# Chapter 1

# A Distinctive System of Health Care Delivery

## **Learning Objectives**

- To understand the basic nature of the US health care system
- To outline the four key functional components of a health care delivery system
- To discuss the primary characteristics of the US health care system from a free market perspective
- To emphasize why it is important for health care managers to understand the intricacies of the health care delivery system
- To get an overview of the health care systems in other countries
- To introduce the systems model as a framework for studying the health services system in the US



The US health care delivery system is a behemoth that is almost impossible for any single entity to manage and control.

## Introduction

The United States has a unique system of health care delivery unlike any other health care system in the world. Most developed countries have national health insurance programs run by the government and financed through general taxes. Almost all citizens in such countries are entitled to receive health care services, depending on the system's capacity to deliver needed services. Such is not yet the case in the United States, where not all Americans are automatically covered by health insurance.

The US health care delivery system is really not a system in its true sense, even though it is called a system when reference is made to its various features, components, and services. Hence, it may be somewhat misleading to talk about the American health care delivery "system" because a true system does not exist (Wolinsky 1988). One main feature of the US health care system is that it is fragmented because different people obtain health care through different means. The delivery system has continued to undergo periodic changes, mainly in response to concerns regarding cost, access, and quality.

Describing health care delivery in the United States can be a daunting task. To facilitate an understanding of the structural and conceptual basis for the delivery of health services, this book is organized according to a systems framework presented at the end of this chapter. Also, the mechanisms of health services delivery in the United States are collectively referred to as a system throughout this book.

The main objective of this chapter is to provide a broad understanding of how health care is delivered in the United States. The overview presented here introduces the reader to several concepts treated more extensively in later chapters.

# An Overview of the Scope and Size of the System

Table 1–1 demonstrates the complexity of health care delivery in the United States. Many organizations and individuals are involved in health care, ranging from educational and research institutions, medical suppliers, insurers, payers, and claims processors to health care providers. Multitudes of providers are involved in the delivery of preventive, primary, subacute, acute, auxiliary, rehabilitative, and continuing care. An increasing number of managed care organizations (MCOs) and integrated networks now provide a continuum of care, covering many of the service components.

The US health care delivery system is massive, with total employment in various health delivery settings over 16 million in 2009. This included over 822,000 professionally active doctors of medicine (MDs), 70,480 osteopathic physicians (DOs), and 2.5 million active nurses (US Census Bureau 2011). The vast number of health care and health services professionals (5.8 million) work in ambulatory health service settings, such as the offices of physicians, dentists, and other health practitioners, medical and diagnostic laboratories, and home health care service locations (US Census Bureau 2011). This is followed by hospitals (4.7 million) and nursing and residential care facilities (3.1 million) (US Census Bureau 2011). The vast array of health care institutions includes 5,815 hospitals, 15,730 nursing homes, and 13,513 substance abuse treatment facilities (US Census Bureau 2011).

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Education/ Research	Suppliers	Insurers	Providers	Payers	Government
Medical schools Dental schools Nursing programs Physician assistant programs Nurse practitioner programs Physical therapy, occupational therapy, speech therapy programs Research organizations Private foundations US Public Health Service (AHRQ, ATSDR, CDC, FDA, HRSA, IHS, NIH, SAMHSA) Professional associations Trade associations	Pharmaceutical companies Multipurpose suppliers Biotechnology companies	Managed care plans Blue Cross/ Blue Shield plans Commercial insurers Self-insured employers Medicare Medicaid VA Tricare	Preventive Care Health departments Primary Care Physician offices Community health centers Dentists Nonphysician providers Subacute Care Subacute care facilities Ambulatory surgery centers Acute Care Hospitals Acute Care Hospitals Auxiliary Services Pharmacists Diagnostic clinics X-ray units Suppliers of medical equipment Rehabilitative Services Home health agencies Rehabilitation centers Skilled nursing facilities Continuing Care Nursing homes Integrated Managed care organizations Integrated networks	Blue Cross/ Blue Shield plans Commercial insurers Employers Third-party administrators State agencies	Public insurance financing Health regulations Health policy Research funding Public health

## Table 1–1 The Complexity of Health Care Delivery

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In 2009, 1,131 federally qualified health center grantees, with 123,012 full-time employees, provided preventive and primary care services to approximately 18.8 million people living in medically underserved, rural and urban areas (HRSA 2011). Various types of health care professionals are trained in 159 medical and osteopathic schools, 61 dental schools, over 100 schools of pharmacy, and more than 1,500 nursing programs located throughout the country (US Bureau of Labor Statistics 2011). In 2008, there were 200.9 million Americans with private health insurance coverage, 43 million Medicare beneficiaries, and 42.6 million Medicaid recipients, but 46.3 million people (15.4%) remained without any health insurance (US Census Bureau 2011). Multitudes of government agencies are involved with the financing of health care, medical and health services research, and regulatory oversight of the various aspects of the health care delivery system.

# A Broad Description of the System

US health care does not function as a rational and integrated network of components designed to work together coherently. To the contrary, it is a kaleidoscope of financing, insurance, delivery, and payment mechanisms that remain loosely coordinated. Each of these basic functional components-financing, insurance, delivery, and payment-represents an amalgam of public (government) and private sources. Thus, government-run programs finance and insure health care for select groups of people who meet each program's prescribed criteria for eligibility. To a lesser degree, government programs also deliver certain health care services directly to recipients, such as veterans, military

personnel, and the uninsured who may depend on city and county hospitals or limited services offered by public health clinics. However, the financing, insurance, payment, and delivery functions are largely in private hands.

The market-oriented economy in the United States attracts a variety of private entrepreneurs driven by the pursuit of profits obtained by carrying out the key functions of health care delivery. Employers purchase health insurance for their employees through private sources, and employees receive health care services delivered by the private sector. The government finances public insurance through Medicare, Medicaid, and the Children's Health Insurance Program (CHIP) for a significant portion of the very low-income, elderly, disabled, and pediatric populations. However, insurance arrangements for many publicly insured people are made through private entities, such as HMOs, and health care services are rendered by private physicians and hospitals. The blend of public and private involvement in the delivery of health care has resulted in:

- a multiplicity of financial arrangements that enable individuals to pay for health care services;
- numerous insurance agencies or MCOs that employ varied mechanisms for insuring against risk;
- multiple payers that make their own determinations regarding how much to pay for each type of service;
- a large array of settings where medical services are delivered; and
- numerous consulting firms offering expertise in planning, cost containment, quality, and restructuring of resources.

There is little standardization in a system that is functionally fragmented, and the various system components fit together only loosely. Such a system is not subject to overall planning, direction, and coordination from a central agency, such as the government. Duplication, overlap, inadequacy, inconsistency, and waste exist, leading to complexity and inefficiency, due to the missing dimension of system-wide planning, direction, and coordination. The system does not lend itself to standard budgetary methods of cost control. Each individual and corporate entity within a predominantly private entrepreneurial system seeks to manipulate financial incentives to its own advantage, without regard to its impact on the system as a whole. Hence, cost containment remains an elusive goal. In short, the US health care delivery system is like a behemoth or an economic megalith that is almost impossible for any single entity to manage or control. The US economy is the largest in the world, and, compared to other nations, consumption of health care services in the United States represents a greater proportion of the country's total economic output. Although the system can be credited for delivering some of the best clinical care in the world, it falls short of delivering equitable services to every American.

An acceptable health care delivery system should have two primary objectives: (1) it must enable all citizens to obtain health care services when needed, and (2) the services must be cost effective and meet certain established standards of quality. On one hand, the US health care delivery system falls short of both these ideals. On the other hand, however, certain features of US health care are the envy of the world. The United States leads the world in the latest and the best in medical technology, training, and research. It offers some of the most sophisticated institutions, products, and processes of health care delivery. These achievements are indeed admirable, but much more remains unaccomplished.

