A basic question that a health care manager should ask is: What is the nature of the system that I am being asked to manage? For most people who are not professionally engaged in organizing or delivering care, the health system means utilization, in other words, an occasional visit to a clinic or institution such as a clinic or HMO. To a manager, however, the health system should initially be analyzed in a variety of ways: in terms of expenditures, facilities, manpower, and patients, or perhaps in terms of the more marketing-oriented nomenclature of clients and consumers.

HEALTH EXPENDITURES

In the calendar year 2000, the total national expenditure for health for the 275 million people living in the United States was $1.3 trillion, or $4,637 per capita. This enormous amount of money represented 13.2% of the gross domestic product.¹ How was this $1.3 billion spent? By whom? For what? With what controls?

Most of the dollars (approximately 87% for the past decade) have been spent on personal health services. The bulk of these personal health dollars pay for hospital services, while other significant percentages are for physician services, nursing home care, drugs, and dental services. The nonpersonal health service expenditures are categorized as those associated with government public health activities, with prepayment and administration, and with research and medical facilities construction.

Hospitals consume by far the lion’s share of the health dollars, but this has not always been the case. Prior to 1939, physician services were the largest single area of health care expenditures, followed closely by hospital services. Subsequent to World War II and up to the present time, hospital expenses have exceeded all other items by a significant degree. From 1928–1929, hospital care represented 18% of the total health expenditures. By 1939–1940, these expenditures represented 25%; by the pre-Medicare/Medicaid period of 1964–1965, this percentage had grown to almost 34%; and by 1980, the total had reached almost 47%. But, by 1990, as a result of pressure from the Medicare payment systems as well as innovations in therapy and ambulatory care, the hospitals’ share of the national health expenditure pie had dropped to 37%, and by 2000 it was less than 34%.\footnote{U.S. Census Bureau, \textit{Statistical Abstract of the United States}, 2002, Table 114, p. 92.} During this same period, expenditures for physician services rose from 28% in 1928–1929 to 25% in 1939–1940 and to 34% in 1964–1965; by 1980, in the post-Medicare and Medicare world, physician and clinical services were slightly less than 21% of total personal health expenditures. By 1990, the figure was up to 23%, and in the year 2000 it hovered around 25% (ibid.).

What had occurred? Why have health expenditures escalated so dramatically, and why have the shifts in expenditure patterns been so great? Several explanations have been offered, including population growth, inflation, the cost of technology, and financing patterns.

Some of the dramatic increases in health expenditures simply are explained by the fact that there are considerably more Americans today than there were 10, 20, or 30 years ago. There are 75 million more people living in the United States today than there were in 1970. In conceptual terms this means that between 1970 and 2000 the United States annexed the equivalent of the entire populations of England, Scotland, Wales, Northern Ireland, Denmark, Norway, and Sweden. Or, on a more local level, the United States added the equivalent of the entire populations of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Maryland, Virginia, West Virginia, and North Carolina. More people means more demand, more services, and more expenditures.

Not only is the example of a 75-million-person growth in the population since 1970 an important explanatory variable in understanding why...
health expenditures continue to increase, but the changing shape of the population is also a critically important variable. Most significantly, we have seen a dramatic growth in the senior population. For example, in 1970 we had a total of 20 million Americans over the age of 65, which represented 9.9% of the population. In 2000 we had 34.8 million people over 65, which represented 12.6% of the population. Within the senior population, the numbers are even more dramatic. We have seen a doubling of the 75- to 84-year-old group since 1970, from 6.1 million people to 12.3 million and close to a tripling of the over-85-year-old group, from 1.5 million to 4.3 million.3 For the health system, more seniors translates into a greater demand for services such as doctor’s visits and hospital days. In 2000, 23.7% of people over 65 visited their physicians more than 10 times, while only 12.2% of the population between 18 and 44 visited their doctors that often.4 The trend lines are clear: The older we get as a society, the greater demands we make on virtually all components of the health system.

Another related dimension of costs is the increasing cost of managing complex diseases. HIV/AIDS is an example of a disease that did not have any impact on health care expenditures until the late 1970s and early 1980s. Similarly, SARS was an unknown disease until 2003, and its impact is still to be determined. We do know that in 2003 this one newly emerging disease wreaked havoc on the health system in Toronto, Canada, with cost implications that are still being calculated.

On a personal level, I can share that my late wife was a victim of ovarian cancer. Fortunately we had excellent health insurance and found superb physicians. She was able to obtain regular care at three outstanding medical centers: Brigham and Women’s Hospital, Massachusetts General Hospital, and Baystate Medical Center. Additionally, she received useful consultations at Fox Chase Cancer Center and experimental care at the University of Texas Health Science Center in San Antonio. All told, between 1989 and 1995 my wife had more than 50 hospital admissions and 5½ years of care before she succumbed. The cost of this extraordinary care was in excess of $500,000.00.

