this study but appears to be in the \$6 billion to \$7 billion range for 1988.

As part of the development of a national health reform proposal in 1994, federal officials developed an estimate of national health expenditures for population-based

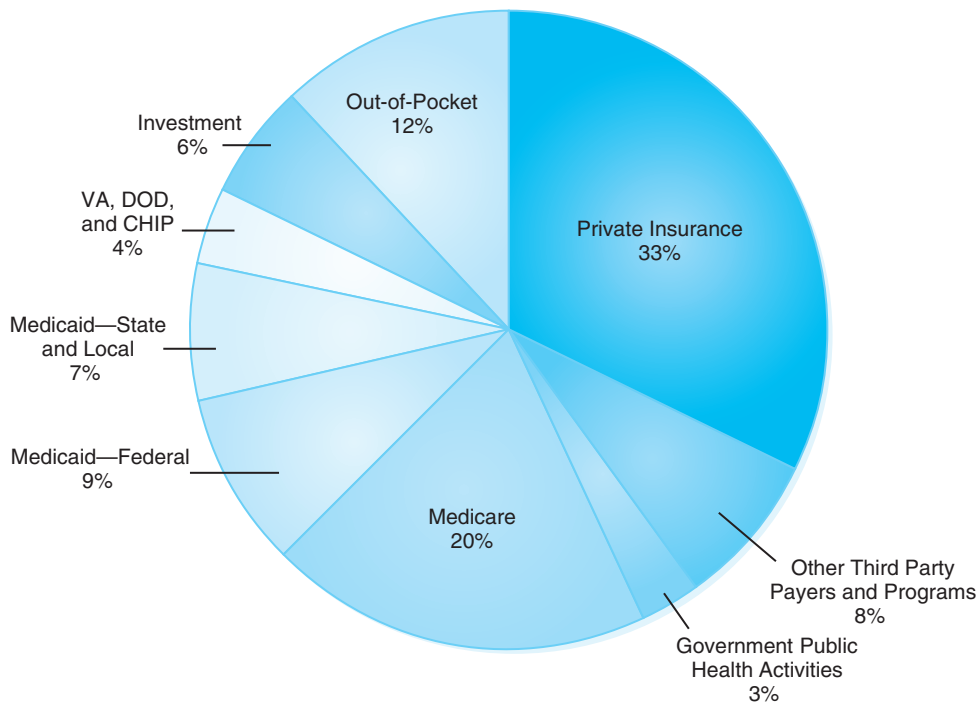


Figure 3-9 Sources of funding for national health expenditures, United States, 2012.

Data from Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group.

services.⁸ On the basis of expenditures in 1993, this analysis concluded that about 1% of all national health expenditures (\$8.4 billion) supported population-based programs and services. U.S. Public Health Service (PHS) agencies spent \$4.3 billion for population-based services in 1993, and state and local health agencies expended another \$4.1 billion. PHS officials estimated that achieving an “essential” level of population-based services nationwide would require doubling 1993 expenditure levels to \$17 billion and that achieving a “fully effective” level would require tripling the 1993 levels to \$25 billion.

The 1994 national health reform effort likely undercounted population-based public health activity expenditures by state and local governments. The results from a comprehensive examination of public health-related expenditures in nine states for 1994 and 1995, together with federal public health activity spending for 1995, suggest that national population-based public health spending totaled \$13.8 billion in that year.

Data from the National Health Accounts identify government public health activity as a distinct category within total national health expenditures. The public health activity category captures the bulk of public health spending funded by government agencies, although it excludes spending for several personal services programs widely considered to be important public health services, such as maternal

and child health, public hospitals, substance abuse prevention, and mental health services. Environmental health activities provided through environmental protection agencies are also excluded. Nonetheless, the government public health activity category within the annual national health expenditures total provides useful insights into general public health funding trends over time. Government public health activity spending was \$75 billion in 2012, \$11 billion from the federal level, and \$64 billion from state and local governments. Figure 3-10 documents the ten-fold increase in federal, state and local, and total government public health activity expenditures from 1980 through 2012.

Adjustments to public health activity expenditures are necessary in order to more accurately reflect the full array of activities included in the essential public health services framework, which includes the provision of personal health services when otherwise unavailable in addition to a battery of population-based activities. Figure 3-10 includes an estimate of total essential public health services expenditures developed by adding spending for mental health and substance abuse prevention, maternal and child health services, school health, and public hospitals to the public health activity category in the national health expenditures. For 2012, estimated essential public health services expenditures were \$120 billion, about two times greater than in 2000 and three times more than in 1990.