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# Basic Components of a Health Services Delivery System

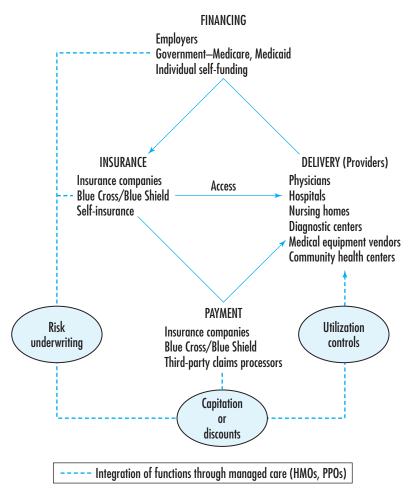
Figure 1–1 illustrates that a health care delivery system incorporates four functional components-financing, insurance, delivery, and payment-necessary for the delivery of health services. The four functional components make up the quad-function model. Health care delivery systems differ depending on the arrangement of these components. The four functions generally overlap, but the degree of overlap varies between a private and a government-run system and between a traditional health insurance and managed care-based system. In a government-run system, the functions are more closely integrated and may be indistinguishable. Managed care arrangements also integrate the four functions to varying degrees.

#### Financing

Financing is necessary to obtain health insurance or to pay for health care services. For most privately insured Americans, health insurance is employer-based; that is, their employers finance health care as a fringe benefit. A dependent spouse or children may also be covered by the working spouse's or working parent's employer. Most employers purchase health insurance for their employees through an MCO or an insurance company selected by the employer. Small employers may or may not be in a

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position to afford health insurance coverage for their employees.

#### Insurance

Insurance protects the insured against catastrophic risks when needing expensive health care services. The insurance function also determines the package of health services the insured individual is entitled to receive. It specifies how and where health care services may be received. The MCO or insurance company also functions as a claims processor and manages the disbursement of funds to the health care providers.

#### **Delivery**

The term delivery refers to the provision of health care services by various providers. The term *provider* refers to any entity that delivers health care services and can either independently bill for those services or is tax supported. Common examples of providers include physicians, dentists, optometrists, and therapists in private practices, hospitals, and diagnostic and imaging clinics, and suppliers of medical equipment (e.g., wheelchairs, walkers, ostomy supplies, oxygen). With few exceptions, most providers render services to people who have health insurance.

#### **Payment**

The payment function deals with *reimbursement* to providers for services delivered. The insurer determines how much is paid for a certain service. Funds for actual disbursement come from the premiums paid to the MCO or insurance company. The patient is usually required, at the time of service, to pay a small out-of-pocket amount, such as \$25 or \$30, to see a physician. The remainder is covered by the MCO or insurance company. In government insurance plans, such as Medicare and Medicaid, tax revenues are used to pay providers.

## **Uninsured Americans**

The United States has a significant number of *uninsured*—those without private or public health insurance coverage. A March 2009 report from Families USA found that 86.7 million, or 1 in 3, Americans under the age of 65 were without health insurance for some period of time between 2008 and 2009 (Families USA 2009).

Since the United States has an employerbased financing system, it is not difficult to see why the unemployed generally have no health insurance. However, even some employed individuals might not have health insurance coverage for two main reasons: (1) In most states, employers are not mandated to offer health insurance to their

employees; therefore, some employers, due to economic constraints, do not offer it. Some small businesses simply cannot get group insurance at affordable rates and, therefore, are not able to offer health insurance as a benefit to their employees. (2) In many work settings, participation in health insurance programs is voluntary and does not require employees to join. Some employees choose not to sign up, mainly because they cannot afford the cost of health insurance premiums. Employers rarely pay 100% of the insurance premium; most require their employees to pay a portion of the cost, called premium cost sharing. Employees who do not have health insurance offered by their employers or those who are self-employed have to obtain health insurance on their own. Individual rates are typically higher than group rates available to employers, and, in some instances, health insurance is unavailable when adverse health conditions are present.

In the United States, working people earning low wages are the most disenfranchised because most are not eligible for public benefits and cannot afford premium cost sharing. The US government finances health benefits for certain special populations, including government employees, the elderly (people age 65 and over), people with disabilities, some people with very low incomes, and children from low-income families. The program for the elderly and certain disabled individuals is called *Medicare*. The program for the indigent, jointly administered by the federal government and state governments, is named Medicaid. The program for children from low-income families, another federal/state partnership, is called the Children's Health Insurance Program (CHIP). For such public programs, the government may function as both financier and insurer, or the insurance function may be carved out to a health maintenance organization (HMO). Private providers, with a few exceptions, render services to these special categories of people, and the government pays for the services, generally, by establishing contractual arrangements with selected intermediaries for the actual disbursement of payments to the providers. Thus, even in government-financed programs, the four functions of financing, insurance, delivery, and payment can be quite distinct.

# Transition from Traditional Insurance to Managed Care

Under traditional insurance, the four basic health delivery functions have been fragmented; that is, the financiers, insurers, providers, and payers have often been different entities, with a few exceptions. During the 1990s, however, health care delivery in the United States underwent a fundamental change involving a tighter integration of the basic functions through managed care.

Previously, fragmentation of the functions meant a lack of control over utilization and payments. The quantity of health care consumed refers to *utilization* of health services. Traditionally, determination of the utilization of health services and the price charged for each service has been left up to the insured individuals and their physicians. Due to rising health care costs, however, current delivery mechanisms have instituted some controls over both utilization and price.

*Managed care* is a system of health care delivery that (1) seeks to achieve efficiencies by integrating the four functions

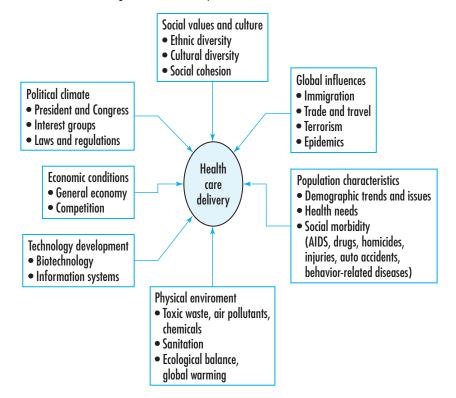
of health care delivery discussed earlier, (2) employs mechanisms to control (manage) utilization of medical services, and (3) determines the price at which the services are purchased and, consequently, how much the providers get paid. The primary financier is still the employer or the government, as the case may be. Instead of purchasing health insurance through a traditional insurance company, the employer contracts with an MCO, such as an HMO or a preferred provider organization (PPO), to offer a selected health plan to its employees. In this case, the MCO functions like an insurance company and promises to provide health care services contracted under the health plan to the enrollees of the plan. The term enrollee (member) refers to the individual covered under the plan. The contractual arrangement between the MCO and the enrollee-including the collective array of covered health services that the enrollee is entitled to-is referred to as the *health plan* (or "plan," for short). The health plan uses selected providers from whom the enrollees can choose to receive services.

# Primary Characteristics of the US Health Care System

In any country, certain external influences shape the basic character of the health services delivery system. These forces consist of the political climate of a nation; economic development; technological progress; social and cultural values; physical environment; population characteristics, such as demographic and health trends; and global influences (Figure 1–2). The combined interaction of these environmental forces influences the course of health care delivery.

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Ten basic characteristics differentiate the US health care delivery system from that of other countries:

- 1. No central agency governs the system.
- 2. Access to health care services is selectively based on insurance coverage.
- 3. Health care is delivered under imperfect market conditions.
- 4. Third-party insurers act as intermediaries between the financing and delivery functions.
- 5. The existence of multiple payers makes the system cumbersome.
- 6. The balance of power among various players prevents any single entity from dominating the system.

- 7. Legal risks influence practice behavior of physicians.
- 8. Development of new technology creates an automatic demand for its use.
- 9. New service settings have evolved along a continuum.
- 10. Quality is no longer accepted as an unachievable goal in the delivery of health care.

#### **No Central Agency**

The US health care system is not administratively controlled by a department or an agency of the government. Most other developed nations have national health care programs in which every citizen is entitled

to receive a defined set of health care services. Availability of "free" services can break a system financially. To control costs, these systems use global budgets to determine total health care expenditures on a national scale and to allocate resources within budgetary limits. Availability of services, as well as payments to providers, is subject to such budgetary constraints. The government of these nations also controls the proliferation of health care services, especially costly medical technology. System-wide controls over the allocation of resources determine to what extent government-sponsored health care services are available to citizens. For instance, the availability of specialized services is restricted.

