CHAPTER 1

Foundations

Health care is one of our economy's largest industries; it contributes significantly to the nation's competitiveness and productivity in addition to enhancing citizens' well-being and quality of life.

AT A GLANCE

The industry is a complex mix of government; nonprofit and commercial organizations; and individual efforts to finance, provide, and regulate health care services. Major industry sectors include:

- *Financing sector* Organizations that reimburse health care providers, such as the Centers for Medicare and Medicaid Services (a federal agency), state workers' compensation programs, health insurance companies, and health maintenance organizations
- *Institutional providers* Organizations that provide personal health care services, such as physician offices, medical groups, hospitals, mental health facilities, nursing homes, and home health agencies
- *Individual providers* Professionals who offer personal health care services, such as physicians, dentists, chiropractors, nurses, pharmacists, and psychologists
- *Public health agencies* Government agencies that promote health and prevent disease in populations, such as the Centers for Disease Control and Prevention and state/local health departments

• *Enablers* Organizations that support and facilitate the provision of health services, such as trade and professional associations (for example, the American Hospital Association and American Medical Association), special interest groups (American Heart Association), research organizations (National Institutes of Health), and educational institutions (medical and nursing schools)

• *Suppliers* Organizations that provide products and services, such as pharmaceutical manufacturers, hospital supply and equipment companies, and consulting firms

• *Regulators* Government agencies and private organizations that regulate health care institutions and professionals, such as medical specialty societies, state licensing boards, state insurance departments, and the Joint Commission on Accreditation of Healthcare Organizations

This classification is not precise; definitions of who belongs where are often fuzzy and membership in the various sectors can overlap.

Table 1.1 is an overview of the U.S. health care industry's magnitude and scope.

SOME HISTORY

The country's first hospital opened its doors in 1756. Over the past 250 years, hospitals have undergone many profound changes; the key stages are summarized in Table 1.2. Each stage entailed its own challenges, and the group best equipped to deal with them exercised the greatest power.

Refuge Stage

This stage spans approximately 170 years, from the mid-1700s to the late 1920s.

Pennsylvania Hospital, the nation's first, opened in 1756; New York Hospital, the second, was founded in 1776. It was not until the mid-1850s that there were more than a handful of organizations devoted to providing inpatient health care. A survey conducted in 1873 identified only 178 hospitals. Medical knowledge was primitive and physicians could do little of

Table 1.1. Overview of the U.S. Health Care Industry, 2002

National Health Care Expenditures	
Per year	$1.3 trillion
Per day	$3.6 billion
Per hour	$148 million
Per minute	$2.5 million
Per second	$36,500
Per person	$4,000
Percentage of gross domestic product	13
Percentage from government funds	43
Percentage from private funds	57
Percentage spent on the provision of personal health care services	87
Spent on prescription drugs	$122 billion
Source of Funds	**Percentage**
Total expenditures from:	
Out-of-pocket (individuals)	17
Private health insurance	34
Other private sources	5
Federal government	33
State governments	11
Health Insurance	
With no coverage:	
Number of individuals	41 million
Percentage of the population under age 65	17
Percentage of population that has coverage through:	
Private health insurance (those under age 65)	72
Private health insurance provided by employer (those under age 65)	67
Enrollment in a health maintenance organization (those under age 65)	34
Medicare	14
Medicaid	9
General, Short-Stay Hospitals	
Organizations	5,800
Beds	1 million

(*Continued*)

Table 1.1. Overview of the U.S. Health Care Industry, 2002, Cont'd

Average beds occupied	66%
Average hospital size	170 beds
Annual inpatient admissions	35 million
Average inpatient stay	6.8 days
Annual (hospital) outpatient visits	85 million
Annual (hospital) emergency room visits	108 million
Annual expenditures	$412 billion
Nursing Homes	
Organizations	17,000
Beds	1.8 million
Average beds occupied	82%
Average daily residents	1.5 million
Annual expenditures	$92 billion
Mental and Behavioral Health	
Psychiatric hospitals	580
Psychiatric units in general hospitals	1,700
Annual expenditures	$33 billion
Personnel	
Total health care industry workforce	12 million
Percentage of all working adults	9%
Physicians	
Number (active)	690,000
Annual office visits	824 million
Annual expenditures	$286 billion
Other Health Care Personnel	
Registered nurses	2.3 million
Pharmacists	208,000
Dentists	168,000
Physical therapists	144,000
Speech therapists	97,000
Podiatrists	11,000

Table 1.2. Evolution of the U.S. Health Care Industry

Stage	Challenge	Greatest Power or Influence
Refuge	Create institutions and raise funds; *provide care*	Board
Physician workshop	Achieve efficacy; expand capacities and competencies; *produce cures*	Physicians
Business	Improve organizational effectiveness and efficiency; *rationalize*	Management
System	Improve organizational competitiveness; *combine and integrate*	Shared and collaborative

value; treatments were primarily supportive and many were detrimental. Those patients able to pay received care in their homes, because hospitals were very dangerous places because of infections.