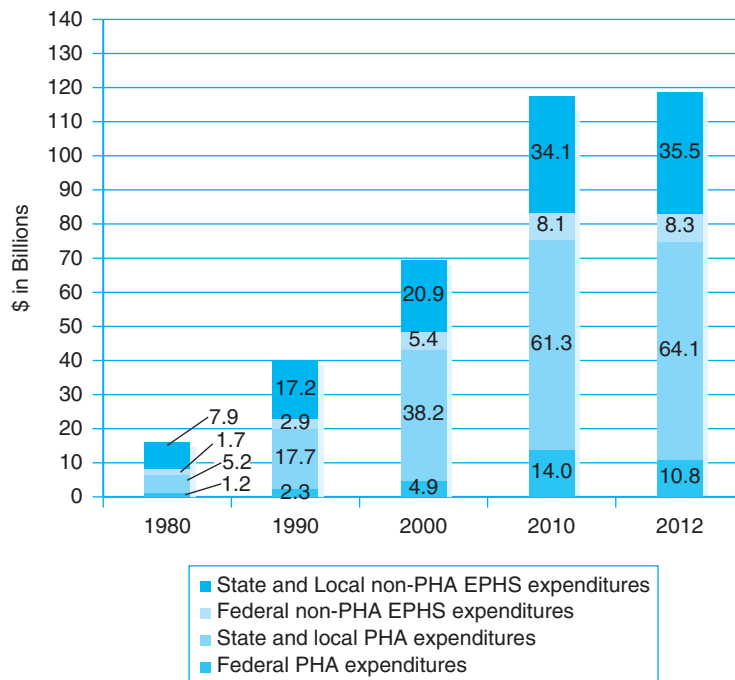


Figure 3-10 Public health activity (PHA) and essential public health services (EPHS) expenditures by government level, United States, selected years, 1980–2012.

Data from Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group.

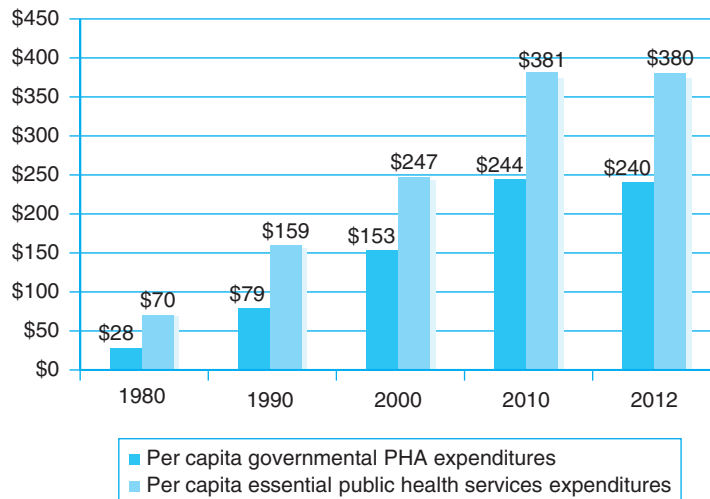


Figure 3-11 Per capita governmental public health activity and essential public health services expenditures, United States, selected years, 1980–2012.

Data from Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group.

A subset of overall public health activity expenditures supports population-based public health activities. Methods for estimating population-based public health expenditures, derived from studies completed in the mid-1990s, suggest that national population-based public health expenditures represent only about 1% of total national health expenditures.⁹

On a per capita basis, expenditures for essential public health services and overall governmental public health activities increased by 5–8 times between 1980 and 2012 (Figure 3-11). Nonetheless, per capita public health expenditures represented only a tiny fraction of total per capita health spending (\$9,500 per person) in the United States in 2012. That share was only 4.3% (\$380 per capita) for total essential public health services spending and 2.6% (\$240 per capita) for governmental public health activity spending in that year (Figure 3-12).

OUTSIDE-THE-BOOK THINKING 3-4

Is an ounce of prevention still worth a pound of cure in the United States? If not, what is the relative value of prevention in comparison with treatment?

Macroeconomic trends, however, tell only part of the story. The disparities between rich and poor have also been growing, leaving an increasing number of Americans without financial access to many healthcare services. These and other

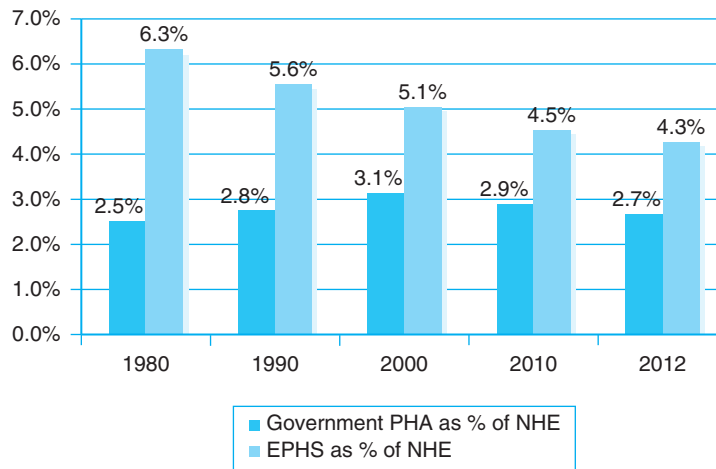


Figure 3-12 Expenditures for essential public health services and government public health activity as a percent of total health spending, United States, selected years, 1980–2012.

Data from Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group.

important aspects will be examined as we review the demands on and resources of the U.S. health system.

