



## CHAPTER 1

# Overview of Health Care: A Population Perspective

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### CHAPTER OVERVIEW

This chapter provides a broad overview of the U.S. healthcare industry—its policies, its values and priorities, and its responses to problems and changing conditions. It also provides a template for understanding the natural histories of diseases and the levels of medical intervention. Major influences in the advances and other changes to the health services system are described with pertinent references to the Patient Protection and Affordable Care Act of 2010 (ACA) and the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA). Conflicts of interest and ethical dilemmas resulting from technologic advances in medicine are also noted.

Health care continuously captures the interest of the public, political leaders, and all forms of media. News of medical breakthroughs, health system deficiencies, high costs, and, most recently, federal healthcare reform through the Patient Protection and Affordable Care Act (ACA) attract high-profile attention. Consuming more than 17 percent of the nation's gross domestic product,<sup>1</sup> exceeding \$3 trillion in costs,<sup>1</sup> and employing a workforce of more than 12 million,<sup>2</sup> health care occupies a central position in American popular and political discourse. In large measure, decades-long problems with rising costs, questionable quality, and lack of healthcare system access for large numbers of un- or underinsured Americans prompted the development and passage of the ACA. If the ACA is successful in accomplishing its intended goals by 2019, it will extend health insurance coverage to millions of uninsured people; the remaining uninsured will be illegal immigrants, low-income individuals who do not enroll in Medicaid, and others who choose to pay a penalty rather than purchase coverage.<sup>3</sup>

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Based on 2013 data from the Organization for Economic Cooperation and Development (OECD) and other sources, a 2015 Commonwealth Fund report compared the United States with 12 other high-income OECD member countries throughout the world on healthcare spending, use of services, and prices. Compared with its high-income peer nations, U.S. population health outcomes are poor with the lowest life expectancy and the highest rates of infant mortality.<sup>4</sup>

These are startling outcomes given that the percentage of gross domestic product the United States devotes to health care is almost double the average of the other OECD member countries.<sup>4</sup> Although the ACA will provide vastly increased access to health care for millions of Americans, there are strong reasons why policy makers focus on whether increased access can result in measurable improvements in Americans' health status. "Health policy researchers are increasingly aware of the dangers of overstating the link between insurance and health."<sup>5</sup> As some suggest, improvements in population health will require success in merging the concepts of public health into the reformed system's approach to personal medical care.<sup>3</sup> With the ACA's emphasis on prevention and wellness and realigned financial incentives to support these, there is even reason for optimism that "over time, prevention and wellness could become a dominant aspect of primary care."<sup>3</sup>

For many, the fortunes and foibles of health care take on deeply serious meanings. There was a widespread sense of urgency among employers, insurers, consumer groups, and other policy makers about the seemingly unresolvable problems of inadequate access, rising costs, and questionable quality of care. Passionate debates about the ACA in healthcare reform focused many Americans on the role health care plays in their lives and about the strengths and deficiencies of the complex labyrinth of healthcare providers, facilities, programs, and services.

## ► Problems of Health Care

Although philosophical and political differences historically fueled the debates about healthcare policies and reforms, consensus finally emerged that the U.S. healthcare system is fraught with problems and dilemmas. Despite its decades-long series of impressive accomplishments, the healthcare system exhibits inexplicable contradictions in objectives; unwarranted variations in performance, effectiveness, and efficiency; and longstanding discord in its relationships with the public and with governments.

The strategies for addressing the problems of cost, quality and access over the eight decades since the passage of the Social Security Act reflected periodic changes in political philosophies. Government-sponsored programs of the 1960s were designed to improve access for older adults and low-income populations without considering the inflationary effects on costs. These programs were followed by regulatory attempts to address first the availability and price of health services, then the organization and distribution of health care, and then its quality. In the 1990s, the ineffective patchwork of government-sponsored health-system reforms was superseded by the emergence of market-oriented changes, competition, and privately organized managed care organizations (MCOs).

The failure of government-initiated reforms created a vacuum, which was filled quickly by the private sector. There is a difference, however, between goals for healthcare reform of the government and those of the market. Although the proposed government programs try to maintain some balance among costs, quality, and access, the primary goal of the market is to contain costs and realize profits. As a result, there remain serious concerns that market-driven reforms may not result in a healthcare system that equitably meets the needs of all Americans and may even drive up costs.<sup>6</sup>



## ► Understanding Health Care

Healthcare policy usually reflects public opinion. Finding acceptable solutions to the perplexing problems of health care depends on public understanding and acceptance of both the existing circumstances and the benefits and risks of proposed remedies. Many communication problems regarding health policy stem from the public's inadequate understanding of health care and its delivery system.

Early practitioners purposely fostered the mystique surrounding medical care as a means to set themselves apart from the patients they served. Endowing health care with a certain amount of mystery encouraged patients to maintain blind faith in the capability of their physicians even when the state of the science did not justify it. When advances in the understanding of the causes, processes, and cures of specific diseases revealed that previous therapies and methods of patient management were based on erroneous premises, new information remained opaque to the American public. Although the world's most advanced and proficient healthcare system provides a great deal of excellent care, the lack of public knowledge has allowed much care to be delivered that was less than beneficial and some that was inherently dangerous.

Now, however, the romantic naïveté with which health care and its practitioners were viewed has eroded significantly. Rather than a confidential contract between the provider and the consumer, the healthcare relationship now includes a voyeuristic collection of insurers, payers, managers, and quality assurers. Providers no longer have a monopoly on healthcare decisions and actions. Although the increasing scrutiny and accountability may be onerous and costly to physicians and other providers, it represents the concerns of those paying for health care—governments, insurers, employers, and patients—about the value received for their expenditures. That these questions have been raised reflects the prevailing opinion that those who now chafe under the scrutiny are, at least indirectly, responsible for generating the excesses in the system while neglecting the problems of limited access to health care for many.

Cynicism about the healthcare system grew with more information about the problems of costs, quality, and access becoming public. People who viewed medical care as a necessity provided by physicians who adhere to scientific standards based on tested and proven therapies have been disillusioned to learn that major knowledge gaps contribute to highly variable use rates for therapeutic and diagnostic procedures that have produced no measurable differences in outcomes. Nevertheless, as discussions about system-wide reforms demonstrated, enormously complex issues underlie the health industry's problems.

## Why Patients and Providers Behave the Way They Do

Throughout the evolution of the U.S. hospital system, a long tradition of physicians and other healthcare providers behaving in an authoritarian manner toward patients prevailed. In the past, hospitalized patients, removed from their usual places in society, were expected to be compliant and grateful to be in the hands of professionals far more learned than they. More recently, however, recognizing the benefits of more proactive roles for patients and the improved outcomes that result, both healthcare providers and consumers encourage patient participation in healthcare decisions under the rubric of “shared decision making.”