This was a period of institution building. Hospitals were new types of organizations with missions different from that of almshouses (warehouses for the poor, aged, and infirm), from which they evolved. Their survival depended on gaining community acceptance and raising funds. Nearly all hospitals were charitable organizations, and the money needed to create and operate them was donated.

Hospital boards, composed of a community's social and financial elite, were the only groups capable of performing these critical tasks. Consequently, they possessed power and exercised influence hard to imagine today.

By 1909, there were forty-three hundred hospitals; in 1923, there were more than seven thousand. This growth, plus dramatic advances in biomedical science, precipitated the next stage and significantly altered the locus of power in hospitals.

Physician Workshop Stage

This stage began in the early 1930s and concluded in the 1960s. With the task of institution building complete, hospitals sought to improve their clinical efficacy. Physicians acquired power by controlling the knowledge, skills, and technologies that transformed hospitals from offering supportive care to producing cures.

Basic biomedical knowledge, accumulating throughout the middle and late 1800s, reached critical mass in the first decades of the twentieth century. Hospitals were revolutionized in three ways. First, because infections could be partially controlled, hospitals became much safer places. Second, treatments were developed that could alter the course of disease. Third, thanks to the development of anesthesia, surgery could be safely and effectively performed. The late John Knowles, M.D., former CEO of Massachusetts General Hospital, observed, "It was not until about 1915 that the average patient with a common disease entering the average hospital, being treated by the typical physician had a better than 50/50 chance of benefiting from the experience."

Those able to pay began seeking care in hospitals. Physicians controlled the knowledge base and flow of patients on which hospitals relied. Accordingly, hospital success became far more dependent on physicians than on trustees. Boards and administrators established the setting and resources employed by physicians; hospitals became doctors' workshops.

Because all but the simplest cases were treated by them, hospitals became the epicenter of America's health care system.

Business Stage

This stage ran from the mid-1960s through the 1980s. To provide physicians what they required to practice, hospitals had to become more business-oriented. As a consequence, far better managerial talent and systems were needed.

Exponentially expanding medical knowledge and skills increased the hospital's size, scope, and complexity. As medical practice became more specialized, the amount and sophistication of facilities, equipment, and sup-

port personnel increased dramatically. Additionally, the growth of private health insurance, combined with enactment of Medicare and Medicaid in the mid-1960s, infused huge amounts of money into the industry and increased the regulations with which hospitals had to comply.

The most important challenges facing hospitals were managing growth and improving operational effectiveness and efficiency. Professional health care managers acquired power and influence in the process; they moved from being servants of the board (in the refuge stage) and lieutenants of the medical staff (in the physician workshop stage) to full-fledged executives responsible for directing the affairs of complex, multimillion dollar organizations.

At the beginning of this stage, a little more than 5 percent of the nation's gross domestic product was spent on health care; by 1985 the figure was 10 percent. Health care was now big business.

System Stage

This stage began in the mid-1980s and continues to the present day. Three developments define it: increasing consolidation, greater competition, and dramatic changes in the nature and form of payment.

First, health care organizations consolidated. For example, many hospitals merged and then combined with physician practices, nursing homes, and health insurance plans. Health systems were created.

Second, the industry became far more competitive. Not only did health systems and hospitals compete with each other but they also began competing with their own medical staffs, insurance companies, and managed care organizations.

Third, change occurred in how providers were paid, as purchasers sought to control double-digit inflation in their health care expenditures. Throughout the 1960s and 1970s, hospitals were reimbursed on the basis of their charges or incurred costs; physicians received fees or customary charges. In the 1980s, hospitals started being paid rates that were set prospectively (irrespective of their incurred costs), assuming some of the financial risk associated with providing services. Additionally, doctors, hospitals, and other health care organizations had to cooperate in order to offer the full spectrum of services demanded by purchasers.

The key challenge faced by health systems was to form and manage a diverse array of enterprises and relationships that would allow them to compete in markets undergoing significant change. This required high levels of coordination among boards, between management teams and physicians, and across organizations. As a consequence, power and influence was increasingly shared.

HEALTH AND DISEASE

Health is defined by the World Health Organization (WHO) as complete physical, mental, and social well-being, not merely the absence of disease or infirmity.

Disease impairs the functioning of a person. It can be caused by genetic flaws; the natural, preprogrammed and progressive breakdown in biological systems that increases with age; external agents (chemical, biologic, radiological); and trauma (such as accidents).