Demographic and Utilization Trends

Several important demographic trends affect the U.S. healthcare system. These include the slowing population growth rate, the shift toward an older population, the increasing diversity of the population, changes in family structure, and persistent lack of access to needed health services for too many Americans. The relative prevalence of particular diseases is another demographic phenomenon but will not be addressed here, although recent history with diseases such as HIV infections and H1N1 influenza illustrates how specific conditions can place increasing demands on fragile healthcare systems.

Census studies document that the growth of the U.S. population has been slowing, a trend that would be expected to restrain future growth in demand for healthcare services. However, this must be viewed in light of the projected changes in the age distribution of the U.S. population that are illustrated in Figure 3-13. Between 2000 and 2030, the population older than age 65 and older than 85 will double, whereas the younger age groups will grow little, if at all.

There is no evidence that excessive utilization or overuse of services contributes significantly to the high cost of health care in the United States. Underuse of care is actually a greater problem than overuse. Quality reviews consistently document that patients fail to receive recommended care almost half the time and that only about 10% of the time do they receive additional care that is not recommended for their specific health problem or condition.¹⁰ Use of healthcare services, in general,

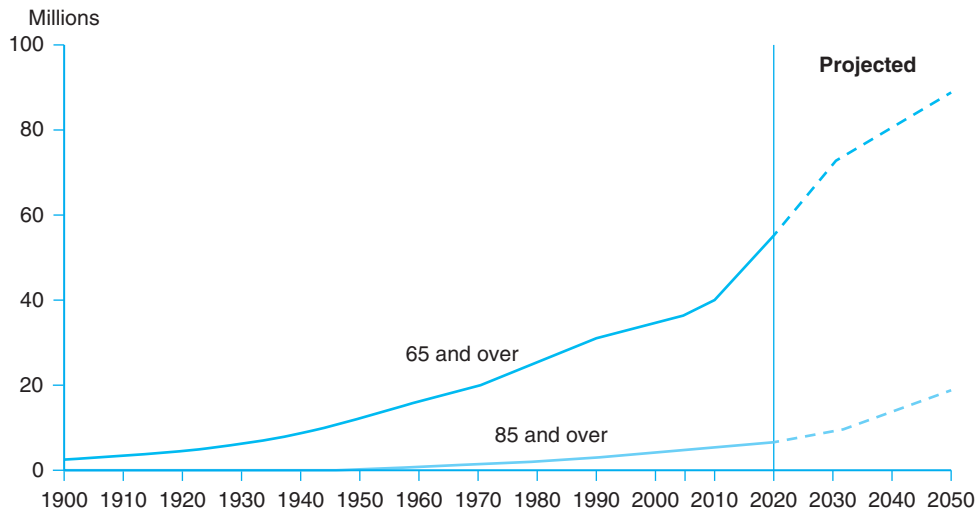


Figure 3-13 Population age 65 and over and age 85 and over, selected years, 1900–2010 and projected 2020–2050.

Reproduced from Federal Interagency Forum on Aging-Related Statistics. Available at www.agingstats.gov. Accessed June 28, 2014. Data from U.S. Census Bureau, 1900 to 1940, 1970, and 1980, U.S. Census Bureau, 1983, Table 42; 1950, U.S. Census Bureau, 1953, Table 38; 1960, U.S. Census Bureau, 1964, Table 155; 1990, U.S. Census Bureau, 1991, 1990 Summary Table File; 2000, U.S. Census Bureau, 2001, Census 2000 Summary File 1; U.S. Census Bureau, Table 1: Intercensal Estimates of the Resident Population by Sex and Age for the U.S.: April 1, 2000 to July 1, 2010 (US-EST00INT-01); U.S. Census Bureau, 2011, 2010 Census Summary File 1; U.S. Census Bureau, Table 2: Projections of the population by selected age groups and sex for the United States: 2010–2050 (NP2008-t2).

is closely correlated with the age distribution of the population. For example, adults age 75 years and older visit physicians three to four times as frequently as do children younger than age 17. Because older persons utilize more healthcare services than do younger people, their expenditures are higher. Obvious reasons for the higher utilization of healthcare resources by the elderly include the high prevalence of chronic conditions, such as arteriosclerosis, cerebrovascular disease, diabetes, senility, arthritis, and mental disorders. As the population ages, it is expected that the prevalence of chronic disorders and the treatment costs associated with them will also increase. This could be minimized through prevention efforts that either avert or postpone the onset of these chronic diseases. Nonetheless, these important demographic shifts portend greater demand for healthcare services in the future.