## Indexes of Health and Disease

The body of statistical data about health and disease has grown enormously since the late 1960s, when the government began analyzing the information obtained from Medicare and Medicaid

claims and computerized hospital and insurance data allowed the retrieval and exploration of clinical information files. In addition, there have been continuing improvements in the collection, analysis, and reporting of vital statistics and communicable and malignant diseases by state and federal governments.

Data collected over time and international comparisons reveal common trends among developed countries. Birth rates have fallen and life expectancies have lengthened so that older people make up an increasing proportion of total populations. The percentage of disabled or dependent individuals has grown as healthcare professions have improved their capacity to rescue otherwise moribund individuals.

Infant mortality and maternal mortality, the international indicators of social and healthcare improvement, have continued to decline in the United States but have not reached the more-commendable levels of countries with more demographically homogeneous populations. In the United States, disparities in infant mortality rates between inner-city neighborhoods and suburban communities may be greater than those between developed and undeveloped countries. The continuing inability of the healthcare system to address those discrepancies effectively reflects the system's ambiguous priorities.

## Natural Histories of Disease and the Levels of Prevention

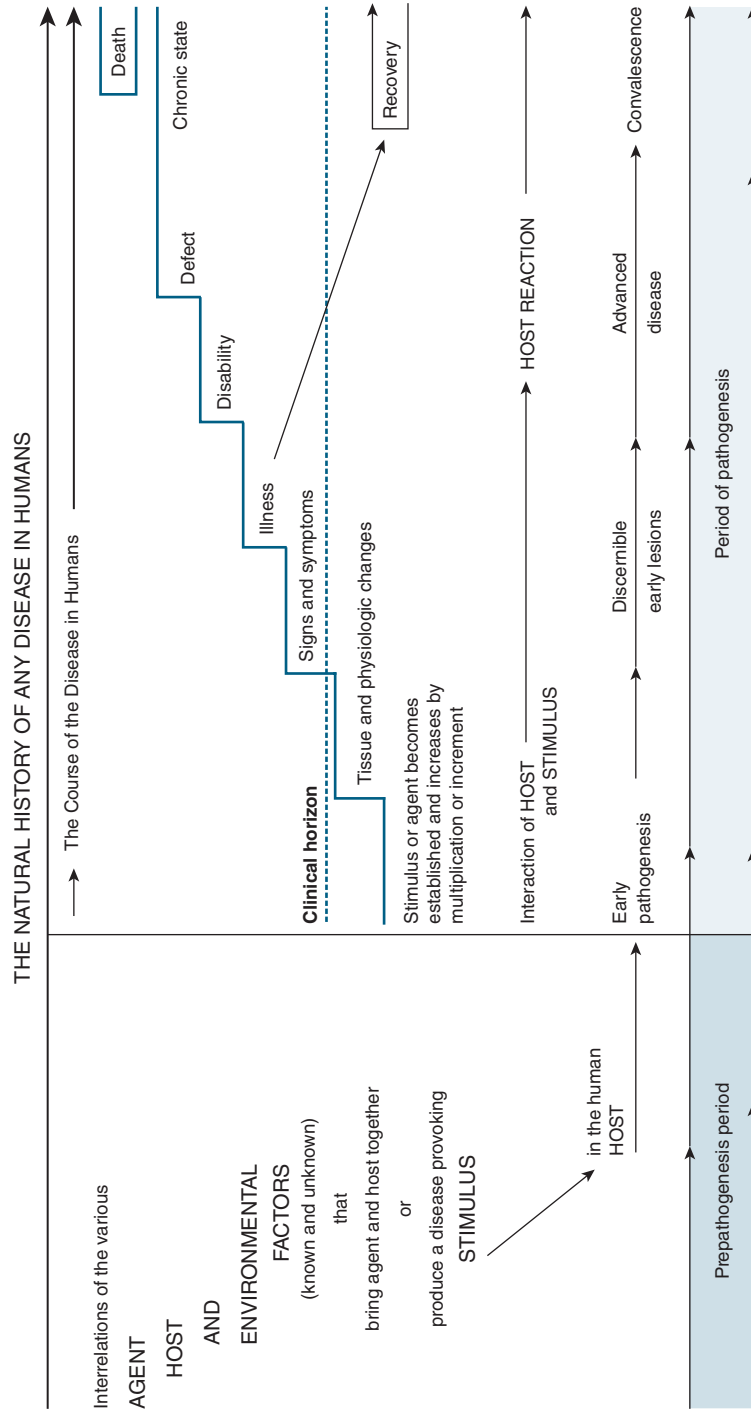
For many years, epidemiologists and health-services planners have used a matrix for placing everything known about a particular disease or condition in the sequence of its origin and progression when untreated; this schema is called the natural history of disease. Many diseases, especially chronic diseases that may last for decades, have an irregular evolution and extend through a sequence of stages. When the causes and stages of a particular disease or condition are defined in its natural history, they can be matched against the healthcare interventions intended to prevent the condition's occurrence or to arrest its progress after its onset. Because these healthcare interventions are designed to prevent the condition from advancing to the next, and usually more serious, level in its natural history, the interventions are classified as the "levels of prevention."<sup>8</sup> **FIGURES 1-1, 1-2, and 1-3** illustrate the concept of the natural history of disease and levels of prevention.

The first level of prevention is the period during which the individual is at risk for the disease but is not yet affected. Called the "pre-pathogenesis period," it identifies the behavioral, genetic, environmental, and other factors that increase the individual's likelihood of contracting the condition. Some risk factors, such as smoking, may be altered, whereas others, such as genetic factors, may not.

When such risk factors combine to produce a disease, the disease usually is not manifest until certain pathologic changes occur. This stage is a period of clinically undetectable, pre-symptomatic disease. Medical science is working diligently to improve its ability to diagnose disease earlier in this stage. Because many conditions evolve in irregular and subtle processes, it is often difficult to determine the point at which an individual may be designated "diseased" or "not diseased." Thus, each natural history has a "clinical horizon," defined as the point at which medical science becomes able to detect the presence of a particular condition.