A person's health is affected by genetic predisposition, age, context (including such things as income level, education, housing, nutrition, sanitation, environment), and the use of health care services. These factors are listed here in decreasing order of importance; genetics, age, and context have a far greater impact on a person's health status than the amount and type of health care services consumed. The reason is that health care services primarily come into play only after the horse is out of the barn, when an illness or condition has already occurred. Meanwhile, other factors affect the probability that an illness or condition will appear in the first place.

Table 1.3 portrays selected indicators of Americans' health and disease status.

HEALTH SERVICE NEED, DEMAND, AND UTILIZATION

What affects the utilization of health care services? Figure 1.1 depicts the key relationships.

Table 1.3. U.S. Health and Disease Status

Infant Mortality Rate (Deaths per 1,000 Live Births)	
White	6
Black	14
Hispanic	6
American Indian	9
Infant mortality ranking of the United States compared to selected other countries	27th
Life Expectancy at Birth	
Males	74 years
Females	79 years
Life expectancy ranking of the United States compared to selected other countries	20th
Age-Adjusted Death Rate (Deaths per 100,000 Persons, Adjusted for Differences in Age)	
White	860
Black	1148
American Indian	716
Hispanic	601
Population with Limitation of Activity Caused by Chronic Conditions	**Percentage**
Under 18	6
18 to 44	6
45 to 54	12
55 to 64	20
65 to 74	26
Over 74	45

(*Continued*)

Table 1.3. U.S. Health and Disease Status, Cont'd

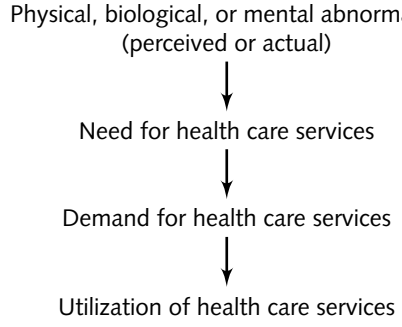
Index of Respondent-Reported Overall Health Status (Lower Scores Are Healthier)	
Total	9
Poor	21
Near poor	15
Nonpoor	6
Persons (age 20–74) with hypertension	24%
Persons (age 20–74) with an unhealthy weight	58%
Children (age 6–19) who are overweight	11%
Number of deaths annually	2,391,000

Cause of Death	**Percentage of Total**
Heart disease	31
Cancer	23
Stroke	7
Chronic obstructive pulmonary disease	5
Accidents	4
Pneumonia and influenza	4
Diabetes	3
Suicide	1
Kidney disease	1
Chronic liver disease	1

The factors and stages are:

- *Need:* recognition of an underlying abnormal condition judged to warrant care and treatment
- *Demand:* motivation and the means to seek care
- *Utilization:* consumption of health care services

Figure 1.1. Key Determinants of Health Care Service Utilization



The presence of a disease or condition does not necessarily cause need. Need may not precipitate demand, and demand may not result in utilization.

Condition → demand	*Example:* A person may have a condition that goes undetected because it is asymptomatic. Or the underlying condition may not be defined as a disease (as was the case for many mental disorders in the early part of the last century).
Need → demand	*Example:* Individuals can demand care without needing it (as in the case of hypochondriacs). They also might need care and not demand it because the condition is thought to be inconsequential.
Demand → utilization	The conversion of demand into consumption of health care services is most affected by the two-sided coin of access: individual wherewithal (knowledge, time, and money); and by how health services are organized, financed, and provided (industry structure and functioning).

A host of factors have been shown to affect the demand for, and utilization of, health care services. Here are a few important ones:

- Age
- Insurance coverage
- Race/ethnicity
- Number and distribution of providers
- Education level
- Provider referral patterns
- Income level
- Attitudes and beliefs

As an illustration, Table 1.4 presents data on ambulatory care usage (total doctor's office, hospital emergency room, and home health visits per year) and how it varies by population group.

BOARDS AND GOVERNANCE

There are approximately six thousand hospital and health system boards, with about one hundred thousand people serving on them. Here is some basic information.

Board Composition

Health Systems

The typical health care system board is composed of fourteen members: one inside director (who holds a board seat *ex officio* by virtue of a full-time administrative position), two medical staff directors (physicians who hold board seats because of their

Hospitals

The average hospital board is composed of fifteen members: one insider, three medical staff directors, and eleven outsiders.