One example of how technology has affected cost comes in the form of the drug Neupogen, which is a product of high-tech DNA synthesis. Its

---

3Health, United States, 2002, Table 1, p. 70.
4Health, United States, 2002, Table 72, p. 217.
value to cancer sufferers comes from its ability to stimulate the growth of white blood cells and thus reduce susceptibility to infection after chemotherapy. While Neupogen is an effective adjunct to chemotherapy, it is also quite expensive. When my wife first used the drug, she had a 10-dose cycle, later reduced to a 5-dose cycle. Each dose cost almost $1,000.00. Our co-payment was $10.00 per dose, the rest being paid by our health insurance. Today the cost is considerably lower, although still expensive: between $175.00 and $279.00 per dose depending on the dosage size.

During the long years of my wife’s treatment I spent considerable effort searching out treatment options throughout the world. In one meeting with a senior official in Britain, I learned that the ovarian cancer protocols in that country were almost identical to those in the United States. Indeed, a good deal of their research had National Cancer Institute funding. Patients in the United Kingdom, however, did not have access to Neupogen. “Why?” I inquired. “Cost” was the straightforward answer. This official went on to say that it is simply cheaper to have patients isolate themselves during their days of highest vulnerability to infection than to give them an expensive drug.

Inflation—the increase in prices and cost with no particular change in value—is a second major factor in the trend toward increased expenditures. How much of the increase can be explained by inflation is debatable, but it is clear that a 1950 dollar is not the equivalent of a present dollar and that most bills must be paid in present-value currency. In one historical examination of the reasons for the increase in health expenditures, it was found that inflation accounted for 44% of the increase in health expenditures between 1950 and 1965, and 43% of the increased expenditures between 1971 and 1974.5 A different report from that same period found that “52% of the $38.4 billion increase from fiscal year 1965 to fiscal year 1972 reflected a rise in prices.” In explaining the remaining rise, the authors noted that “10% ($3.8 billion) was the result of population growth, and the remaining 38% ($14.7 billion) was attributable to greater utilization of services and the introduction of new medical techniques.”6 The inflation statistics on medical care pretty well tell

---

the story: Using 1982–1984 as the base period—that is, assuming an average price of medical care in that period of 100—by 1990 we are up to 162.8 and by 2000 we are up to 266.

Perhaps a more user-friendly way of considering inflation is thinking about the cost of gasoline today versus 20 years ago. The gallon is still a gallon and the gas is essentially the same, although more expensive (and to think it was about a quarter per gallon when I first started driving).

Since the single largest component of any health care manager’s budget is personnel, it is important to realize that higher wages and salaries are important variables in explaining the growth of national health expenditures. Not only do we have more people working in health care, but also the cost of employing them is greater. While few health care workers receive the minimum wage, that number does represent a base figure for calculating all wages. In 1967 the federal minimum wage was $1.40; in 1975 it increased to $2.10; by 1980 it was up to $3.10; in 1990 it was $3.80; and in 1997, with a few changes in between, it hit $5.15.

In a summary of analyses looking at the increasing costs for health care, Thorpe, Woodruff, and Ginsburg suggest that since 1998 the following factors explain the increases: “Growth in pharmaceutical expenses, expensive new technologies, aging of the population, increase in consumer demand, broader managed care networks, provider consolidation, health care labor pressure.” They go on to suggest that from 2002 through 2010 there will be additional increases in health care expenditure as follows: “Hospital care (21%); physician services (19%); outpatient prescription and over-the-counter drugs (21%); and nursing home and home health care (10%).”

Not only has the use of the health care dollar changed, but the source of the revenue also has shifted. This shift has had and will continue to have a profound effect on management of health care organizations. The two most important shifts are related to the payer and the source of the revenue. In terms of the payer, direct patient payments have decreased, from 88.5% prior to 1929 to 27% in the fiscal 1980 period to 17.2% in 2000.

During that same period, third-party payments have increased to 82.9%, of which 34.6% comes from private health insurance, 5.0% from private funding such as philanthropy, and 43.3% from government.

8Ibid.
9Health, United States, 2002, Table 117, p. 293.
Indeed, Medicaid and Medicare, which did not come into existence until the mid-1960s, now account for 21% of all personal health expenditures. Government now not only pays 40% of the total health bill, but it also pays 55% of the hospital bill and 24% of the physician’s bill.