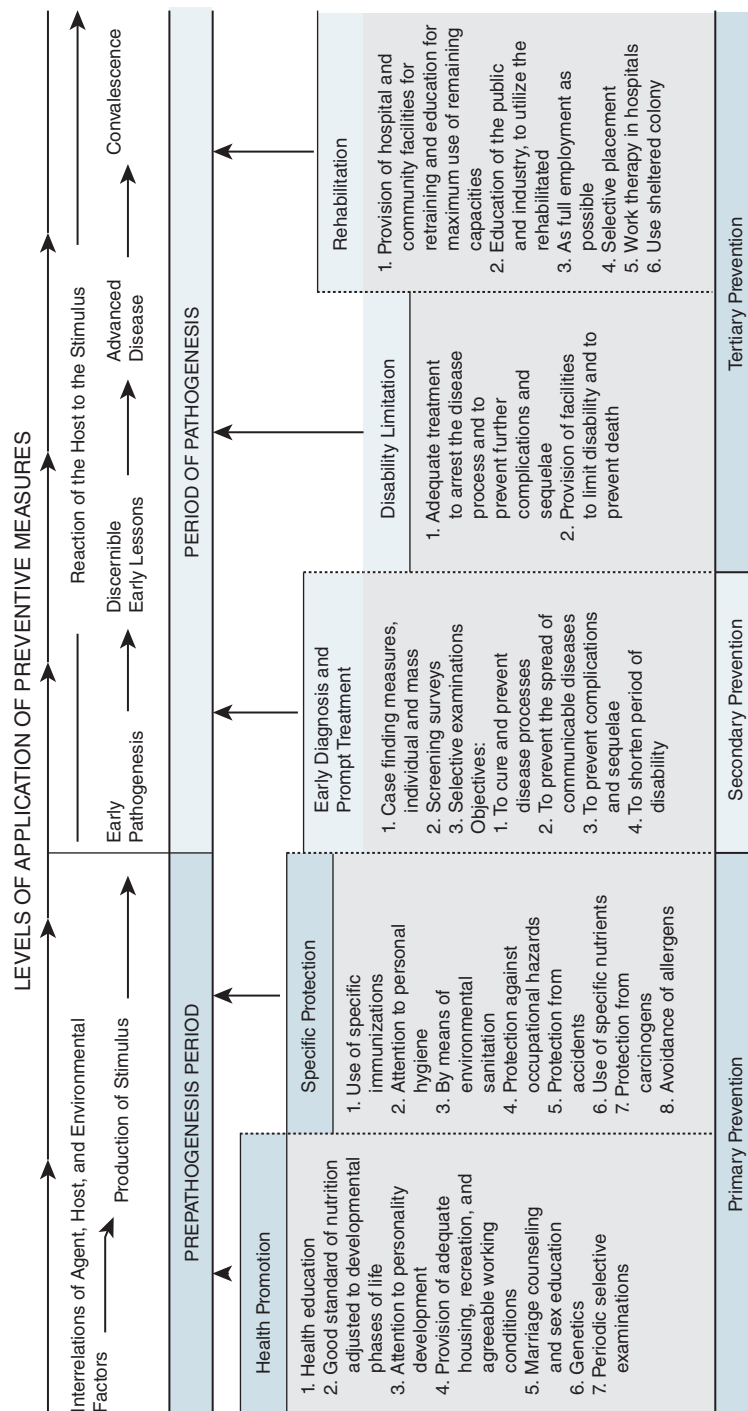
Because the pathologic changes may become fixed and irreversible at each step in disease progression, preventing each succeeding step of the disease is therapeutically important. This concept emphasizes the preventive aspect of clinical interventions.

Primary prevention, or the prevention of disease occurrence, refers to measures designed to promote health (e.g., health education to encourage good nutrition, exercise, and genetic counseling) and specific protections (e.g., immunization and the use of seat belts).

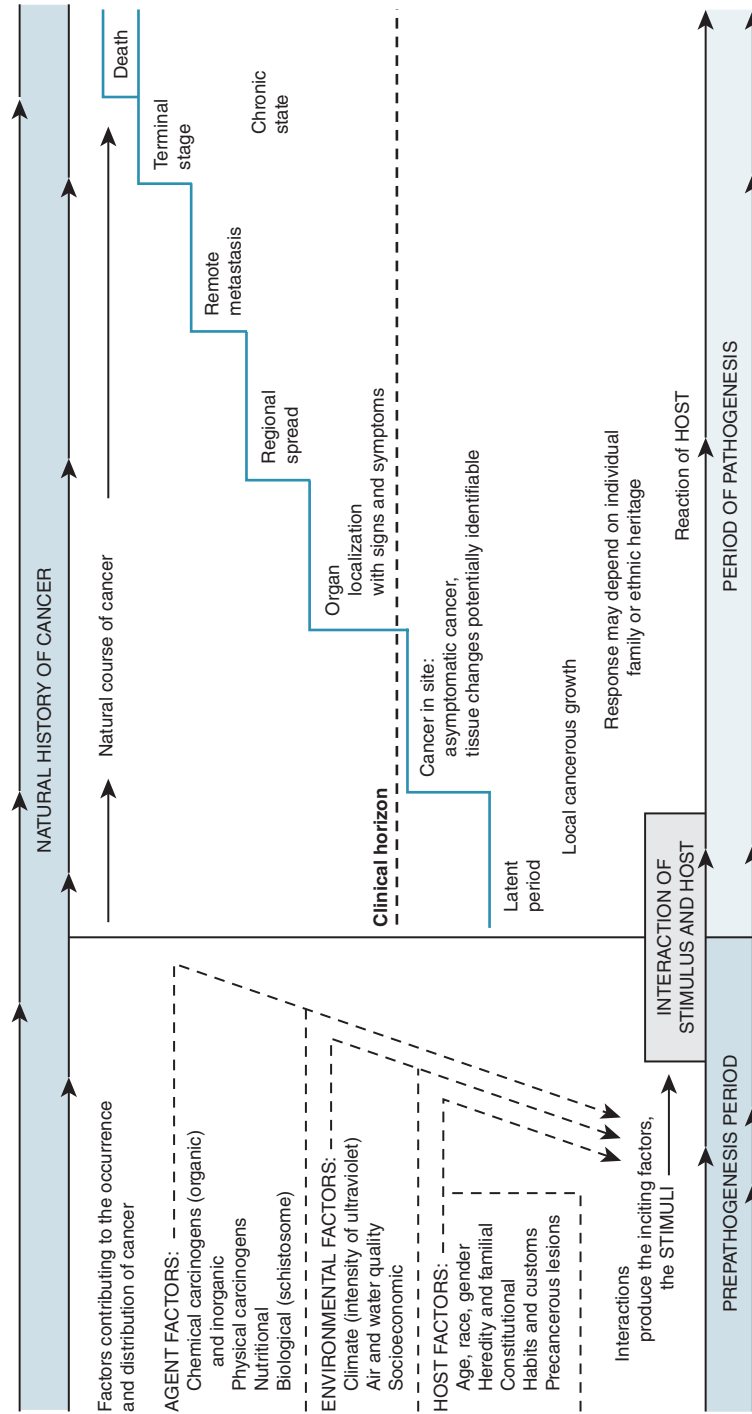


**FIGURE 1-1 Natural History of Any Disease in Humans**

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**FIGURE 1-2 Levels of Application of Preventive Measures**

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**FIGURE 1-3** Natural History of Cancer (continues)