Another important demographic trend is the increasing diversity of the population. The nonwhite population is growing three times faster than the white population, and the Hispanic population is increasing at five times the rate for the entire U.S. population. Between 1980 and 2000, Hispanics increased from 6.4% to 12.5% of the U.S. population, while the number of Asian/Pacific Islanders more than doubled from 1.6% to 3.7%. The white population declined from 79.7% to 69.1% of the total population over these 2 decades. Figure 3-14 projects these trends for-

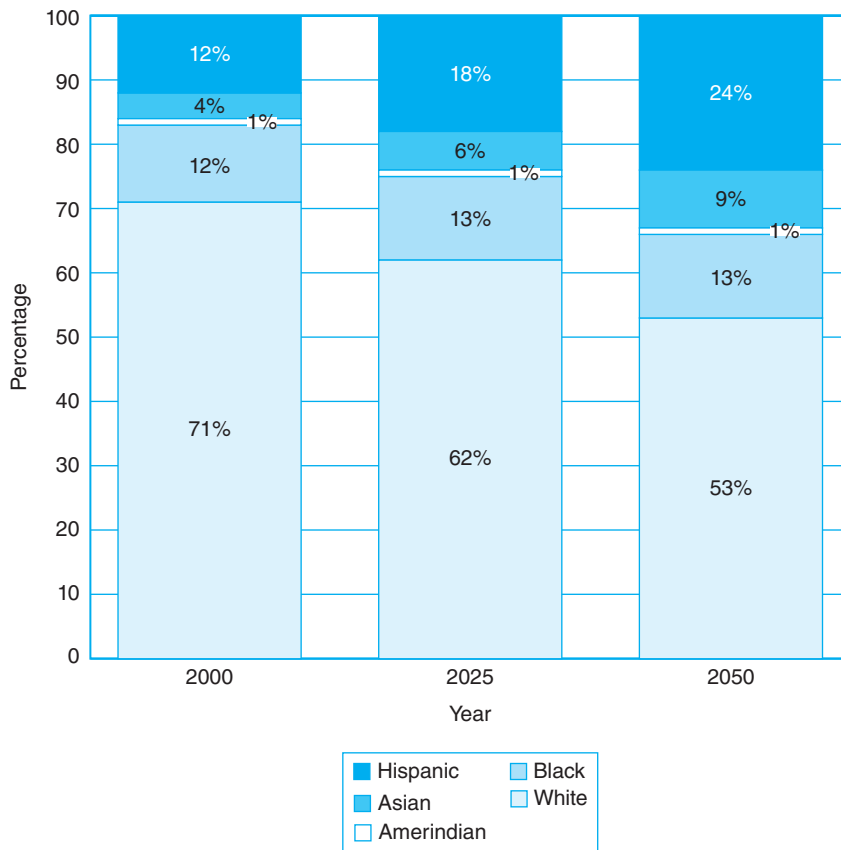


Figure 3-14 Current and projected racial and ethnic composition of U.S. population, 2000, 2025, 2050.

Data from U.S. Census Bureau, 2001.

ward through mid-century. Notably, these trends reflect differences in fertility and immigration patterns and disproportionately affect the younger age groups, suggesting that services for mothers and children will face considerable challenges in their ability to provide culturally sensitive and acceptable services. This scenario also underscores the importance of cultural competence skills for health professionals. Cultural competence is a set of behaviors and attitudes, as well as a culture within an institution or system that respects and takes into account the cultural background, cultural beliefs, and values of those served and incorporates this into the way services are delivered. At the same time, the considerably less diverse baby boom generation will be increasing its ability to affect public policy decisions and resource allocations in the early decades of the 21st century.

Changes in family structure also represent a significant demographic trend in the United States. There is only a 50% chance that married partners will reach their 25th anniversary. One in three children live part of their lives in a one-parent

household; for black children, the chances are two in three. Labor force participation for women has more than doubled over the past 50 years. Even more indicative of gender changes in the labor market, the proportion of married women in the workforce with children under age 5 has been increasing in recent decades. Many American households have maintained their economic status over the recent decades with the second paycheck from women in the workforce. As the structure of families diversifies, so do their needs for access, availability, and even types of services (such as substance abuse, family violence, and child welfare services).

Intermingled with many of these trends are the persistent inequalities in access to services for low-income populations, including blacks and Hispanics. For example, despite higher rates of self-reported fair or poor health and greater utilization of hospital inpatient services, low-income persons are substantially less likely to report physician contacts within the past 2 years than are persons in high-income households. Utilization rates for prenatal care and childhood immunizations are also lower for low-income populations.

Healthcare Resources

The supply of healthcare resources is another key dimension of the healthcare system. During the past quarter-century, the number of active U.S. physicians increased by more than two-thirds, with even greater increases among women physicians and international medical graduates. The specialty composition of the physician population also changed during this period, as a result of many factors, including changing employment opportunities, advances in medical technology, and the availability of residency positions. Suffice it to say that medical and surgical subspecialties grew more rapidly than did the primary care specialties. Projections suggest that the 21st century will see a substantial shortage of primary care physicians even while there will be a surplus of physicians trained in the surgical and medical specialties. A continuing shortage of registered nurses has reached crisis proportions in many regions of the United States.

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Healthcare delivery models have also experienced major changes in recent years. For example, hospital-based resources have changed dramatically. Since the mid-1970s, the number of community hospitals has decreased, and the numbers of admissions, days of care, average occupancy rates, and average length of stay have all declined, as well. On the other hand, the number of hospital employees per 100 average daily patients has continued to increase. Hospital outpatient visits have also been increasing since the mid-1970s.