Along with these increased payments from the government has come an increased control of the expenditures. For example, virtually every major health bill that has passed through Congress since the late 1960s has been supported on the basis that it would contain or reduce health care costs. Some initiatives, such as changing the system of paying hospitals for Medicare recipients from a cost-based retrospective payment system to the present case-based prospective system, have saved money nationwide. Other programs, such as health care fraud and abuse prevention, have saved the system money, but their actual implementation is so localized that there are clear cost savings differences from region to region. Illustrative of this is an analysis of the work of the U.S. attorney’s office in Boston, which indicated that the aggressiveness of Boston lawyers as well as their colleagues in Philadelphia and Florida have made these offices the trendsetters in litigating fraud and abuse cases.\(^\text{10}\) On the other hand, the United States is a large country, and one must wonder what is going on elsewhere that health care fraud and abuse cases are not being aggressively pursued.

Despite these massive expenditures, there is clearly a lack of equity in terms of access, cost, and quality in the U.S. health system. Many observers argue that this is inevitable, since our society is fundamentally inequitable; the health system simply reflects that. It should be recognized, however, that even some government programs institutionalize this inequity. For example, every state has considerable latitude in setting the level of eligibility for Medicaid, as well as the quantity, and to some extent the quality, of services that will be available. What this means in practice is easily seen in the long-term care industry. Medicaid per diem reimbursement rates for similar facilities ranged in 2003 from $99.25 in West Virginia to $171.17 in Delaware. For the individual institution, such differences in reimbursement rates translate into different staffing ratios and other services that result in a differing quantity and quality of care for residents.

A frequently mentioned aspect of the access equation is that of financial access to the system; that is, the ability to get through the front door

because of having health insurance. Current estimates are that approximately 40 million people are uninsured, although as many as 59 million people are uninsured at some time during the year. What is perhaps most interesting is that the typical uninsured person is not necessarily unemployed but rather is employed at a job that pays low wages and does not provide health insurance as a benefit. The fiscal crisis that beset states in 2003 is a cautionary tale about the interplay between the needs of society and money. A report from the National Conference of State Legislatures Health Policy Tracking Services underscored the equity issues in our society by pointing out that 19 states were contemplating significant cuts to their Medicaid recipients, including, in the case of Colorado, eliminating an entire group from eligibility (legal immigrants) and, in other states, cutting back on a range of services such as vision care, podiatry, and dental care.

Perhaps the most interesting issue to contemplate is that even when the finances are in place through such programs as Medicare, which is the federal program primarily serving the elderly, equal access still does not exist. In a 2003 report by Gornick analyzing Medicare data, we learn that “in comparison with White beneficiaries, Black beneficiaries used fewer preventive and health promotion services . . . and underwent more of the types of procedures associated with poor management of chronic disease, such as partial or complete lower limb amputation.”

Wennberg, the distinguished academic researcher from Dartmouth University who single-handedly called the nation’s attention to the significant variations in medical care between regions, also found that Medicare, the program designed to provide equal access and control costs, had major variations in spending and services. Nationwide data also tell us that there are many variations in how categories of people use the health system, such as the poor and nonpoor, or how people of different ages, and sex use the health system.

1National Conference of State Legislatures, State Health Policy Brief 4, April 2003, p. 1.
5Health, United States, 2002, Table 72, p. 218.
6Ibid., p. 217.
ethnicities, or from different parts of the country use health services. Although some of these differences are related to the behavior of the population itself, there is another explanatory variable: the availability of resources. In the next section we shall examine some of the key resources of the United States' health system.

HOSPITALS

Since hospitals are so central to any understanding of the health system, and hospitals are also the largest employer in health care, it is worthwhile to briefly review their origins. The word *hospital* is derived from Medieval Latin, and meant “hospice” or “guesthouse” typically for weary pilgrims. The 1989 edition of the *Oxford English Dictionary* notes that the word finds its first usage in 1300 CE in reference to St. Thomas's in London: “Ther is nouth an hospital arerd of seint Thomas.”

The concept of a hospital dates from earlier times, indeed, hundreds of years before the beginning of the Common Era. For example, the Sinhalese claim that King Pandukabhaya established hospitals in Sri Lanka in the fourth century BCE. Perhaps the most interesting account traces the idea of hospital chains to the time of the great Indian ruler King Asoka (273–232 BCE).

Legend has it that Asoka killed all rival claimants to the throne of the Indian Empire, most notably his 99 brothers. After his ascendency he converted to Buddhism and became distinguished for promoting goodness and virtue throughout his kingdom, including the establishment of networks of medical facilities. In what is probably the best and most comprehensive current history of hospitals, Risse describes the Greeks developing a temple culture in the ninth century BCE that included amongst their attributes health and healing.