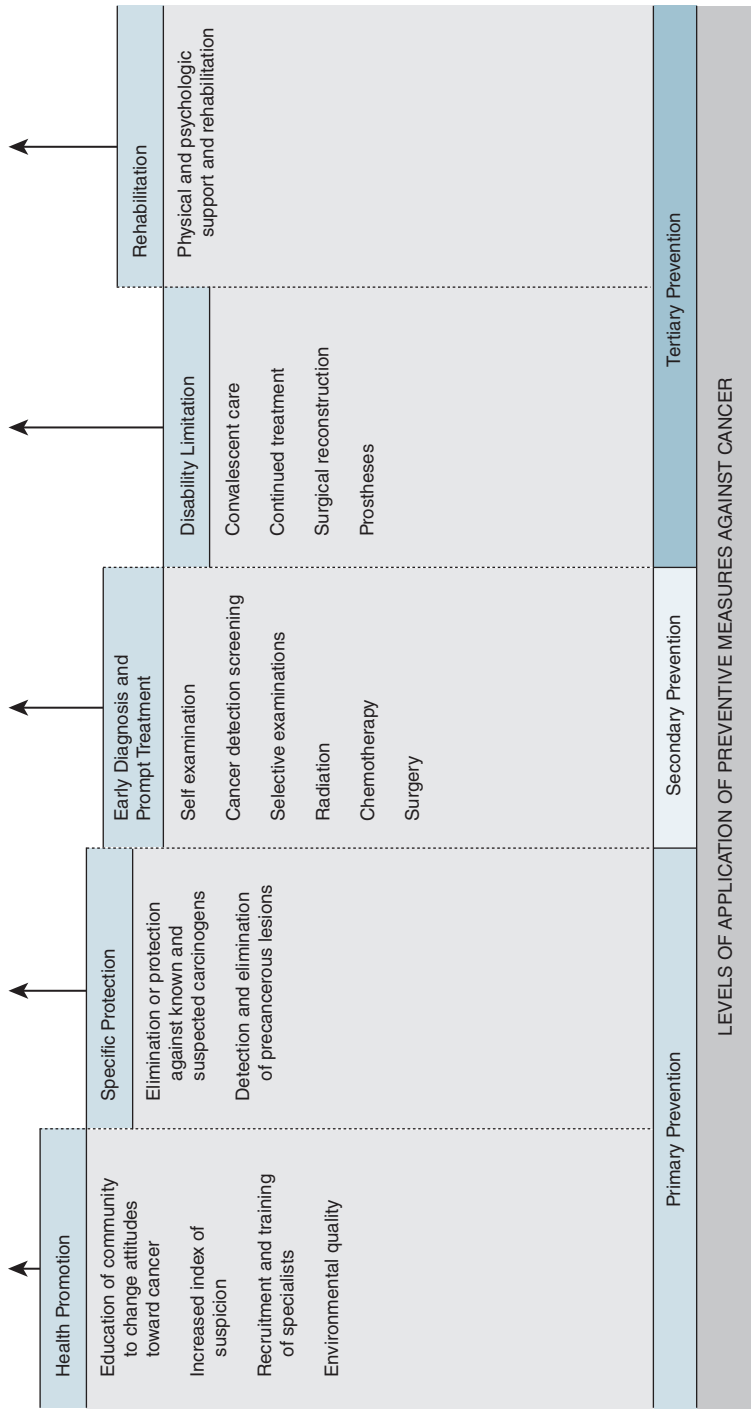


FIGURE 1-3 (continued) Natural History of Cancer

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Secondary prevention involves early detection and prompt treatment to achieve an early cure, if possible, or to slow progression, prevent complications, and limit disability. Most preventive health care is currently focused on this level.

Tertiary prevention consists of rehabilitation and maximizing remaining functional capacity when disease has occurred and left residual damage. This stage represents the most costly, labor-intensive aspect of medical care and depends heavily on effective teamwork by representatives of a number of healthcare disciplines.

**FIGURE 1-4** illustrates the natural history and levels of prevention for the aging process. Although aging is not a disease, it is often accompanied by medical, mental, and functional problems that should be addressed by a range of healthcare services at each level of prevention.

The natural history of diseases and the levels of prevention are presented to illustrate two very important aspects of the U.S. healthcare system. First, in studying the natural history and levels of prevention for almost any of the common causes of disease and disability, it quickly becomes apparent that the focus of health care historically has been directed at the curative and rehabilitative side of the disease continuum. The serious attention paid to refocusing the system on population health and the health promotion/disease prevention side of those disease schemas is reflected by the National Prevention Strategy of the ACA.<sup>9</sup> This attention came about only after decades of relentlessly rising costs of diagnostic and remedial care and the lack of adequate insurance coverage for millions of Americans became a public and political embarrassment.

The second important aspect of the natural history concept is its value in planning community services. The illustration on aging provides a good example by suggesting health promotion and specific protection measures that could be applied to help maintain positive health status.

## ► Major Stakeholders in U.S. Healthcare Industry

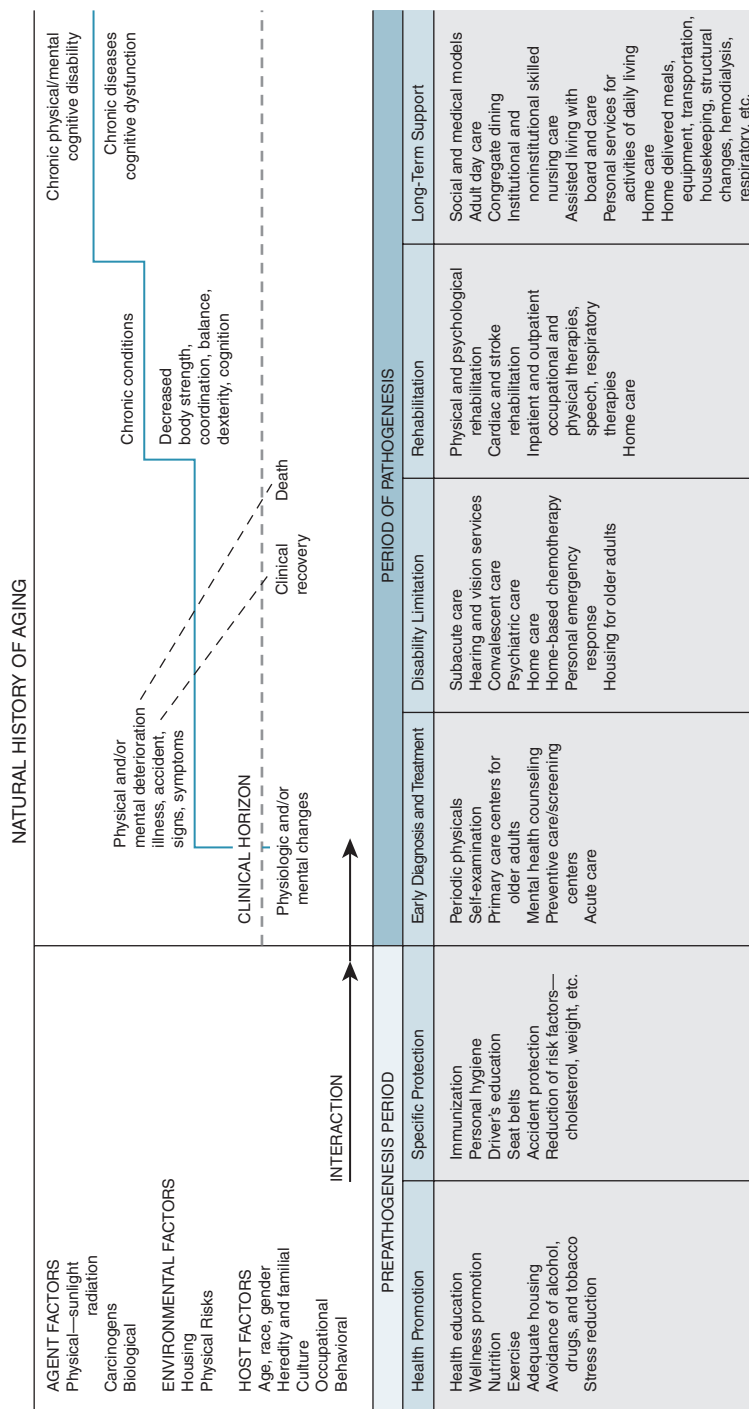
To understand the healthcare industry, it is important to recognize the number and variety of the stakeholders involved. The sometimes shared and often-conflicting concerns, interests, and influences of these constituent groups cause them to shift alliances periodically to oppose or champion specific reform proposals or other changes in the industry.