Table 1.4. Percentage of Individuals with No Doctor's Office, Hospital Emergency Room, or Home Health Visits During the Past Twelve Months

Category	Percentage
All persons	17
Age:	
Under 18	12
18 to 44	23
45 to 64	15
65 and over	8
Gender:	
Male	22
Female	12
Race:	
White	16
Black	17
American Indian	21
Asian	20
Hispanic	unavailable
Economic status:	
Poor	22
Near poor	21
Nonpoor	14
Under age 65, health insurance coverage:	
Insured (private)	14
Insured (Medicaid)	14
Uninsured	37
Geographic region:	
Northeast	12
Midwest	15
South	18
West	20
Residence:	
Urban	17
Rural	17

membership on the medical staff), and eleven outside directors (board members who are neither inside nor medical staff directors).

Eighty-two percent of systems limit the number of consecutive terms a director can serve (the median is three terms).

Fifty percent of hospitals have term limits (the median is three terms).

Twenty-one percent of system directors are female; 94 percent of system boards have at least one female member.

Eighteen percent of hospital directors are female; only 6 percent of hospitals have no female members.

Minorities hold 7 percent of system board seats; 5 percent are Black, 1 percent are Hispanic, 0.7 percent are Asian, and 0.1 percent are Native American. Thirty-seven percent of system boards have at least one minority member.

Minorities compose 7 percent of hospital directors; 6 percent are Black, 0.7 percent are Hispanic, and 0.3 percent are Asian. Fifty percent of hospital boards have no racial or ethnic minority members.

Board Functioning

Health Systems

Ninety-six percent of systems have a person assigned to provide staff support to the board; 10 percent of systems have a designated board coordinator. Staff support to the board is from an executive assistant in 60 percent of systems; this person is typically attached to the office of the president or CEO. On

Hospitals

Ninety-four percent of hospitals have a person assigned to extend staff support to the board. In hospitals with governance staff support, 15 percent have a formally designated board coordinator; 80 percent use an executive or administrative assistant or secretary, and 5 percent assign a

average, about one-quarter FTE (full-time-equivalent) is devoted to board staffing.	member of the management team. On average, one-half FTE is allocated to board staffing.
System directors spend on average twenty-three hours per year involved in formal educational activities related to their roles.	The typical hospital director spends about seventeen hours per year involved in governance education.
Eighteen percent of systems compensate their directors.	Ten percent of hospitals compensate their directors. In the vast majority of instances, the amount of compensation is nominal (less than $1,000 per year).
Thirty-eight percent of system boards meet monthly, 40 percent meet every other month, and 18 percent meet quarterly.	Fifty-six percent of hospital boards meet monthly, 19 percent meet every other month, and 8 percent meet quarterly.
The typical system board meeting lasts three and one-half hours; on average, 11 percent of members are absent.	The average hospital board meeting lasts two hours; 13 percent of members are typically absent.

The most common system and hospital standing committees are executive, finance, planning or strategy, quality or credentialing, nominating, and audit.

Eighty-six percent of health system board chairpersons are outsiders, 6 percent are medical staff directors, and 8 percent are insiders.	For hospital board chairpersons, the corresponding figures are 94 percent, 4 percent, and 2 percent.
Seventy-four percent of system board chairpersons are male and 2 percent are minorities.	Among hospital board chairpersons 79 percent are male and 2 percent are minorities.

Governance Work

The fundamental obligation of all boards is to represent an organization's owners, ensuring that resources and capacities are deployed in ways that benefit them. In for-profit health care organizations, the owners are stockholders; in nonprofits, they are stakeholders (such as the community); and in governmental facilities they are constituents (voters).

To meet this obligation, a board must discharge four core responsibilities.

1. Determining *ends*: formulating the organization's vision and mission, specifying its key goals, and ensuring that strategies (developed by management) will lead to accomplishing goals and fulfilling the vision and mission
2. Ensuring a high level of *management* performance: recruiting and selecting the CEO; specifying CEO performance expectations; assessing the CEO's performance and contributions; adjusting the CEO's compensation; and, if the need arises, terminating the CEO's employment
3. Ensuring the *quality* of patient care: appointing or reappointing members of the medical staff and determining their privileges; making sure that necessary quality, utilization, and risk measurement and management systems are in place and functioning effectively; and assessing the quality of care provided
4. Ensuring *financial* health: specifying financial objectives; determining if management-devised budgets are aligned with financial objectives and to the organization's key goals, vision, and mission; monitoring and evaluating financial performance and outcomes; and making sure that financial controls are in place and the organization's financial statements accurately reflect its financial status

To fulfill these responsibilities, a board must have the right structure, composition, and infrastructure.

Structure is how governance work is subdivided and coordinated within the organization; it deals with such things as board size, the number and type of committees, and (in systems) the number of boards and their relationships. *Composition* focuses on board members—their characteristics, knowledge, skills, perspectives, and experience. *Infrastructure* includes the resources and systems that support the performance of governance work.