By contrast, the United States has mainly a private system of financing, as well as delivery. Private financing, predominantly through employers, accounts for approximately 54% of total health care expenditures; the government finances the remaining 46% (National Center for Health Statistics 2006). Private delivery of health care means that the majority of hospitals and physician clinics are private businesses, independent of the government. No central agency monitors total expenditures through global budgets or controls the availability and utilization of services. Nevertheless, the federal and state governments in the United States play an important role in health care delivery. They determine public-sector expenditures and reimbursement rates for services provided to Medicaid, CHIP, and Medicare beneficiaries. The government also formulates standards of participation through health policy and regulation, meaning providers must comply with the standards established by the government to be certified to provide services to Medicaid, CHIP, and Medicare beneficiaries.

Certification standards are also regarded as minimum standards of quality in most sectors of the health care industry.

#### **Partial Access**

*Access* means the ability of an individual to obtain health care services when needed. In the United States, access is restricted to people who (1) have health insurance through their employers, (2) are covered under a government health care program, (3) can afford to buy insurance with their own private funds, or (4) are able to pay for services privately. Health insurance is the primary means for ensuring access. Although the uninsured can access certain types of services, they often encounter barriers to obtaining needed health care. Federally supported community health centers, for example, provide physician services to anyone regardless of ability to pay. Such centers and other types of free clinics, however, are located only in certain geographic areas. Under US law, hospital emergency departments are required to evaluate a patient's condition and render medically needed services for which the hospital does not receive any direct payments unless the patient is able to pay. Uninsured Americans, therefore, are able to obtain medical care for acute illness. Hence, one can say that the United States does have a form of universal catastrophic health insurance even for the uninsured (Altman and Reinhardt 1996). On the other hand, the uninsured generally have to forego continual basic and routine care, commonly referred to as *primary care*.

Countries with national health care programs provide *universal coverage*; that is, health insurance is available to all citizens. However, access to services when needed may be restricted because no health care system has the capacity to deliver on demand every type of service the citizens may require. Hence, *universal access*—the ability of all citizens to obtain health care when needed remains mostly a theoretical concept.

Experts generally believe that the inadequate access to basic and routine primary care services particularly by the nation's vulnerable populations (see Chapter 11 for detailed discussion) is one of the main reasons why the United States, in spite of being the most economically advanced country, lags behind other developed nations in measures of population health, such as infant mortality and overall life expectancy. It remains to be seen whether the Patient Protection and Affordable Care Act of 2010 will be able to deliver on the promise of access to health care for all Americans by 2014 (see Chapter 6 for further details).

#### **Imperfect Market**

In the United States, even though the delivery of services is largely in private hands, health care is only partially governed by free market forces. The delivery and consumption of health care in the United States does not quite pass the basic test of a *free market*, as subsequently described. Hence, the system is best described as a quasi-market or an imperfect market. Following are some key features characterizing free markets.

In a free market, multiple patients (buyers) and providers (sellers) act independently, and patients can choose to receive services from any provider. Providers neither collude to fix prices, nor are prices fixed by an external agency. Rather, prices are governed by the free and unencumbered interaction of the forces of supply and demand (Figure 1–3). **Demand**—that is, the quantity of health care purchased—in turn, is driven by the prices prevailing in the free market. Under free market conditions, the quantity demanded will increase as the price is lowered for a given product or service. Conversely, the quantity demanded will decrease as the price increases.

At casual observation, it may appear that multiple patients and providers do exist. Most patients, however, are now enrolled in either a private health plan or governmentsponsored Medicare, Medicaid, or CHIP programs. These plans act as intermediaries for the patients, and the consolidation of patients into health plans has the effect of shifting the power from the patients to the administrators of the plans. The result is that the health plans, not the patients, are the real buyers in the health care services market. Private health plans, in many instances, offer their enrollees a limited choice of providers rather than an open choice.

Theoretically, prices are negotiated between the payers and providers. In practice, however, prices are determined by the payers, such as managed care, Medicare, and Medicaid. Because prices are set by agencies external to the market, they are not governed by the unencumbered forces of supply and demand.

For the health care market to be free, unrestrained competition must occur among providers based on price and quality. Generally speaking, free competition exists among health care providers in the United States. The consolidation of buying power in the hands of private health plans, however, has been forcing providers to form alliances and integrated delivery systems on the supply side. Integrated delivery systems (discussed in Chapter 9) are networks of health services organizations. In certain geographic sectors of the country, a single giant medical system has taken over as the

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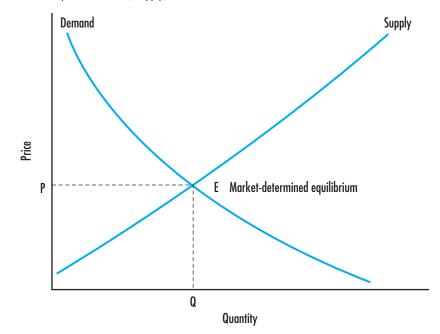


Figure 1–3 Relationship Between Price, Supply, and Demand Under Free-Market Conditions.

Under free-market conditions, there is an inverse relationship between the quantity of medical services demanded and the price of medical services. That is, quantity demanded goes up when the prices go down and vice versa. On the other hand, there is a direct relationship between price and the quantity supplied by the providers of care. In other words, providers are willing to supply higher quantities at higher prices and vice versa. In a free market, the quantity of medical care that patients are willing to purchase, the quantity of medical care that providers are willing to supply, and the price reach a state of equilibrium. The equilibrium is achieved without the interference of any nonmarket forces. It is important to keep in mind that these conditions exist only under free-market conditions, which are not characterisitic of the health care market.

sole provider of major health care services, restricting competition. As the health care system continues to move in this direction, it appears that only in large metropolitan areas will there be more than one large integrated system competing to get the business of the health plans.

A free market requires that patients have information about the appropriateness of various services. Such information is difficult to obtain because technologydriven medical care has become highly sophisticated. New diagnostic methods, intervention techniques, and more effective drugs fall in the domain of the professional physician. Also, medical interventions are commonly required in a state of urgency. Hence, patients have neither the skills nor the time and resources to obtain accurate information when needed. Channeling all health care needs through a primary care provider is likely to reduce this information gap when the primary care provider acts as the patient's advocate or agent. Conversely, the Internet is becoming a prominent source of medical information, and medical advertising is having an impact on consumer expectations.

In a free market, patients have information on price and quality for each provider. The current system has other drawbacks that obstruct information-seeking efforts. Item-based pricing, instead of package pricing, is one such hurdle. Surgery is a good example to illustrate item-based pricing. Patients can generally obtain the fees the surgeon would charge for a particular operation. But the final bill, after the surgery has been performed, is likely to include charges for supplies, use of the hospital's facilities, and services performed by providers, such as anesthesiologists, nurse anesthetists, and pathologists. These providers, sometimes referred to as *phantom providers*, who function in an adjunct capacity, bill for their services separately. Item billing for such additional services, which sometimes cannot be anticipated, makes it extremely difficult to ascertain the total price before services have actually been received. Package pricing and capitated fees can help overcome these drawbacks, but they have made relatively little headway for pricing medical procedures. Package pricing refers to a bundled fee for a package of related services. In the surgery example, this would mean one all-inclusive price for the surgeon's fees, hospital facilities, supplies, diagnostics, pathology, anesthesia, and postsurgical follow-up. With *capitation*, all health care services are included under one set fee per covered individual.

In recent years, quality of health care has received much emphasis. Performance ratings and report cards, however, furnish scant information on the quality of health care providers.

In a free market, patients must directly bear the cost of services received. The purpose of insurance is to protect against the risk of unforeseen catastrophic events. Since the fundamental purpose of insurance is to meet major expenses when unlikely events occur, having insurance for basic and routine health care undermines the principle of insurance. When you buy home insurance to protect your property against the unlikely event of a fire, you do not anticipate the occurrence of a loss. The probability that you will suffer a loss by fire is very small. If a fire does occur and cause major damage, insurance will cover the loss, but the policy does not cover routine wear and tear on the house, such as chipped paint or a leaking faucet. Health insurance, however, generally covers basic and routine services that are predictable. Health insurance coverage for minor services, such as colds and coughs, earaches, and so forth, amounts to prepayment for such services. Health insurance has the effect of insulating patients from the full cost of health care. There is a *moral hazard* that, once enrollees have purchased health insurance, they will use health care services to a greater extent than if they were to bear the full cost of these services.