In biblical times we learn of hospitality from the great patriarch Abraham who, despite recovering from his own circumcision, invites

---

17Ibid.
18Ibid., p. 219.
three strangers into his tent only to learn that the strangers are angels of God. Perhaps the single city that is most responsible for the growth of facilities to house and treat the weary and ill is Jerusalem, an important city for pilgrims. Hospices were vital to the city’s landscape. In his discussion of Jerusalem, Risse notes, “Before the first century, the city already had a tradition of sponsoring Jewish hospices, and that tradition was taken on by Christians to house and serve their own pilgrims who began flocking to Jerusalem.”

The Christian focus on Jerusalem began with its recognition by the Church and saw its height during the many years of the Crusades, when a visit to Jerusalem represented a step toward salvation.

The next thousand years or so coincided with the establishment of those Christian orders that took responsibility for the hospices. For example, there were the Hospitallers of St. John, founded in the eleventh century, the German Order of Hospital Knights, founded in 1199, and specialized orders such as the Knights of St. Lazar, who focused their energy on the care of lepers. Although one hospital in Paris, Hotel Dieu, dates to 600 CE, it is not until the 13th and 14th centuries that we see the rapid development of institutions in western Europe, particularly Italy and France, that more resemble our present-day institutions.

American Hospitals
(The Colonial Period to World War II)

As the American nation developed, so did its inventory of hospitals and related institutions. Each institution represented a specific response to the growth of the population, the needs of a specific community, the availability of philanthropy, and often the philosophy of an individual or religious group. The Pennsylvania Hospital, founded by Dr. Thomas Bond and Benjamin Franklin in 1751, is considered to be the oldest voluntary (that is, nonprofit) hospital in the United States. Like most of its successors, it was founded to take care of the sick poor; the more affluent were treated at home. When the hospital opened in 1756 it was utilized in the following way: “The ground floor of the east wing contained the cells for insane patients. The second floor was the men’s ward. The third floor was

23Ibid., p. 138.
24Ibid., pp. 138–156.
the women’s ward, and the space above was used as lodging for Hospital employees and patients who needed isolation.”

Other hospitals, such as Candler in Savannah, Georgia, also were developing in the same time period as the Pennsylvania Hospital. Each of these institutions represented the growth of America. In its earliest days as a nation of seaport cities, growth came in the coastal towns and, as the nation expanded, so did its network of hospitals. For example, it was not until 1907 that Lawton, Oklahoma, saw its first hospital, the Turner and Lewis Private Hospital and Training School for Nursing. Today that small private hospital is a modern medical center, the Lawton Southwestern Medical Center.

During the early 1900s, medical schools, teaching hospitals and a range of specialty hospitals for women, eyes, ears, nose, and throat developed. The nation also witnessed the growth of military and public health service hospitals, religious-oriented institutions, and thousands of community hospitals. A casual perusal of the Internet demonstrates the history and the pride in the history of many of these institutions.

**World War II to the Present**

Perhaps no event has had a greater impact on hospitals in the United States and elsewhere than World War II. For example, many observers link the establishment of the British National Health System to the devastating consequences of the war on the United Kingdom. In a different part of the world, the health system of Japan was essentially destroyed and subsequently rebuilt by the Allies.

In the United States there was a long period during the war when wages and salaries were frozen. In order to get around this freeze, many employers looked to enhance their packages of fringe benefits, the most significant of which was hospital insurance. The development of hospital insurance and the subsequent rise of Blue Cross and Blue Shield to provide both hospital and medical care insurance put the pieces in place for the growth of the health care industry after the war.

---

An interesting footnote is that for many years, until the federal government started scrutinizing the antitrust issues, Blue Cross and the American Hospital Association viewed themselves in partnership. This partnership even extended to sharing a building at 840 North Lake Shore Drive on Chicago’s Gold Coast.

Post–World War II, the Hill-Burton Act passed in 1948, providing the funds and an impetus for the growth of hospitals and the building of scores of rural hospitals throughout the country. Many of these institutions remain today as the primary provider of both medical care and employment in their communities.

Comparing and contrasting hospitals of the World War II era and today is almost like comparing Lindberg’s Spirit of St. Louis with a new 777 jetliner. They both fly and have wings, tails, and pilots, but that pretty much is where the similarity ends. The typical hospital of the postwar era, probably up to the late 1960s, was essentially a hospital without medical office buildings, ambulatory care facilities, nursing homes, or satellite operations. The hospital of the 1960s did not have one single computer or word processor. It did not have a CT scanner, an MRI, or ultrasound equipment. It may have had an operating suite for open heart surgery, equipment in the laboratories for multichannel blood testing, and its staff certainly had several peer committees for managing the quality of care. No one talked about marketing. (Indeed, in 1974, when the associate director of a hospital I had worked in attended a lecture on hospital marketing that I presented at Columbia University, he promptly and strongly castigated me for thinking of hospital services in marketing terms.)