### The Public

First and foremost among healthcare stakeholders are the individuals who consume the services. Although all are concerned with the issues of cost and quality, those who are uninsured or underinsured have an overriding uncertainty about access. It remains uncertain as to whether the U.S. public will someday wish to treat health care like other inherent rights, such as education, but the passage of the ACA seems to suggest that there is agreement that some basic array of healthcare services should be available to all U.S. citizens.

### Employers

Employers constitute an increasingly influential group of stakeholders in health care because they not only pay for a high proportion of the costs but also take proactive roles in determining what those costs should be. Large private employers, coalitions of smaller private employers, and public employers

**FIGURE 1-4 Natural History of Aging**

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wield significant authority in insurance plan negotiations. In addition, employer organizations representing small and large businesses wield considerable political power in the halls of Congress.

## Providers

Healthcare professionals form the core of the industry and have the most to do with the actual process and outcomes of the service provided. Physicians, dentists, nurses, nurse practitioners, physician assistants, pharmacists, podiatrists, chiropractors, and a large array of allied health providers working as individuals or in group practices and staffing healthcare institutions are responsible for the quality and, to a large extent, the cost of the healthcare system. Recognizing the centrality of individual providers to system reform, the ACA and the MACRA are now offering numerous opportunities for the participation of physicians and other healthcare professionals in innovative experimentation with integrated systems of care. The MACRA institutes performance-driven systems of patient care linked to the health outcomes of population groups.<sup>10,11</sup>

## Hospitals and Other Healthcare Facilities

Much of the provider activity, however, is shaped by the availability and nature of the healthcare institutions in which providers work. Hospitals of different types—general, specialty, teaching, rural, profit or not-for-profit, and independent or multi-facility systems—are central to the healthcare system. However, they are becoming but one component of more complex integrated delivery system networks that also include nursing homes and other levels of care and various forms of medical practices.

## Governments

Since the advent of Medicare and Medicaid in 1965, federal and state governments, already major stakeholders in health care, became the dominant authorities of the system. Governments serve not only as payers but also as regulators and providers through public hospitals, state and local health departments, veterans' affairs medical centers, and other facilities. In addition, of course, governments are the taxing authorities that generate the funds to support the system.

## Complementary and Alternative Therapists

Unconventional health therapies—those not usually taught in established medical and other health professional schools—contribute significantly to the amount, frequency, and cost of health care. In spite of the scientific logic and documented effectiveness of traditional, academically based health care, it is estimated that one in three adults uses complementary forms of health interventions each year.<sup>12</sup> Complementary medicine consists of using modalities such as nutritional supplements, yoga, acupuncture, or meditation in conjunction with mainstream medical care.<sup>13</sup> Because of their popularity, state Medicaid programs, Medicare, and private health insurance plans provide benefits for some complementary therapies.<sup>14</sup> Alternative medicine uses non-mainstream treatments in place of conventional medicine.<sup>13</sup>

It is estimated that more than \$9 billion per year is spent on complementary and alternative forms of health care such as Rolfing, yoga, spiritual healing, relaxation techniques, herbal remedies, energy healing, megavitamin therapy, chiropractic care, and a host of other mind-body healing techniques.<sup>14</sup>

The public's willingness to spend so much time and money on unconventional therapies suggests a substantial level of dissatisfaction with traditional scientific medicine. Thus, as a somewhat paradoxical development, some of the most ancient concepts of alternative health care are gaining broader recognition and acceptance in an era of the most innovative and advanced high-technology medicine. The National Institutes of Health operates a National Center for Complementary and Integrative Health (NCCIH) to fund studies on the efficacy of such therapies.

In recent years, a number of hospitals began offering forms of complementary and alternative medicine. According to an American Hospital Association survey, by 2000 more than 15 percent of U.S. hospitals had opened complementary or alternative medicine centers.<sup>15</sup> With a market estimated to be \$34 billion and patients willing to pay cash for treatments, hospitals are willing to rationalize the provision of medically unproven services in response to patient demand.<sup>16</sup>

## Health Insurers

The insurance industry has long been a major stakeholder in the healthcare industry. Today, MCO insurance plans are the predominant form of U.S. health insurance. MCOs may be owned by insurance companies, or they may be owned by hospitals, physicians, or consumer cooperatives. MCOs and the economic pressures they can apply through the negotiation of prepaid fees for healthcare services have produced much of the change occurring in the healthcare system during the past three decades. The insurance industry played a major role in the development of the ACA.<sup>17</sup> Under the ACA, between 2014 and 2018, the insurance industry will contribute annual fees to the federal government totaling \$47.5 billion as a percent of premiums to help offset the ACA costs.<sup>18</sup> In subsequent years, the industry will pay fees based upon rates of premium increase.<sup>18</sup> This fee levy recognizes that the ACA will add millions of new insurance company customers.

## Long-Term Care Industry

The aging of the U.S. population poses a formidable challenge to the country's systems of acute and long-term care. Nursing homes, home-care services, other adult-care facilities, and rehabilitation facilities will become increasingly important components of the nation's healthcare system. The ACA's creation of seamless systems of integrated care that permit patients to move back and forth among ambulatory care offices, acute care hospitals, home care, and nursing homes within a single network of facilities and services will provide a continuum of services required for the complex care of aging patients.