In a free market for health care, patients make decisions about the purchase of health care services. The main factors that limit the patient's ability to make health care purchase decisions have already been discussed. Even with the best intentions, the circumstances surrounding sickness and injury often prohibit comparative shopping based on price and quality. Further, such information is not easily available. At least two additional factors limit the ability of patients to make decisions. First, decisions about the utilization of health care are often determined by need rather than by price-based demand. Need has been defined as the amount of medical care that medical experts believe a person

should have to remain or become healthy (Feldstein 1993). Need can also be based on self-evaluation of one's own health status. Second, the delivery of health care can result in demand creation. This follows from selfassessed need, which, coupled with moral hazard, leads to greater utilization, creating an artificial demand because prices are not taken into consideration. Practitioners who have a financial interest in additional treatments also create artificial demand (Hemenway and Fallon 1985), commonly referred to as *provider-induced demand*, or supplier-induced demand. Functioning as patients' agents, physicians exert enormous influence on the demand for health care services (Altman and Wallack 1996). Research studies have pointed to physicians' behavior of creating demand to their own financial benefit (see, for instance, McGuire and Pauly 1991). Demand creation occurs when physicians prescribe medical care beyond what is clinically necessary. This can include practices such as making more frequent follow-up appointments than necessary, prescribing excessive medical tests, or performing unnecessary surgery (Santerre and Neun 1996).

## **Third-Party Insurers and Payers**

Insurance often functions as the intermediary among those who finance, deliver, and receive health care. Delivery of health care is often viewed as a transaction between the patient and the provider, but insurance and payment functions introduce a *third party* into the transaction (Griffith 1995), the patient being the first party and the provider the second party. Apart from being the payer, the third-party insurer also takes over most other administrative functions associated with the plan. The providers, as well as the enrollees, must comply with the policies set forth by the insurer in matters related to the delivery of health care and payment for services.

The intermediary role of insurance creates a wall of separation between the financing and delivery functions so that quality of care often remains a secondary concern. In normal economic markets, the consumer is armed with the power to influence demand based on the price and quality of goods and services. Another way to illustrate this concept is to say that, in a free market, consumers vote with their dollars for the best candidate among competing products, based on the price and quality of each product. The insurance intermediary does not have the incentive to be the patient's advocate on either price or quality. At best, employees can air their dissatisfactions with the plan to their employer, who has the power to discontinue the current plan and choose another company. In reality, however, employers may be reluctant to change plans if the current plan offers lower premiums compared to a new plan. National health care programs have even fewer incentives for promoting quality, although they can contain costs by artificially fixing prices.

#### **Multiple Payers**

A national health care system is sometimes also referred to as a *single-payer system*, because there is one primary payer, the government. When delivering services, providers send the bill to an agency of the government that subsequently sends payment to each provider.

By contrast, the United States has a multiplicity of health plans and insurance companies because each employer is free to determine the type of health plan it offers. Each plan spells out the type of services the enrollee can receive. Some plans make an arbitrary determination of how much will be paid for a certain type of service. For Medicare and Medicaid recipients, the government has its own set of regulations and payment schedules.

Multiple payers often represent a billing and collection nightmare for the providers of services. Multiple payers make the system more cumbersome in several ways:

- It is extremely difficult for providers to keep tabs on the numerous health plans. For example, it is difficult to keep up with which services are covered under each plan and how much each plan will pay for those services.
- Providers must hire a battery of claims processors to bill for services and monitor receipt of payments. Billing practices are not always standardized, and each payer establishes its own format.
- Payments can be denied for not precisely following the requirements set by each payer.
- Denied claims necessitate rebilling.
- When only partial payment is received, some health plans may allow the provider to *balance bill* the patient for the amount the health plan did not pay. Other plans prohibit balance billing. Even when the balance billing option is available to the provider, it triggers a new cycle of billings and collection efforts.
- Providers must sometimes engage in lengthy collection efforts, including writing collection letters, turning delinquent accounts over to collection agencies, and finally writing off as bad debt amounts that cannot be collected.

• Government programs have complex regulations for determining whether payment is made for services actually delivered. Medicare, for example, requires that each provider maintain lengthy documentation on services provided. Medicaid is known for lengthy delays in paying providers.

It is generally believed that the United States spends far more on *administrative costs*—that is the costs associated with billing, collections, bad debts, and maintaining medical records—than the national health care systems in other countries. However, estimates of cost differentials between the US health care system and single-payer systems have been the subject of considerable controversy (Kahn et al. 2005).

## **Power Balancing**

The US health services system involves multiple players, not just multiple payers. The key players in the system have been physicians, administrators of health service institutions, insurance companies, large employers, and the government. Big business, labor, insurance companies, physicians, and hospitals make up the powerful and politically active special interest groups represented before lawmakers by highpriced lobbyists. Each set of players has its own economic interests to protect. Physicians, for instance, want to maximize their incomes and have minimum interference with the way they practice medicine; institutional administrators seek to maximize reimbursement from private and public insurers. Insurance companies and MCOs are interested in maintaining their share of the health care insurance market; large employers want to minimize the costs they incur

providing health insurance as a benefit to their employees. The government tries to maintain or enhance existing benefits for select population groups and simultaneously reduce the cost of providing these benefits. The problem is that self-interests of different players are often at odds. For example, providers seek to maximize government reimbursement for services delivered to Medicare, Medicaid, and CHIP beneficiaries, but the government wants to contain cost increases. Employers dislike rising health insurance premiums. Health plans, under pressure from the employers, may constrain fees for the providers, who resent any cuts in their incomes.

The fragmented self-interests of the various players produce countervailing forces within the system. One positive effect of these opposing forces is that they prevent any single entity from dominating the system. Conversely, each set of players has a large stake in health policy reforms. In an environment that is rife with motivations to protect conflicting self-interests, achieving comprehensive system-wide reforms has been next to impossible, and cost containment has remained a major challenge. Consequently, the approach to health care reform in the United States has been characterized as incremental or piecemeal, and the focus of reform initiatives has been confined to health insurance coverage and payment cuts to providers.

#### **Legal Risks**

America is a litigious society. Motivated by the prospects of enormous jury awards, Americans are quick to drag an alleged offender into a courtroom at the slightest perception of incurred harm. Private health care providers have become increasingly susceptible to litigation. By contrast, in national health care programs, governments are immune to lawsuits. Hence, in the United States, the risk of malpractice lawsuits is a real consideration in the practice of medicine. To protect themselves against the possibility of litigation, it is not uncommon for practitioners to engage in what is referred to as *defensive medicine* by prescribing additional diagnostic tests, scheduling return checkup visits, and maintaining copious documentation. Many of these additional efforts may be unnecessary; hence, they are costly and inefficient.

## **High Technology**

The United States has been the hotbed of research and innovation in new medical technology. Growth in science and technology often creates demand for new services despite shrinking resources to finance sophisticated care. People generally equate high-tech care to high-quality care. They want "the latest and the best," especially when health insurance will pay for new treatments. Physicians and technicians want to try the latest gadgets. Hospitals compete on the basis of having the most modern equipment and facilities. Once capital investments are made, costs must be recouped through utilization. Legal risks for providers and health plans alike may also play a role in discouraging denial of new technology. Thus, several factors promote the use of costly new technology once it is developed.

## **Continuum of Services**

Medical care services are classified into three broad categories: curative (e.g., drugs, treatments, and surgeries), restorative (e.g., physical, occupational, and speech therapies), and preventive (e.g., prenatal care, mammograms, and immunizations). Health care service settings are no longer confined to the hospital and the physician's office, where many of the aforementioned services were once delivered. Several new settings, such as home health, subacute care units, and outpatient surgery centers, have emerged in response to the changing configuration of economic incentives. Table 1–2 depicts

Table 1–2 The Continuu	m of Health Care Services		
Types of Health Services	<b>Delivery Settings</b>		
Preventive care	Public health programs Community programs Personal lifestyles Primary care settings		
Primary care	Physician's office or clinic Community health centers Self-care Alternative medicine		
Specialized care	Specialist provider clinics		
Chronic care	Primary care settings Specialist provider clinics Home health Long-term care facilities Self-care Alternative medicine		
Long-term care	Long-term care facilities Home health		
Subacute care	Special subacute units (hospitals, long-term care facilities) Home health Outpatient surgical centers		
Acute care	Hospitals		
Rehabilitative care	Rehabilitation departments (hospitals, long-term care facilities) Home health Outpatient rehabilitation centers		
End-of-life care	Hospice services provided in a variety of settings		

Table 1–2 Th	e Continuum	of Health	Care Se	rvices
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the continuum of health care services. The health care continuum in the United States remains lopsided, with a heavier emphasis on specialized services than on preventive services, primary care, and management of chronic conditions.