The growth in the number and types of healthcare delivery systems in recent years is another reflection of a rapidly changing healthcare environment. Increasing competition, combined with cost containment initiatives, has led to the proliferation of group medical practices, health maintenance organizations, preferred provider organizations, ambulatory surgery centers, and emergency centers. Common to many of these delivery systems since the early 1990s have been managed care strategies designed to control the utilization of services. Elements of managed care strategies generally include some combination of the following:

- Risk sharing with providers to discourage the provision of unnecessary diagnostic and treatment services and, to some degree, to encourage preventive measures

- To attract specific groups, designing of tailored benefit packages that include the most important (but not necessarily all) services for that group; cost sharing for some services through deductibles and copayments can be built into these packages
- Case management, especially for high-cost conditions, to encourage seeking out of less expensive treatments or settings
- Primary care gatekeepers, generally the enrollee's primary care physician, who control referrals to specialists
- Second opinions as to the need for expensive diagnostic or elective invasive procedures
- Review and certification for hospitalizations, in general, and hospital admissions through the emergency department, in particular
- Continued-stay review for hospitalized patients as they reach the expected number of days for their illness (as determined by diagnosis-related groupings)
- Discharge planning to move patients out of hospitals to less expensive care settings as quickly as possible¹¹

The growth and expansion of these delivery systems has significant implications for the cost of, access to, and quality of health services. These, in turn, have substantial impact on public health organizations and their programs and services. The majority of the U.S. population is now served through a managed care organization, and that share continues to increase.

CHANGING ROLES, THEMES, AND PARADIGMS IN THE HEALTH SYSTEM

Even a cursory review of the health sector requires an examination of the key participants or key players in the health industry. The list of major stakeholders has been expanding as the system has grown and now includes government, business, third-party payers, healthcare providers, drug companies, and labor, as well as consumers. The federal government has become the largest purchaser of health care and, along with business, has attempted to become a more prudent buyer by exerting more control over payments for services. Government seeks to reduce rising costs by altering the economic performance of the health sector through stimulation of a more competitive healthcare market. At the same time, efforts to expand access through Medicaid and state child health insurance programs and isolated state initiatives toward universal coverage require more, not less, governmental spending. Still, budget problems at all levels make it increasingly difficult for government to fulfill commitments to provide healthcare services to the poor, the disadvantaged, and the elderly. Over recent years, new and expensive medical technology, inflation, and unexpected increases in utilization forced third parties to pay out more for health care than they anticipated when premiums were determined. As a result, insurers have joined government in becoming more aggressive in efforts to contain healthcare costs. Many commercial carriers deploy methods to anticipate utilization more accurately and to control outlays through managed care strategies. Business, labor, patients, hospitals, and professional organizations are all trying to restrain costs while maintaining access to health services.

Reducing the national deficit and balancing the federal budget rely in part on controlling costs within Medicare and Medicaid, as well as in discretionary

federal health programs. Except for Medicare, such efforts are likely to be politically popular, even though the public has little understanding of the federal budget. For example, a 1994 poll found that Americans believe healthcare costs comprise 5% of the federal budget, although these costs actually constituted 16% at the time.¹² At the same time, Americans believed that foreign aid and welfare comprise 27% and 19%, respectively, of the federal budget when, in fact, they constituted only 2% and 3%, respectively. When the time comes to balance the federal budget and reduce the national deficit, the American public faces difficult choices as to which programs can be reduced. Public health programs, largely discretionary spending, may not fare well in this scenario.

As these stakeholders search for methods to reduce costs and as competition intensifies, efforts to preserve the quality of health care have become increasingly important. An Institute of Medicine study concluded that medical errors account for as many deaths each year as motor vehicle crashes and breast cancer.¹³ Despite the difficulty in measuring quality of medical care, it is likely that quality measurement systems will increase substantially.

Almost certainly, health policy issues will become increasingly politicized. The debate on healthcare issues will continue to expand beyond the healthcare community. Many health policy issues may no longer be determined by sound science and practice considerations, but rather by political factors. Changes in the health sector may lead to unexpected divisions and alliances on health policy issues.

The intensity of economic competition in the health sector is likely to continue to increase because of the increasing supply of healthcare personnel and because of the changes in the financing of care. Increased competition is likely to cause realignments among key participants in the healthcare sector, often depending on the particular issue involved. Dialogue and debate among the major stakeholders in the health system will be influenced by the tension between cost containment and regulation; the interdependence of access, quality, and costs; the call for greater accountability; and the slow but steady acceptance of the need for health reform.

The failure of health reform at the national policy level in 1994 did not avert the implementation of significant improvements in both the public or the private components of the health sector. With or without major changes in national health policies, the health system in the United States has been reforming itself incrementally for decades. With the persistence of cost and access as the system's twin critical problems, new approaches and models were both needed and expected. The federal, as well as state, governments have moved to control the costs of Medicaid services, primarily through attempts to enroll nondisabled Medicaid populations into capitated managed care programs. The rapid conversion of Medicaid services to managed care operations and the growth of private managed care organizations pose new issues for the delivery of clinical preventive and public health services.¹¹ These changes will likely result in fewer clinical preventive and treatment services being provided through public health agencies, but the extent and impact of these shifts is uncertain.