## Voluntary Facilities and Agencies

Voluntary not-for-profit facilities and agencies, so called because they are governed by volunteer boards of directors, provide significant amounts of health counseling, health care, and research support and should be considered major stakeholders in the healthcare system. Although the voluntary sector traditionally has not received the recognition it deserves for its contribution to the nation's health care, it is often now viewed as the safety net to replace the services of government or other organizations eliminated by budgetary reductions.



## Health Professions Education and Training Institutions

Schools of medicine, public health, nursing, dentistry, pharmacy, optometry, allied health, and other healthcare professions have a significant impact on the nature, quality, and costs of health care. As they prepare each generation of competent healthcare providers, these schools also inculcate the values, attitudes, and ethics that govern the practices and behaviors of those providers as they function in the healthcare system.

## Professional Associations

National, state, and regional organizations representing healthcare professionals or institutions have considerable influence over legislative proposals, regulation, quality issues, and other political matters. The lobbying effectiveness of the American Medical Association, for example, is legendary. The national influence of the American Hospital Association and the regional power of its state and local affiliates are also impressive. Other organizations of healthcare professionals, such as the American Public Health Association, America's Health Insurance Plans, the American Nurses Association, and the American Dental Association, play significant roles in health policy decisions. The American insurance industry lobbyists from organizations such as America's Health Insurance Plans had major influences on the provisions of the ACA.

## Other Health Industry Organizations

The size and complexity of the healthcare industry encourage the involvement of a great number of commercial entities. Several, such as the insurance industry noted above and the pharmaceutical and medical-device industries, have significant influence on the healthcare delivery enterprise. The ACA imposed annual fees on the pharmaceutical industry beginning in 2012 that will total \$13.9 billion by 2018 and continue at \$2.8 billion per year thereafter.<sup>18</sup> As with insurance companies, these fees acknowledged that the ACA would bring in much new business to the pharmaceutical industry from newly insured individuals. Medical supplies and equipment businesses and the various consulting, information, and management-system suppliers also are important players. Again recognizing that medical-device manufacturers would experience increased business from the ACA's newly insured, the law imposed a 2.3 percent excise tax on sales of taxable medical devices beginning in 2013.<sup>18</sup> Due to intense lobbying efforts, in late 2012 the ACA medical-device tax was suspended through the end of 2017.<sup>19</sup>

## Research Communities

It is difficult to separate much of healthcare research from the educational institutions that provide for its implementation. Nevertheless, the national research enterprise must be included in any enumeration of stakeholders in the healthcare industry. Government entities, such as the National Institutes of Health and the Agency for Healthcare Research and Quality, and not-for-profit foundations, such as the Robert Wood Johnson Foundation, the Commonwealth Fund, the Henry J. Kaiser Family Foundation, and the Pew Charitable Trusts, exert tremendous influence over healthcare research, policy development, and practice by conducting research and widely disseminating findings and supporting and encouraging investigations that inform policy decision making.

## ► Rural Health Networks

Rural health systems often struggle with shortages of various services. Federal and state programs have addressed this situation by promoting rural health network development.<sup>20</sup>

Rural health networks may be formally organized as not-for-profit corporations or informally linked for a defined set of mutually beneficial purposes. Typically, they advocate at local and state levels on rural healthcare issues, cooperate in joint community outreach activities, and seek opportunities to negotiate with MCOs to provide services to enrolled populations. Most of these networks strive to provide local access to primary, acute, and emergency care and to provide efficient links to more distant regional specialists and tertiary care services. Ideally, rural health networks assemble and coordinate a comprehensive array of services that include dental, mental health, long-term care, and other health and human services.

With costs increasing and populations declining in many rural communities, it has been difficult for rural hospitals to continue their acute inpatient care services. Nevertheless, rural hospitals often are critically important to their communities. Because a hospital is usually one of the few major employers in rural communities, its closure has economic and healthcare consequences. Communities lacking alternative sources of health care within reasonable travel distance not only lose payroll and related business but also lose physicians, nurses, and other health personnel and suffer higher morbidity and mortality rates among those most vulnerable, such as infants and older adults.<sup>21</sup>

Some rural hospitals have remained viable by participating in some form of multi-institutional arrangement that permits them to benefit from the personnel, services, purchasing power, and financial stability of larger facilities. Many rural hospitals, however, have found it necessary to shift from inpatient to outpatient or ambulatory care. In many rural communities, the survival of a hospital has depended on how quickly and effectively it could replace its inpatient services with a productive constellation of ambulatory care, and sometimes long-term care, services.

Rural hospital initiatives have been supported by federal legislation since 1991.<sup>21</sup> Legislation provided funding to promote the essential access community hospital and the rural primary care hospital. Both were limited-service hospital models developed as alternatives for hospitals that were too small and geographically isolated to be full-service acute-care facilities. Regulations regarding staffing and other service requirements were relaxed in keeping with the rural settings<sup>21</sup> and included allowing physician's assistants, nurse practitioners, and clinical nurse specialists to provide primary or inpatient care without a physician in the facility if medical consultation is available by phone.

The Balanced Budget Act of 1997 included a Rural Hospital Flexibility Program that replaced the essential access community hospital/rural primary care hospital model with a critical access hospital (CAH) model.<sup>22</sup> Any state with at least one CAH may qualify for the program, which exempts CAHs from strict regulation and allows them the flexibility to meet small, rural community needs by developing criteria for establishing network relationships. Although the new program maintained many of the same features and requirements as its predecessor, it added more flexibility by increasing the number of allowed occupied inpatient beds and the maximum length of stay before required discharge or transfer. The new program also allowed a swing bed program to provide flexibility in their use. The goal of the CAH program is to enable small rural hospitals to maximize reimbursement and meet community needs with responsiveness and flexibility.

The Balanced Budget Act also served rural hospitals by providing Medicare reimbursement for telemedicine and other arrangements that link isolated facilities with clinical specialists at large

hospitals. Telemedicine technology makes it possible for a specialist to be in direct visual and voice contact with a patient and provider at a remote location. The ACA contains significant support for the continued expansion of telemedicine programs that began with prior Medicare-supported pilot projects.<sup>23</sup>

## ► Priorities of Health Care

The historical priorities of America's healthcare system, which emphasize dramatic tertiary care and costly and intensive efforts to fend off the death of terminal patients for a few more days or weeks, have contributed to the obvious mismatch between the costs of health care and the failure to improve the measures of health status in the United States.