## **Quest for Quality**

Even though the definition and measurement of quality in health care are not as clear cut as they are in other industries, the delivery sector of health care has come under increased pressure to develop quality standards and demonstrate compliance with those standards. There are higher expectations for improved health outcomes at the individual and broader community levels. The concept of continual quality improvement has also received much emphasis in managing health care institutions.

## **Trends and Directions**

Since the final two decades of the 20th century, the US health care delivery system has continued to undergo certain fundamental shifts in emphasis, summarized in Figure 1–4. Later chapters discuss these transformations in greater detail and focus on the factors driving them.

Figure 1–4 Trends	and	Directions	in	Health	Care	Delivery.
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Promotion of health at less cost has been the driving force behind these trends. An example of a shift in emphasis is the concept of health itself: The focus is changing from illness to wellness. Such a change requires new methods and settings for wellness promotion, although the treatment of illness continues to be the primary goal of the health services delivery system.

# Significance for Health Care Practitioners and Policymakers

An understanding of the health care delivery system is essential for managers and policy makers. In fact, an understanding of the intricacies within the health services system would be beneficial to all those who come in contact with the system. In their respective training programs, health professionals, such as physicians, nurses, technicians, therapists, dietitians, and pharmacists, as well as others, may understand their own individual roles but remain ignorant of the forces outside their profession that could significantly impact current and future practices. An understanding of the health care delivery system can attune health professionals to their relationship with the rest of the health care environment. It can help them better understand changes and the potential impact of those changes on their own practice. Adaptation and relearning are strategies that can prepare health professionals to cope with an environment that will see ongoing change long into the future.

Policy decisions to address specific problems must also be made within the broader macro context because policies designed to bring about change in one health care sector can have wider repercussions, both desirable and undesirable, in other sectors of the system. Policy decisions and their implementation are often critical to the future direction of the health care delivery system. However, in a multifaceted system, future issues will be best addressed by a joint undertaking with a balanced representation of the key players in health services delivery: physicians, insurance companies, managed care organizations, employers, institutional representatives, and the government.

# Significance for Health Care Managers

An understanding of the health care system has specific implications for health services managers, who must understand the macro environment in which they make critical decisions in planning and strategic management, regardless of whether they manage a private institution or a public service agency. Such decisions and actions, eventually, affect the efficiency and quality of services delivered. The interactions among the system's key components and the implications of those interactions must be well understood because the operations of health care institutions are strongly influenced, either directly or indirectly, by the financing of health services, reimbursement rates, insurance mechanisms, delivery modes, new statutes and legal opinions, and government regulations.

The environment of health care delivery will continue to remain fluid and dynamic. The viability of delivery settings, and, thus, the success of health care managers, often depends on how the managers react to the system dynamics. Timeliness of action is often a critical factor that can make the difference between failure and success. Following are some more specific reasons why understanding the health care delivery system is indispensable for health care managers.

## **Positioning the Organization**

Health services administrators need to understand their own organizational position within the macro environment of the system. Senior managers, such as chief executive officers, must constantly gauge the nature and impact of the fundamental shifts illustrated in Figure 1-4. Managers need to consider which changes in the current configuration of financing, insurance, payment, and delivery might affect their organization's longterm stability. Middle and first-line managers also need to understand their role in the current configuration and how that role might change in the future. How should resources be realigned to effectively respond to those changes? For example, these managers need to evaluate whether certain functions in their departments will have to be eliminated, modified, or added. Would the changes involve further training? What processes are likely to change and how? What do the managers need to do to maintain the integrity of their institution's mission, the goodwill of the patients they serve, and the quality of the services? Well thought through and appropriately planned change is likely to cause less turbulence for the providers, as well as the recipients of care.

## **Handling Threats and Opportunities**

Changes in any of the functions of financing, insurance, payment, and delivery can present new threats or opportunities in the health care market. Health care managers are more effective if they proactively deal with any threats to their institution's profitability and viability. Managers need to find ways to transform certain threats into new opportunities.

## **Evaluating Implications**

Managers are better able to evaluate the implications of health policy and new reform proposals when they understand the relevant issues and how such issues link to the delivery of health services in the establishments they manage. With the expected expansion of health insurance coverage, more individuals will be brought into the health care system, creating further demand for health services. Planning and staffing for the right mix of health care workforce to meet this anticipated surge in demand is critical.

## Planning

Senior managers are often responsible for strategic planning, regarding which services should be added or discontinued, which resources should be committed to facility expansion, or what should be done with excess capacity. Any long-range planning must take into consideration the current makeup of health services delivery, the evolving trends, and the potential impact of these trends.

## **Capturing New Markets**

Health care administrators are in a better position to capture new health services markets if they understand emerging trends in the financing, insurance, payment, and delivery functions. New opportunities must be explored before any newly evolving segments of the market get overcrowded. An understanding of the dynamics within the system is essential to forging new marketing strategies to stay ahead of the competition and often to finding a service niche.

### **Complying with Regulations**

Delivery of health care services is heavily regulated. Health care managers must comply with government regulations, such as standards of participation in government programs, licensing rules, and security and privacy laws regarding patient information, and must operate within the constraints of reimbursement rates. The Medicare and Medicaid programs have, periodically, made drastic changes to their reimbursement methodologies that have triggered the need for operational changes in the way services are organized and delivered. Private agencies, such as the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), also play an indirect regulatory role, mainly in the monitoring of quality of services. Health care managers have no choice but to play by the rules set by the various public and private agencies. Hence, it is paramount that health care managers acquaint themselves with the rules and regulations governing their areas of operation.

## **Following the Organizational Mission**

Knowledge of the health care system and its development is essential for effective management of health care organizations. By keeping up to date on community needs, technological progress, consumer demand, and economic prospects, managers can be in a better position to fulfill their organizational missions to enhance access, improve service quality, and achieve efficiency in the delivery of services.

## Health Care Systems of Other Countries

Canada and most Western European countries have national health care programs that provide universal coverage. There are three basic models for structuring national health care systems:

- 1. In a system under *national health insurance* (NHI), such as in Canada, the government finances health care through general taxes, but the actual care is delivered by private providers. In the context of the quadfunction model, NHI requires a tighter consolidation of the financing, insurance, and payment functions coordinated by the government. Delivery is characterized by detached private arrangements.
- 2. In a *national health system* (NHS), such as in Great Britain, in addition to financing a tax-supported NHI program, the government manages the infrastructure for the delivery of medical care. Under such a system, the government operates most of the medical institutions. Most health care providers, such as physicians, are either government employees or are tightly organized in a publicly managed infrastructure. In the context of the quad-function model, NHS requires a tighter consolidation of all four functions.
- 3. In a *socialized health insurance* (SHI) system, such as in Germany, government-mandated contributions by employers and employees finance health care. Private providers deliver health care. Private not-for-profit insurance companies, called sickness

funds, are responsible for collecting the contributions and paying physicians and hospitals (Santerre and Neun 1996). In a socialized health insurance system, insurance and payment functions are closely integrated, and the financing function is better coordinated with the insurance and payment functions than in the United States. Delivery is characterized by independent private arrangements. The government exercises overall control.

In the remainder of this book, the terms "national health care program" and "national health insurance" are used generically and interchangeably to refer to any type of government-supported universal health insurance program. Table 1–3 presents

selected features of the national health care programs in Canada, Germany, and Great Britain compared to the United States. Following is a brief discussion of health care delivery in selected countries from various parts of the world, to illustrate the application of the three models discussed and to provide a sample of the variety of health care systems in the world.