In any event, the underlying investment strategy of the U.S. health system appears to have changed little over recent decades, with more than 95% of the available resources allocated for treatment services, approximately 4% for essential public health services, and a scant 1% for population-based public health services.

Without additional investment in prevention and public health approaches, the long-term prospects for controlling costs within the U.S. health system are bleak. The health reform package enacted in 2010 was a significant step toward universal coverage and meaningful health reform, especially in terms of reducing barriers to access for the 45 million Americans on the fringes of the system and who otherwise would continue to incur excessive costs when they inappropriately accessed needed services. Universal access remains a prerequisite for eventual control of costs. Although the Affordable Care Act addressed a variety of health insurance gaps and abuses, it did relatively little to shift the balance in the U.S. health system from treatment to prevention. Table 3-3 offers a scorecard on the implementation of key Affordable Care Act (also known as Obamacare) components through 2014.

Although progress along the road to reform has been painfully slow, there is evidence that a paradigm shift is already under way. The Pew Health Professions Commission, among other authorities, argues that the American healthcare system of the 21st century will be quite different from its 1990s counterpart. The 21st century health system will be:

- More managed, with better integration of services and financing
- More accountable to those who purchase and use health services
- More aware of and responsive to the needs of enrolled populations
- More able to use fewer resources more effectively
- More innovative and diverse in how it provides for health
- More inclusive in how it defines health
- Less focused on treatment and more concerned with education, prevention, and care management
- More oriented to improving the health of the entire population
- More reliant on outcomes data and evidence¹⁴

These gains, however, will likely be accompanied by pain. The number of hospitals may decline by as much as 50% and the number of hospital beds by even more than that. There will be continued expansion of primary care in community and other ambulatory settings; this will foster replication of services in different settings, a development likely to confuse consumers. These forces also suggest major traumas for the health professions, with projected deficits of some professions, such as nurses and dentists, and surpluses of others, such as physicians and pharmacists.¹⁴ An estimated 100,000–150,000 excess physicians, mainly specialists, could be joined by several hundred thousand excess nurses as the hospital sector consolidates and by as many as 40,000 excess pharmacists as drug dispensing is automated and centralized. The massive fragmentation among 200 or more allied health fields will likely cause consolidation into multiskilled professions to meet the changing needs of hospitals and other care settings. One of the few professions likely to flourish in this environment will be public health, with its focus on populations, information-driven planning, collaborative responses, and broad definition of health and health interventions.

Where these forces will move the health system is not yet known. To blend better the contributions of preventive and treatment-based approaches, several important changes are needed. There must be a new and more rational

TABLE 3-3 Timeline and Implementation Status of Selected Affordable Care Act Health Reform Provisions

Affordable Care Act Provision	
✓ = in effect	
Year	* = delayed or not yet implemented
<i>2010</i>	
✓	Requires the federal government to create a process, in conjunction with states, where insurers have to justify unreasonable premium increases. Provides grants to states for reviewing premium increases.
✓	Appropriates \$5 billion for fiscal years 2010 through 2014 and \$2 billion for each subsequent fiscal year to support prevention and public health programs.
✓	Provides a \$250 rebate to Medicare beneficiaries who reach the Part D coverage gap in 2010. Further subsidies and discounts that ultimately close the coverage gap begin in 2011.
✓	Provides tax credits to small employers with no more than 25 employees and average annual wages of less than \$50,000 that provide health insurance for employees. Phase I (2010–2013): tax credit up to 35% (25% for nonprofits) of employer cost; Phase II (2014 and later): tax credit up to 50% (35% for nonprofits) of employer cost if purchased through an insurance Exchange for 2 years.
✓	Imposes additional requirements on nonprofits hospitals to conduct community needs assessments and develop a financial assistance policy and impose a tax of \$50,000 per year for failure to meet these requirements.
✓	Creates a state option to provide Medicaid coverage to childless adults with incomes up to 133% of the federal poverty level. (States will be required to provide this coverage in 2014.)
✓	Creates a temporary program to provide health coverage to individuals with preexisting medical conditions who have been uninsured for at least 6 months. The plan will be operated by the states or the federal government.
✓	Creates the National Prevention, Health Promotion, and Public Health Council to develop a national prevention, health promotion, and public health strategy.
✓	Extends dependent coverage for adult children up to age 26 for all individual and group policies.
✓	Prohibits individual and group health plans from placing lifetime limits on the dollar value of coverage, rescinding coverage except in cases of fraud, and from denying children coverage based on preexisting medical conditions or from including preexisting condition exclusions for children. Restricts annual limits on the dollar value of coverage (and eliminates annual limits in 2014).
✓	Requires new health plans to provide at a minimum coverage without cost-sharing for preventive services rated A or B by the U.S. Preventive Services Task Force, recommended immunizations, preventive care for infants, children, and adolescents, and additional preventive care and screenings for women.
✓	Permanently authorizes the federally qualified health centers and NHSC programs and increases funding for FQHCs and for the NHSC for fiscal years 2010–2015.