If health care were to be governed by rational policies, the benefits to society of investing in primary prevention that is unquestionably cost-effective would be compared with both the human and economic costs of salvaging individuals from preventable adverse outcomes. Unfortunately, priorities have favored heroic medicine over the more mundane and far less costly preventive care that results in measurable human and economic benefits. As noted previously, major tenets of the ACA are designed to shift the focus from curative to preventive priorities through the implementation of the National Prevention Strategy.<sup>9</sup>

## ► Tyranny of Technology

In many respects, as noted many times throughout this text, the healthcare system has accomplished remarkable work and continues to do so. Important advances have been made in medical science, bringing measurable improvements in the length and quality of life. The paradox is, however, that as technology grows in sophistication and costs, increasing numbers of people are deprived of its benefits. Healthcare providers can be so mesmerized by their own technological ingenuity that things assume greater value than people. For example, hospital administrators and medical personnel commonly dedicate their most-competent practitioners and most-sophisticated technology to the care of terminal patients while allocating far fewer resources to primary and preventive services for ambulatory clinic patients and other community populations in need of basic medical services.

Some hospitals recognize this disparity by conducting outreach and education programs for the medically underserved. Now with the ACA aligning reimbursement with prevention and wellness efforts, more institutions likely will find it beneficial to initiate and maintain prevention initiatives and allocate more resources to the potentially more productive care of discharged patients and ambulatory clinic populations.

The recurring theme among health-services researchers assessing the value of technologic advances is a series of generally unanswered questions:

1. How does the new technology benefit the patient?
2. Is it worth the cost?
3. Are the new methods better than previous methods, and can they replace them?
4. Is treatment planning enhanced?
5. Is the outcome from disease better, or is the mortality rate improved?

Although many of the latest advances have gained great popularity and widespread acceptance, rigorous assessments that address these basic questions remain sorely needed.

Much of the philosophy underlying the values and priorities of the healthcare system today can be attributed to the unique culture of U.S. medicine. That philosophy owes much to the aggressive “can do” spirit of the frontier. Diseases are likened to enemies to be conquered. Physicians expect their patients to be aggressive, too. Those who undergo drastic treatments to “beat” cancer are held in higher regard than patients who resign themselves to the disease. Some physicians and nurses feel demoralized when dying patients refuse resuscitation or limit interventions to palliative care.

The treatment-oriented rather than prevention-oriented healthcare philosophy has been encouraged by an insurance system that, before managed care’s prevention orientation and efforts to curb unnecessary interventions, rarely paid for any disease prevention other than immunizations. It also is understandable in a system prizing high-technology medicine and rewarding volume regardless of value that there has been much more satisfaction and remuneration from saving the lives of the injured and diseased than in preventing those occurrences from happening in the first place.

## ► Social Choices of Health Care

The American emphasis on cure over prevention disinclined the healthcare professions to address those situations over which they have had little control. Behavioral issues such as acquired dependence on tobacco, alcohol, and drugs must be counted among the significant causes of impaired health in the U.S. population with staggering human and economic costs. In 2014, the National Institute on Drug Abuse reported an estimated combined annual cost of \$700 billion related to crime, lost work productivity, and health care due to these addictions.<sup>24</sup>

Nevertheless, outside of the public health disciplines, the considerable influence and prestige of the healthcare professions have been noticeably absent in steering public opinion and governmental action toward an emphasis on behavioral health. Similarly, in comparison with resources expended on treatment after illness occurs, relatively little attention had been given to changing high-risk behaviors even when the consequences are virtually certain and nearly always extreme.

## ► Aging Population

The aging of the U.S. population will have wide-ranging implications for the country. As the United States ages over the next several decades, its older population will become more racially and ethnically diverse. Projecting the size and structure in terms of age, sex, race, and ethnic origin of the older population is important to public and private interests, both socially and economically. Current estimates place the population 65 years of age and older at 44.7 million, 14.1 percent of the population, or about one in every seven Americans.<sup>25</sup> The number of persons aged 65 years or older is expected to grow to 21.7 percent of the population by 2040, totaling 82.3 million. A current U.S. Census projection estimates that the population 65 years or older will more than double in number between 2013 and 2060 reaching 98.2 million by year 2060.<sup>25</sup>

As medical advances find more ways to maintain life, the duration of chronic illness and the number of chronically ill individuals will increase with a concomitant increase in the need for personal support. The intensity of care required by frail older adults also has the potential of affecting worker productivity, as it is common for family members to leave the workforce or to work part time to care for frail relatives.

The increased number of older persons with chronic physical ailments and cognitive disorders raises significant questions about the capability and capacity of U.S. healthcare system. Healthcare professionals are just beginning to respond to the need to focus health care for older adults away from medications or other quick-fix remedies. The system is slowly acknowledging that the traditional medical service model is inappropriate to the care of those with multiple chronic conditions.

The growing number of older adults face serious gaps in financial coverage for long-term care needs. Unlike the broad Medicare program coverage for the acute healthcare problems of older Americans, the long-term care services needed to cope with the chronic disability and functional limitations of aging are largely unaddressed by either Medicare or private insurance plans. With the exception of the relatively small number of individuals with personal long-term care insurance, the costs of long-term care services are borne by individual older adults and their caregivers.

As a last resort, the Medicaid program became the major public source of financing for nursing home care. Medicaid eligibility, however, requires that persons “spend down” their personal resources to meet financial eligibility criteria. For those disabled older adults who seek care in the community outside of nursing homes, Medicaid offers very limited assistance. Provisions of the ACA make some progress in addressing these issues. The reform plan, called “Medicaid Money Follows the Person” (MFP), sets demonstration projects in motion by providing grants to states for additional federal matching funds for Medicaid beneficiaries making the transition from an institution back to their homes or to other community settings.<sup>26</sup> Grants enable state Medicaid programs to fund home- and community-based services for individuals’ needs, such as personal care assistance to enable their safe residency in the community. Other long-term care provisions under the ACA include the “Community First Choice Option in Medicaid,” which provides states with an increased federal Medicaid matching rate to support community-based attendant services for individuals who require an institutional level of care,<sup>27</sup> and a “State Balancing Incentive Program,” which enhances federal matching funds to states to increase the proportion of Medicaid long-term services and support dollars allocated toward home- and community-based services.<sup>28</sup> It is hoped that these demonstrations will yield results that may be expanded to address the serious gaps that exist in services between home- and community-based and institutional care available for older Americans.

## ► Access to Health Care

Much attention has been paid to the economic problems of health care, and considerable investments of research funds have been made to address the issues of healthcare quality. However, the third major problem—that of limited access to health care among the uninsured or underinsured Americans—continues to confound decision makers and has evolved into both a moral and economic issue.

Polarized positions have been taken by those who have addressed the question of whether society in general or governments in particular have an obligation to ensure that everyone has the right to health care and whether the healthcare system has a corresponding obligation to make such care available. Consider these opposing viewpoints by P. H. Elias and R. M. Sade, respectively:

Physicians who limit their office practice to insured and paying patients declare themselves openly to be merchants rather than professionals....