#### Australia

In the past, Australia had switched from a universal national health care program to a privately financed system. Since 1984, it has returned to a national program—called Medicare—financed by income taxes and an income-based Medicare levy. The system is built on the philosophy of everyone

#### Table 1–3 Health Care Systems of Selected Industrialized Countries

	United States	Canada	Great Britain	Germany
Туре	Pluralisitic	National health insurance	National health system	Socialized health insurance
Ownership	Private	Public/Private	Public	Private
Financing	Voluntary, multipayer system (premiums or general taxes)	Single payer (general taxes)	Single payer (general taxes)	Employer—employee (mandated payroll contributions and general taxes)
Reimbursement (hospital)	Varies (DRG, negotiated fee for service, per diem, capitation)	Global budgets	Global budgets	Per diem payments
Reimbursement (physicians)	RBRVS, fee for service	Negotiated fee for service	Salaries and capitation payments	Negotiated fee for service
Consumer copayment	Small to significant	Negligible	Negligible	Negligible

Note: RBRVS, resource-based relative value scale.

Source: Data from R.E. Santerre and S.P. Neun, Health Economics: Theories, Insights, and Industry Studies, p. 146, © 1996, Irwin.

contributing to the cost of health care according to his or her capacity to pay. In addition to Medicare, approximately 43% of Australians carry private health insurance (Australian Government 2004) to cover gaps in public coverage, such as dental services and care received in private hospitals (Willcox 2001). Although private health insurance is voluntary, it is strongly encouraged by the Australian government through tax subsidies for purchasers and tax penalties for nonpurchasers (Healy 2002). Public hospital spending is funded by the government, but private hospitals offer better choices. Costs incurred by patients receiving private medical services, whether in or out of the hospital, are reimbursed in whole or in part by Medicare. Private patients are free to choose and/or change their doctors. The medical profession in Australia is composed mainly of private practitioners, who provide care predominantly on a fee-forservice basis (Hall 1999; Podger 1999).

Recent health care reform undertaken by the Australian government has focused mainly on creating a better primary care system with the aim of offsetting the growing prevalence of chronic diseases (Gregory 2010; National Health and Hospitals Reform Commission 2010). Efforts have been launched to improve access and quality. Another objective is to reform the public hospital system by increasing the number of beds and improving productivity.

Information on safety and quality standards, as well as prices, will be accessible to the public and closely monitored to ensure transparency. The reform also created the Australian Commission on Safety and Quality in Health Care, the Independent Hospital Pricing Authority, and the National Performance Authority to help improve system performance. These three divisions have been established for continual improvement, well after the implementation of reform legislation, and to assist Australians in making more informed decisions about health services (Australian Government 2010).

#### Canada

Canada implemented its national health insurance system-referred to as Medicare—under the Medical Care Act of 1966. Currently, Medicare is composed of 13 provincial and territorial health insurance plans, sharing basic standards of coverage, as defined by the Canada Health Act (Health Canada 2006). The bulk of financing for Medicare comes from general provincial tax revenues; the federal government provides a fixed amount that is independent of actual expenditures. Taxes are used to pay for nearly 70% of total health care expenditures in Canada. The remaining 30%, which pays for supplementary services, such as drugs, dental care, and vision care, is financed privately (Canadian Institute for Health Information 2005). Many employers offer private insurance for supplemental coverage.

Provincial and territorial departments of health have the responsibility to administer medical insurance plans, determine reimbursement for providers, and deliver certain public health services. Provinces are required by law to provide reasonable access to all medically necessary services and to provide portability of benefits from province to province. Patients are free to select their providers (Akaho et al. 1998). Several provinces have established contracts with providers in the United States for certain specialized services. According to Canada's Fraser Institute. specialist physicians surveyed across 12 specialties and 10 Canadian provinces reported a total waiting time of 18.2 weeks between

referral from a general practitioner and delivery of treatment in 2010, an increase from 16.1 weeks in 2009. Patients had to wait the longest to undergo orthopedic surgery (35.6 weeks) (Barua et al. 2010).

Nearly all the Canadian provinces (Ontario being one exception) have resorted to regionalization, by creating administrative districts within each province. The objective of regionalization is to decentralize authority and responsibility to more efficiently address local needs and to promote citizen participation in health care decision making (Church and Barker 1998). The majority of Canadian hospitals are operated as private nonprofit entities run by community boards of trustees, voluntary organizations, or municipalities, and most physicians are in private practice (Health Canada 2006). Most provinces use global budgets and allocate set reimbursement amounts for each hospital. Physicians are paid fee-for-service rates, negotiated between each provincial government and medical association (MacPhee 1996; Naylor 1999).

Over the years, federal financial support to the provinces has been drastically reduced. Under the increasing burden of higher costs, certain provinces, such as Alberta and Ontario, have started small-scale experimentation with privatization. However, in 2003, the Health Council of Canada, composed of representatives of federal, provincial, and territorial governments, as well as health care experts, was established to assess Canada's health care system performance and establish goals for improvement. The Council's 2003 First Ministers' Accord on Health Care Renewal created a 5-year, \$16 billion Health Reform Fund targeted at improving primary health care, home care, and catastrophic drug coverage (Health Council of Canada 2005).

Although most Canadians are quite satisfied with their health care system, how to sustain current health care delivery and financing remains a challenge. Spending on health care has increased from approximately 7% of program spending at the provincial level in the 1970s to almost 40% today. It is expected to surpass 50% in every province and territory within the next few years.

#### China

Since the economic reforms initiated in the late 1970s, health care in the People's Republic of China has undergone significant changes. In urban China, health insurance has evolved from a predominantly public insurance (either government or public enterprise) system to a multipayer system. Government employees are covered under government insurance as a part of their benefits. Employees for public enterprises are largely covered through public enterprise insurance, but the actual benefits and payments vary according to the financial well-being of the enterprises. Employees of foreign businesses or joint ventures are, typically, well insured through private insurance arrangements. Almost all of these plans contain costs through a variety of means, such as experience-based premiums, deductibles, copayments, and health benefit dollars (i.e., pre-allocated benefit dollars for health care that can be converted into income if not fully used). The unemployed, self-employed, and employees working for small enterprises (public or private) are largely uninsured. They can purchase individual or family plans in the private market or pay for services out of pocket. In rural China, the New Cooperative Medical Scheme (NCMS) (discussed later) has become widespread with funds pooled

from national and local government, as well as private citizens. Although the insurance coverage rate is high (reaching over 90%), the actual benefits are still very limited.

Similar to the United States, China has been facing the growing problems of a large uninsured population and health care cost inflation. Although health care funding was increased by 87% in 2006 and 2007, the country has yet to reform its health care system into one that is efficient and effective. Employment-based insurance in China does not cover dependents, nor does it cover migrant workers, leading to high out-of-pocket cost sharing in total health spending. Rural areas in China are the most vulnerable because of a lack of true insurance plans and the accompanying comprehensive coverage. Health care cost inflation is also growing at a rate that is 7% faster than gross domestic product (GDP) growth of 16% per year (Yip and Hsia 2008).

Health care delivery has also undergone significant changes. The former three-tier referral system (primary, second, tertiary) has been largely abolished. Patients can now go to any hospital of their choice as long as they are insured or can pay out of pocket. As a result, large (tertiary) hospitals are typically overutilized, whereas smaller (primary and secondary) hospitals are underutilized. Use of large hospitals contributes to medical cost escalation and medical specialization.

Major changes in health insurance and delivery have made access to medical care more difficult for the poor, uninsured, and underinsured. As a result, wide and growing disparities in access, quality, and outcomes are becoming apparent between rural and urban areas, and between the rich and the poor. Since the severe acute respiratory syndrome (SARS) epidemic in 2003, the government created an electronic disease reporting system at the district level. In addition, each district in China now has a hospital dedicated to infectious disease. However, flaws still remain, particularly in monitoring infectious disease in the remote localities that comprise some districts (Blumenthal and Hsiao 2005).

To fix some of its problems, the Chinese government has pushed through health reform initiatives in five prominent areas: health insurance, pharmaceuticals, primary care, public health, and public/community hospitals. For example, it created the New Cooperative Medical Scheme to provide rural areas with a government-run voluntary insurance program. It prevents individuals living in these areas from becoming impoverished due to illness or catastrophic health expenses (Yip and Hsia 2008). A similar program was established in urban areas in 2008, called the Urban Resident Basic Medical Insurance scheme. The scheme targets the uninsured children, elderly, and other nonworking urban residents and enrolls them into the program at the household level rather than at the individual level (Wagstaff et al. 2009).