TABLE 3-3 Timeline and Implementation Status of Selected Affordable Care Act Health Reform Provisions (Continued)

Affordable Care Act Provision	
Year	✓ = in effect * = delayed or not yet implemented
2011	
✓	Requires health plans to report the proportion of premium dollars spent on clinical services, quality, and other costs and provide rebates to consumers if the share of the premium spent on clinical services and quality is less than 85% for plans in the large group market and 80% for plans in the individual and small group markets.
✓	Provides a 10% Medicare bonus payment for primary care services; also, provides a 10% Medicare bonus payment to general surgeons practicing in health professional shortage areas.
✓	Eliminates cost-sharing for Medicare-covered preventive services that are recommended (rated A or B) by the U.S. Preventive Services Task Force and waives the Medicare deductible for colorectal cancer screening tests; authorizes Medicare coverage for a personalized prevention plan, including a comprehensive health risk assessment.
✓	Creates a new Medicaid state option to permit certain Medicaid enrollees to designate a provider as a health home and provides states taking up the option with 90% federal matching payments for 2 years for health home-related services.
✓	Provides 3-year grants to states to develop programs to provide Medicaid enrollees with incentives to participate in comprehensive health lifestyle programs and meet certain health behavior targets.
*	Provides grants for up to 5 years to small employers that establish wellness programs. <ul style="list-style-type: none"> • Funds have yet to be awarded due to budget debates related to the Prevention and Public Health Fund
✓	Requires disclosure of the nutritional content of standard menu items at chain restaurants and food sold from vending machines.
2012	
✓	Allows providers organized as accountable care organizations (ACOs) that voluntarily meet quality thresholds to share in the cost savings they achieve for the Medicare program.
✓	Requires private individual and group health plans to provide a uniform summary of benefits and coverage (SBC) to all applicants and enrollees. The intent is to help consumers compare health insurance coverage options before they enroll and understand their coverage once they enroll.
✓	Requires enhanced collection and reporting of data on race, ethnicity, sex, primary language, disability status, and for underserved rural and frontier populations.
2013	
✓	Provides a one percentage point increase in federal matching payments for preventive services in Medicaid for states that offer Medicaid coverage with no patient cost sharing for services recommended (rated A or B) by the U.S. Preventive Services Task Force and recommended immunizations.

(continues)

TABLE 3-3 Timeline and Implementation Status of Selected Affordable Care Act Health Reform Provisions (*Continued*)

Affordable Care Act Provision	
✓ = in effect	
Year	* = delayed or not yet implemented
✓	Increases Medicaid payments for primary care services provided by primary care doctors to 100% of the Medicare payment rate for 2013 and 2014 (financed with 100% federal funding).
✓	Creates the Consumer Operated and Oriented Plan (CO-OP) to foster the creation of nonprofit, member-run health insurance companies.
✓	Extends authorization and funding for the Children's Health Insurance Program (CHIP) through 2015 (current authorization is through 2013).
2014	
✓	Expands Medicaid to all individuals not eligible for Medicare under age 65 (children, pregnant women, parents, and adults without dependent children) with incomes up to 138% FPL and provides enhanced federal matching payments for new eligibles.
✓	Allows all hospitals participating in Medicaid to make presumptive eligibility determinations for all Medicaid-eligible populations.
✓	Requires U.S. citizens and legal residents to have qualifying health coverage (there is a phased-in tax penalty for those without coverage, with certain exemptions). <ul style="list-style-type: none"> States were given latitude to let people renew insurance policies that fail to meet the law's benefits standards, so that consumers may buy such policies until October 2016 and keep them for 1 year after that.
✓	Creates state-based American Health Benefit Exchanges and Small Business Health Options Program (SHOP) Exchanges, administered by a governmental agency or nonprofit organization, through which individuals and small businesses with up to 100 employees can purchase qualified coverage. Exchanges will have a single form for applying for health programs, including coverage through the Exchanges and Medicaid and CHIP programs. <ul style="list-style-type: none"> Online enrollment via SHOPS delayed until November 2014 although small businesses could get coverage directly from an insurer or an insurance agent or broker before online enrollment becomes available. Implementation of requirement that SHOPS offer two plans delayed until 2015.
✓	Provides refundable and advanceable tax credits and cost sharing subsidies to eligible individuals. Premium subsidies are available to families with incomes between 133–400% of the federal poverty level to purchase insurance through the Exchanges, while cost sharing subsidies are available to those with incomes up to 250% of the poverty level.
✓	Requires guarantee issue and renewability of health insurance regardless of health status and allows rating variation based only on age (limited to a 3 to 1 ratio), geographic area, family composition, and tobacco use (limited to 1.5 to 1 ratio) in the individual and the small group market and the Exchanges.