Physicians who value their professionalism should treat office patients on the basis of need, not remuneration.<sup>29</sup>

The concept of medical care as the patient's right is immoral because it denies the most fundamental of all rights, that of a man to his own life and the freedom of action to support it. Medical care is neither a right nor a privilege: it is a service that is provided by doctors to others who wish to purchase it.<sup>30</sup>

Although healthcare providers debate their individual and personal obligations to provide uncompensated care, the system itself finessed the problem for many years by shifting the costs of care from the uninsured to the insured. This unofficial but practical approach to indigent care was ethically tolerable as long as the reimbursement system for paying patients was so open ended that the cost of treating the uninsured could easily be passed on to paying patients. The cost shifting that worked under old reimbursement systems that paid for virtually everything after the fact was not feasible under pre-payment designs that began in the 1980s and vigorously continue today. Evolving insurance and reimbursement mechanisms recognize that a transparent approach to providing insurance coverage for low-income persons will help address the long-standing inequities in a cryptic system previously required to manage uncompensated care. In this regard, the ACA's health insurance provisions are a pointed example of the need for government intervention on behalf of its citizenry when markets are unable or unwilling to respond.

Ideally, U.S. health policy makers would have preferred to assure the public that the health-care system would provide all citizens with comparable access to health care and to assure physicians and other healthcare providers that they would be free of government interference in decisions about service production and delivery. However, a very long history of failed attempts at free-market approaches has resulted in the indisputable conclusion that government intervention is needed to improve the access problem.

## ► Quality of Care

Another problem area in the delivery of health care is variations in the quality and appropriateness of medical care. The uncertainty that pervades current clinical practice is far greater than most people realize. Problems in the quality and appropriateness of many diagnostic and therapeutic procedures impact heavily on costs.

A 1999 report of the Institute of Medicine estimated that medical errors take from 44,000 to 98,000 lives per year, and it was widely acknowledged that the complexity of the healthcare system, the dangers inherent in surgical procedures, and the potential for error in the many information transfers that occur during hospital care combine to put patients at serious risk.<sup>31</sup> However, solutions have remained elusive. A 2016 *British Medical Journal* report aggregated research from several sources to conclude: "If medical error was a disease, it would rank as the third leading cause of death in the U.S."<sup>32</sup> In addition, while much attention is focused on the risk of errors in hospitals, serious concerns also exist in ambulatory care where treatment is episodic and there is significant discontinuity in communication among patients, physicians, and support service providers.<sup>33</sup>

## ► Conflicts of Interest

One of the greatest advantages of U.S. high-technology healthcare systems is the ability of physicians and patients to benefit from referrals to a broad range of highly specialized clinical, laboratory, rehabilitation, and other services.

In recent years, however, increasing numbers of physicians have begun to invest in laboratories, imaging centers, medical supply companies, and other healthcare businesses. In many cases, these are joint ventures with other institutions that conceal the identity of the investors. When healthcare providers refer patients for tests or other services to healthcare businesses that they own or in which they have a financial stake, there is a serious potential for conflicts of interest. For the last several years both federal and state governments and the American Medical Association have conducted studies confirming that physician-owned laboratories, for example, perform more tests per patient at higher charges than those in which physicians have no investment.<sup>34</sup> These conflicts of interest undermine the traditional professional role of physicians and significantly increase healthcare expenditures. In another dimension of conflicts of interest, the ACA includes “Sunshine” provisions that arose from activities related to enforcement of the federal kickback statute pertaining to financial relationships between health industry (pharmaceutical, biologics, and medical device companies) and healthcare providers.<sup>35</sup>

The ACA “requires reporting of all financial transactions and transfers of value between manufacturers of pharmaceutical/biologic products or medical devices and physicians, hospitals, and other covered recipients that are reimbursed by U.S. federal government.”<sup>35</sup> In addition, the ACA requires the Centers for Medicare & Medicaid Services to establish a website to post information pertinent to these transactions in a searchable, downloadable database.<sup>35</sup> Fines for manufacturer noncompliance with reporting requirements can reach up to \$1 million per reporting year.<sup>35</sup>

## ► Health Care's Ethical Dilemmas

Once almost an exclusive province of physicians and other healthcare providers, moral and ethical issues underlying provider–patient relationships are now in the domains of law, politics, journalism, health institution administrations, and the public. During the last few decades, the list of ethical issues has expanded as advances in areas such as genetic identification and engineering, a mounting armamentarium of highly specialized diagnostic and therapeutic interventions, and other technological advances have allowed the lives of otherwise terminal individuals to be prolonged. In addition, an energized healthcare consumer movement advocating more personal control over healthcare decisions, economic realities, and issues of appropriate use of limited resources are just some of the topics propelling values and ethics onto the healthcare agenda. There is a social dimension to health care that never existed before and that the health professions, their educational institutions, their organizations, and their philosophical leadership are now beginning to address.

Clearly, the rapid pace of change in health care and the resulting issues have outpaced U.S. society's ability to reform the thinking, values, and expectations that were more appropriate to a bygone era. Legislative initiatives are, correctly or not, attempting to fill the voids.

New York State's 1990 passage of healthcare proxy legislation that allows competent adults to appoint agents to make healthcare decisions on their behalf if they become incapacitated is one example. The 1997 decision of the U.S. 9th Circuit Court of Appeals permitting physician-assisted suicide for competent, terminally ill adults in the state of Oregon is another. And in 2016, California became the fourth state to enact physician-assisted suicide legislation.<sup>36</sup>

Issue by issue, the country is trying to come to grips with the ethical dilemmas that modern medicine has created. The pluralistic nature of this society, however, and the Judeo-Christian concepts about caring for the sick and disabled that served so well for so long, make sweeping reformation of the ethical precepts on which health care has been based very challenging.

## ► Continuing Challenges

As the United States pushes forward with the implementation of the ACA and other legislative initiatives, its experimentation to test strategies to reduce costs, improve quality, and increase access will likely be joined by other emerging concerns. How to improve Americans' health behaviors, how to involve consumers more effectively in healthcare decisions, and how to balance responsibilities and accountability between the government and private sectors remain among the looming challenges of this continuing era of health reform.

### KEY TERMS FOR REVIEW

Natural History of Disease  
Primary Prevention

Rural Health Networks  
Secondary Prevention

Tertiary Prevention

### CHAPTER ACRONYMS

**ACA** Patient Protection and Affordable Care Act of 2010

**CAH** Critical Access Hospital

**MACRA** Medicare Access and CHIP Reauthorization Act of 2015

**MCO** Managed Care Organization

**MFP** Medicaid Money Follows the Person

**NCCIH** National Center for Complementary and Integrative Health

**OECD** Organization for Economic Cooperation and Development

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