To improve access to primary care, China has reestablished community health centers (CHCs) to provide preventive and primary care services to offset the expensive outpatient services at hospitals. The goal is to reduce hospital utilization in favor of CHCs that can provide prevention, home care, and rehabilitative services (Yip and Hsia 2008; Yip and Mahal 2008). The CHCs have not been very popular among the public because of their perceived lack of quality and reputation. It remains uncertain whether China will restore its previously integrated health care delivery system, aimed at achieving universal access, or continue its current course of medical specialization and privatization.

#### Germany

The German health care system is characterized by socialized health insurance (SHI) financed by pooling employer and employee premium contributions through payroll taxes. Nonprofit sickness funds manage the social insurance pool. About 88% of the population has been enrolled in a sickness fund; another 11% either have private health insurance or are government workers with special coverage provisions. Less than 0.2% of Germans are uninsured (Busse 2002). Sickness funds act as purchasing entities by negotiating contracts with hospitals. However, with an aging population, fewer people in the workforce, and stagnant wage growth during recessions, paying for the increasing cost of medical care has been challenging.

During the 1990s, Germany adopted legislation to promote competition among sickness funds (Brown and Amelung 1999). To further control costs, the system employs global budgets for the hospital sector and places annual limits on spending for physician services. Disease management programs are also implemented to standardize care for ailments like diabetes, as well as fixed payments to hospitals that discourage overtreatment.

## **Great Britain**

Great Britain follows the national health system (NHS) model. Coincidentally, the British health delivery system is also named NHS (National Health Service), which marked 50 years of existence in 1998. The NHS is founded on the principles of primary care and has strong focus on community health services. The system owns its hospitals and employs its hospital-based specialists and other staff on a salaried basis. The primary care physicians, referred to as general practitioners (GPs), are mostly private practitioners.

Delivery of primary care is through primary care trusts (PCTs) in England, local health groups in Wales, health boards in Scotland, and primary care partnerships in Northern Ireland. PCTs have geographically assigned responsibility for community health services, in which each person living in a given geographic area is assigned to a particular PCT. A typical PCT is responsible for approximately 50,000-250,000 patients (Dixon and Robinson 2002). PCTs function independently of the local health authorities and are governed by a consumer-dominated board. A fully developed PCT has its own budget allocations, used for both primary care and hospital-based services. In this respect, PCTs function like MCOs in the United States.

It is also of interest to note that 11.5% of the British population holds private health care insurance (Dixon and Robinson 2002), and approximately 2.2 billion pounds are spent annually in the acute sector of private health care (Doyle and McNeilly 1999). Future "pro-market" reforms in the UK's National Health Service would likely shift decision making to general practitioners, let some hospitals become nonprofit, and give patients more control over their health care.

## Israel

Until 1995, Israel had a system of universal coverage based on the German SHI model, financed through an employer tax and income-based contributions from individuals. When the National Health Insurance (NHI) Law went into effect in 1995, it made insurance coverage mandatory for all Israeli citizens. Adults are required to pay a health tax. General tax revenue supplements the health tax revenue, which the government distributes to the various health plans based on a capitation formula. Each year the government determines how much from the general tax revenue should be contributed toward the NHI. The employer tax for health care was abolished in 1997; as a result, the share of general tax revenue to finance health care rose from 26% in 1995 to 46% in 2000 (Rosen 2003).

Health plans (or sickness funds) offer a predefined basic package of health care services and are prohibited from discriminating against those who have preexisting medical conditions. The capitation formula has builtin incentives for the funds to accept a larger number of elderly and chronically ill members. Rather than relying on a single-payer system, the reform allowed the existence of multiple health plans (today there are four competing, nonprofit sickness funds) to foster competition among funds with the assumption that competition would lead to better quality of care and an increased responsiveness to patient needs. The plans also sell private health insurance to supplement the basic package. The system is believed to provide a high standard of care (Rosen and Merkur 2009; Gross et al. 1998).

Unlike Germany, approximately 85% of the general hospital beds in Israel are owned by the government and the General Sick Fund, the largest of the four sickness funds. Hospitals are reimbursed under the global budget model (Chinitz and Israeli 1997). There was a major effort, in the early 1990s, to shift hospitals from government

ownership to independent, nonprofit trusts, but this endeavor failed because of opposition from labor unions. Despite this, government hospitals have been granted more autonomy in the intervening years (Rosen 2003).

#### Japan

Since 1961, Japan has been providing universal coverage to its citizens through two main health insurance schemes. The first one is an employer-based system, modeled after Germany's SHI program. The second is a national health insurance program. Generally, large employers (with more than 300 employees) have their own health programs. Nearly 2,000 private, nonprofit health insurance societies manage insurance for large firms. Smaller companies either band together to provide private health insurance or belong to a governmentrun plan. Day laborers, seamen, agricultural workers, the self-employed, and retirees are all covered under the national health care program. Individual employees pay roughly 8% of their salaries as premiums and receive coverage for about 90% of the cost of medical services, with some limitations. Dependents receive slightly less than 90% coverage. Employers and the national government subsidize the cost of private premiums. Coverage is comprehensive, including dental care and prescription drugs, and patients are free to select their providers (Akaho et al. 1998; Babazono et al. 1998). Providers are paid on a fee-for-service basis with little control over reimbursement (McClellan and Kessler 1999).

Several health policy issues have emerged in Japan, however, in the past few years. First, since 2002, some business leaders and economists urged the Japanese government to lift its ban on mixed public/ private payments for medical services, arguing that private payments should be allowed for services not covered by medical insurance (i.e., services involving new technologies or drugs). The Japan Medical Association and Ministry of Health, Labor, and Welfare have argued against these recommendations, stating such a policy would favor the wealthy, create disparities in access to care, and could be a risk to patient safety. Although the ban on mixed payments has not been lifted, Prime Minister Koizumi expanded the existing "exceptional approvals system" for new medical technologies in 2004 to allow private payments for selected technologies not covered by medical insurance (Nomura and Nakayama 2005).

Another recent policy development in Japan is the hospitals' increased use of a new system of reimbursement for inpatient care services, called diagnosis-procedure combinations (DPCs). Using DPCs, hospitals receive daily fees for each condition and treatment, regardless of actual provision of tests and interventions, proportionate to patients' length of stay. It is theorized that the DPC system will incentivize hospitals to provide more efficient, higher quality care to patients (Nomura and Nakayama 2005).

Japan's economic stagnation in the last several years has led to an increased pressure to contain costs (Ikegami and Campbell 2004). In 2005, Japan implemented reform initiatives in long-term care (LTC) delivery to contain costs in a growing sector of health care with rapidly rising costs. The new policy required residents in LTC facilities to pay for room and board. It also established new preventive benefits for seniors with low needs, who are at risk of requiring care in the future. The preventive benefits were designed to maintain health and independence and to postpone the need for nursing home care. Charging nursing home residents a fee for room and board was a departure from past policies that promoted institutionalization (Tsutsui and Muramatsu 2007).

#### Singapore

Prior to 1984, Singapore had a British-style NHS program, in which medical services were provided mainly by the public sector and financed through general taxes. Since then, the nation has designed a system based on market competition and self-reliance. Singapore has achieved universal coverage through a policy that requires mandatory private contributions but little government financing. The program, known as Medisave, mandates every working person, including the self-employed, to deposit a portion of earnings into an individual Medisave account. Employers are required to match employee contributions. These savings can only be withdrawn (1) to pay for hospital services and some selected, expensive physician services or (2) to purchase a government-sponsored insurance plan, called Medishield, for catastrophic (expensive and major) illness. For basic and routine services, people are expected to pay out of pocket. Those who cannot afford to pay receive government assistance (Hsiao 1995). In 2002, the government introduced ElderShield, which defrays out-of-pocket medical expenses for the elderly and severely disabled requiring long-term care (Singapore Ministry of Health 2004). The fee-for-service system of payment is prevalent throughout Singapore (McClellan and Kessler 1999).