TABLE 3-3 Timeline and Implementation Status of Selected Affordable Care Act Health Reform Provisions (Continued)

Affordable Care Act Provision	
✓ = in effect	
Year	* = delayed or not yet implemented
✓	Prohibits annual limits on the dollar value of coverage.
✓	Creates an essential health benefits package that provides a comprehensive set of services, limiting annual cost-sharing to the Health Savings Account limits (\$5,950/individual and \$11,900/family in 2010). Creates four categories of plans to be offered through the Exchanges, and in the individual and small group markets, varying based on the proportion of plan benefits they cover.
*	Permits states the option to create a Basic Health Plan for uninsured individuals with incomes between 133–200% FPL who would otherwise be eligible to receive premium subsidies in the Exchange. <ul style="list-style-type: none"> • Implementation delayed until 2015.
*	Assesses a fee of \$2,000 per full-time employee, excluding the first 30 employees, on employers with more than 50 employees that do not offer coverage and have at least one full-time employee who receives a premium tax credit. Employers with more than 50 employees that offer coverage but have at least one full-time employee receiving a premium tax credit, will pay the lesser of \$3,000 for each employee receiving a premium credit or \$2,000 for each full-time employee, excluding the first 30 employees. <ul style="list-style-type: none"> • Implementation date moved to: January 1, 2015 for employers with 50–99 employees. • Implementation date moved to January 1, 2016 for employers with 100 or more employees.
✓	Permits employers to offer employees rewards of up to 30%, potentially increasing to 50%, of the cost of coverage for participating in a wellness program and meeting certain health-related standards; establishes 10-state pilot programs to permit participating states to apply similar rewards for participating in wellness programs in the individual market.
2016	
*	Permits states to form healthcare choice compacts and allows insurers to sell policies in any state participating in the compact. <ul style="list-style-type: none"> • Scheduled implementation date: January 1, 2016
2018	
*	Imposes an excise tax on insurers of employer-sponsored health plans with aggregate expenses that exceed \$10,200 for individual coverage and \$27,500 for family coverage. <ul style="list-style-type: none"> • Scheduled implementation date: January 1, 2018

Modified from Kaiser Family Foundation, Kaiser Commission on Medicaid and the Uninsured and Health Care Marketplace Project. Available at <http://kff.org/interactive/implementation-timeline/>. Accessed March 10, 2014.

understanding of what is meant by “health services.” This understanding must include a broad view of health promotion and health protection strategies and must afford these equal standing with treatment-based strategies. Once and for all, health services must be seen to include services that focus on health, as well as those that focus on ill health. The health status of a population is determined by a complex set of considerations which include social determinants that reflect the fundamental causes of many societal ills operating within a social-ecological model of health and illness. Those considerations are very much the focus of the population-focused public health and prevention interventions. A second and companion change needed is to finance this enhanced basic benefit package from the same source, rather than funding public health and most prevention from one source (government resources) and treatment and the remaining prevention activities from private sources (business, individuals, insurance). With these changes, a gradual reallocation of resources can move the system toward a more rational and effective investment strategy.

OUTSIDE-THE-BOOK THINKING 3-5

Which problems and issues of the health system are improved by the Affordable Care Act? Which are not? What forces are most likely to fuel further movement toward major health system reform in America?

Organizations and systems that are unable to achieve their primary objectives and outcomes often justify their existence in terms of how well they do the things they are doing. Our health system is a prime example of this phenomenon. In such cases, the original outcome (here, improved health status) is displaced by a focus on how well the means to that end (the availability of complex and sophisticated services) are being executed. Processes displace outcomes as the prime purpose or mission for that entity. Instead of “doing the right things” to affect health status, the system focuses on “doing things right” (regardless of whether they actually affect population health status). This outcome displacement allows the United States to boast having the best medical care services in the world while having an inadequate health system.

CONCLUSION

Every day in America, decisions are made that influence the health status of individuals and populations. The aggregate of these decisions and the activities necessary to carry them out constitute our health system. It is important to view interventions as linked with health and illness states, as well as with the dynamic processes and multiple factors that move an individual from one state to another. Preventive interventions act at various points and through various means to prevent the development of a disease state or, if it occurs, to minimize its effects to the extent possible. These interventions differ in their linkages with public health

practice, medical practice, and long-term care, as well as in their focus on individuals or groups. The framework represents a rational one, reflecting known facts concerning each of its aspects and their relationships with each other.

As this chapter has described, the U.S. health system focuses mainly on disease states and strategies for restoring, as opposed to promoting or protecting, health. It directs the vast majority of human, physical, and financial resources to tertiary prevention, particularly to acute treatment. It focuses disproportionately on individually oriented secondary and tertiary medical care. In so doing, it raises questions as to whether these policies are effective and ethical.

Characterized in the past largely by federalism, pluralism, and incrementalism, the health sector in the United States is finally undergoing fundamental change due in large part to the massive resources it consumes. We are now realizing that this investment strategy is not producing results commensurate with its costs. Health indicators, including those characterizing large disparities in outcomes and access among important minority groups, are not responding to more resources being deployed in the usual ways. How to control costs while moving toward universal access, consistent quality, and improved outcomes will challenge the U.S. healthcare system through the first quarter of the 21st century.

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