## **Developing Countries**

Developing countries, containing 84% of the world's population, claim only 11% of the world's health spending. Yet, these countries account for 93% of the worldwide burden of disease. The six developing regions of the world are East Asia and the Pacific, Europe (mainly Eastern Europe) and Central Asia, Latin America and the Caribbean, the Middle East and North Africa, South Asia, and Sub-Saharan Africa. Of these, the latter two have the least resources and the greatest health burden. On a per capita basis, industrialized countries have six times as many hospital beds and three times as many physicians as developing countries. People with private financial means can find reasonably good health care in many parts of the developing world. However, the majority of the populations have to depend on limited government services that are often of questionable quality, as evaluated by Western standards. As a general observation, government financing for health services increases in countries with higher per capita incomes (Schieber and Maeda 1999).

## The Systems Framework

A *system* consists of a set of interrelated and interdependent, logically coordinated components designed to achieve common goals. Even though the various functional components of the health services delivery structure in the United States are, at best, only loosely coordinated, the main components can be identified using a systems model. The systems framework used here helps one understand that the structure of health care services in the United States is based on some foundations, provides a logical arrangement of the various components, and demonstrates a progression from inputs to outputs. The main elements of this arrangement are system inputs (resources), system structure, system processes, and system outputs (outcomes). In addition, system outlook (future directions) is a necessary feature of a dynamic system. This systems framework is used as the conceptual base for organizing later chapters in this book (see Figure 1–5).

### **System Foundations**

The current health care system is not an accident. Historical, cultural, social, and economic factors explain its current structure. These factors also affect forces that shape new trends and developments, as well as those that impede change. Chapters 2 and 3 provide a discussion of the system foundations.

## **System Resources**

No mechanism for health services delivery can fulfill its primary objective without deploying the necessary human and nonhuman resources. Human resources consist of the various types and categories of workers directly engaged in the delivery of health services to patients. Such personnelphysicians, nurses, dentists, pharmacists, other doctoral trained professionals, and numerous categories of allied health professionals-usually have direct contact with patients. Numerous ancillary workersbilling and collection agents, marketing and public relations personnel, and building maintenance employees-often play an important, but indirect, supportive role in the delivery of health care. Health care managers are needed to manage various

Figure 1–5 The Systems Model and Related Chapters.

Ε I. SYSTEM FOUNDATIONS N Cultural Beliefs and Values and Historical Developments V "Beliefs, Values, and Health" Т (Chapter 2) R 0 "The Evolution of Health Services in the United States" Ň (Chapter 3) M Ε N Т

#### **System Features**

II. SYSTEM RESOURCES Human Resources	III. SYSTEM PROCESSES The Continuum of Care	IV. SYSTEM OUTCOMES Issues and Concerns	
"Health Services Professionals" (Chapter 4)	"Outpatient and Primary Care Services" (Chapter 7)	"Cost, Access, and Quality" (Chapter 12)	
Nonhuman Resources "Medical Technology"	"Inpatient Facilities and Services" (Chapter 8) "Managed Case and Integrated Occurring tions"	Change and Reform "Health Policy"	
(Chapter 5) "Health Services Financing"	"Managed Care and Integrated Organizations" (Chapter 9)	(Chapter 13)	
(Chapter 6)	Special Populations		
	"Long-Term Care" (Chapter 10)		
	"Health Services for Special Populations" (Chapter 11)		
FT UR TE UN RD Ec	V. SYSTEM OUTLOOK "The Future of Health Services Delivery" (Chapter 14)		

types of health care services. This book primarily discusses the personnel engaged in the direct delivery of health care services (Chapter 4). The nonhuman resources include medical technology (Chapter 5) and health services financing (Chapter 6).

Resources are closely intertwined with access to health care. For instance, in

certain rural areas of the United States, access is restricted due to a shortage of health professionals within certain categories. Development and diffusion of technology also determine the caliber of health care to which people may have access. Financing for health insurance and reimbursement to providers affect access indirectly.

#### System Processes

System resources influence the development and change in the physical infrastructure-such as hospitals, clinics, and nursing homes-essential for the different processes of health care delivery. Most health care services are delivered in noninstitutional settings, mainly associated with processes referred to as outpatient care (Chapter 7). Institutional health services provided in hospitals, nursing homes, and rehabilitation institutions, for example, are predominantly inpatient services (Chapter 8). Managed care and integrated systems (Chapter 9) represent a fundamental change in the financing (including payment and insurance) and delivery of health care. Even though managed care represents an integration of the resource and process elements of the systems model, it is discussed as a process for the sake of clarity and continuity of discussions. Special institutional and community-based settings have been developed for long-term care (Chapter 10) and mental health (Chapter 11).

## **System Outcomes**

System outcomes refer to the critical issues and concerns surrounding what the health services system has been able to accomplish, or not accomplish, in relation to its primary objective, to provide, to an entire nation, cost-effective health services that meet certain established standards of quality. The previous three elements of the systems model play a critical role in fulfilling this objective. Access, cost, and quality are the main outcome criteria to evaluate the success of a health care delivery system (Chapter 12). Issues and concerns regarding these criteria trigger broad initiatives for reforming the system through health policy (Chapter 13).

### **System Outlook**

A dynamic health care system must be forward looking. In essence, it must project into the future the accomplishment of desired system outcomes in view of anticipated social, economic, political, technological, informational, and ecological forces of change (Chapter 14).

## Summary

The United States has a unique system of health care delivery. The basic features characterizing this system—or rather a patchwork of subsystems-include the absence of a central agency to govern the system; unequal access to health care services, mainly because of a lack of health insurance for all Americans: health care delivery under imperfect market conditions; the existence of multiple payers; third-party insurers functioning as intermediaries between the financing and delivery aspects of health care; a balancing of power among various players; legal risks influencing practice behavior; new and expensive medical technology; a continuum of service settings; and a focus on quality improvement.

No country in the world has a perfect system, and most nations with a national health care program also have a private sector that varies in size. Because of resource limitations, universal access remains a theoretical concept even in countries that offer universal health insurance coverage. The developing countries of the world also face serious challenges due to scarce resources and strong underlying needs for services.

Under free-market conditions, there is an inverse relationship between the quantity of medical services demanded and the price of medical services. Conversely, there is a direct relationship between price and the quantity supplied by the providers of care. In a free market, the quantity of medical care that patients are willing to purchase, the quantity of medical care that providers are willing to supply, and the price reach a state of equilibrium. The equilibrium is achieved without interference of any nonmarket forces. These conditions exist only under free-market conditions, which are not characteristic of the health care market.

Health care administrators must understand how the health care delivery system works and evolves. Such an understanding improves awareness of the position their organization occupies within the macro environment of the system. This awareness also facilitates strategic planning and compliance with health regulations, enabling them to deal proactively with both opportunities and threats, and enabling them to effectively manage health care organizations. The systems *framework* provides an organized approach to an understanding of the various components of the US health care delivery system.

#### Terminology

access	Medicaid	provider-in
administrative costs	Medicare	quad-functi
balance bill	moral hazard	reimbursem
capitation	national health insurance	single-paye
defensive medicine	national health system	socialized h
demand	need	standards o
enrollee	outpatient care	system
free market	package pricing	third party
global budget	phantom providers	uninsured
health plan	premium cost sharing	universal ad
inpatient services	primary care	universal co
managed care	provider	utilization

## **Test Your Understanding**

nduced demand tion model ment er system health insurance of participation iccess coverage

#### **Review Questions**

- 1. Why does cost containment remain an elusive goal in US health services delivery?
- 2. What are the two main objectives of a health care delivery system?
- 3. Name the four basic functional components of the US health care delivery system. What role does each play in the delivery of health care?
- 4. What is the primary reason for employers to purchase insurance plans to provide health benefits to their employees?
- 5. Why is it that, despite public and private health insurance programs, some US citizens are without health care coverage?

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  - 6. What is managed care?
  - 7. Why is the US health care market referred to as "imperfect"?
  - 8. Discuss the intermediary role of insurance in the delivery of health care.
  - 9. Who are the major players in the US health services system? What are the positive and negative effects of the often-conflicting self-interests of these players?
- 10. What main roles does the government play in the US health services system?
- 11. Why is it important for health care managers and policy makers to understand the intricacies of the health care delivery system?
- 12. What kind of a cooperative approach do the authors recommend for charting the future course of the health care delivery system?
- 13. What is the difference between national health insurance (NHI) and a national health system (NHS)?
- 14. What is socialized health insurance (SHI)?

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