From 1962–1963 I worked in a 300-bed teaching hospital where half of the beds were in eight- to ten-person wards. In that hospital not one single patient was covered under Medicare or Medicaid (the programs did not begin until 1965. Many procedures that today routinely occur both inside and outside of hospitals, such as ultrasonography or virtual colonoscopy, did not exist in 1962.

As noted earlier, hospitals take the lion’s share of virtually every pie in the health system. Hospitals are usually categorized by ownership (governmental, nongovernmental, or proprietary/for-profit), and type of services offered (general medical and surgical, specialty, such as ear, nose, throat), or category of patient (children’s hospital). From the early 1960s through the mid-1970s, the number of hospitals in the United States was fairly constant, although from 1953 through 1963 there had been an
increase of over 1,000 institutions. But by the mid-1970s, the decline in facilities started. In 1975 there were 7,156 hospitals; three years later that number declined to 7,015; by 1990 the supply had fallen to 6,291 hospitals; and in 2000, the nation was down to 5,810. Not only has the number of facilities declined, but the number of beds available for patients has also diminished, from 1.4 million in 1975 to 983,628 in 2000, all during a time when we have 75 million more people in this country. Of the 5810 hospitals in the United States, 245 belong to agencies of the federal government, primarily the Departments of Veterans Affairs and Defense, and 496 hospitals are for patients with psychiatric problems. The largest single grouping of hospitals are the 3003 non-governmental, nonprofit facilities (your standard community hospital), and the second-largest grouping are those 1163 acute-care hospitals owned by state and local governments. Finally, investor-owned (that is, for-profit) hospitals account for 749 facilities, including close to 200 owned by the largest hospital chain, the Hospitals Corporation of America (HCA), and 114 owned by the second largest chain, Tenet Healthcare Corporation.

During this same time period (1975–2000), the total number of hospital admissions declined slightly, from 36,157,000 to 34,891,000, and the number of births increased, from 3.09 million in 1975 to 3.94 million in 2000. Throughout this period, hospital personnel increased from 3.023 million people to 4.4 million, and outpatient visits more than doubled, from 254 million in 1975 to over 592 million in 2000.

What is going on? What is behind all these numbers that at first glance do not seem to make any sense whatsoever? Fundamentally, what has occurred in the last 50 years has been an internal reorganization of bed utilization. For example, psychotropic drugs have allowed many persons to function outside of psychiatric hospitals, with the result being that the number of psychiatric beds has decreased from 620,000 in 1950 to 285,000 in 1977 to a mere 86,465 in 2000.

Other shifts in incidence and treatment of diseases have resulted in similar decreases, such as the decrease in the number of beds in tuberculosis and respiratory disease hospitals from 72,000 beds in 1950 to 3,315 in

---

29 Health, United States, 2002, Table 107, p. 279.
30 Health Statistics 2002 (Chicago: Health Forum LLC, 2002). Table 1, pp. 2–5.
31 Ibid.
1977 to 253 in 2000. However, it should also be recognized that some of these cases are also handled with dedicated services within traditional acute care settings.

The heart of the hospital system is the community hospital—the short-term, nonfederal hospital that provides a range of general medical and surgical services. In 2000 these 4,915 hospitals, which include in their classification the 3003 nongovernment, nonprofit hospitals, the 749 investor-owned, for-profit hospitals, and the 1163 state and local government-owned community hospitals, had a total of 824,000 beds. While there is clearly a great variety within this group of hospitals, some basic data regarding the “average” community hospital can be identified. The average hospital in the United States has a total of 168 beds, with 21 states having average bed sizes greater than 168 and 29 smaller; indeed, 10 states have average bed sizes smaller than 100 beds. National average length of stay in community hospitals is 5.8 days, ranging from 10.5 days in Montana and South Dakota to a low of 4.4 days in Oregon and 4.2 days in New Mexico. We also see major variations in hospital occupancy rates. Thus, while the average occupancy rate in the country is 63.8%, New York’s occupancy rate (78.4%) is dramatically higher than the rate in Kansas (52.6%) or Idaho (52.5%).

AMBULATORY CARE

Ambulatory care is provided in a variety of locations: physicians’ offices, hospital outpatient departments, hospital emergency rooms, and a range of other facilities such as surgical day centers, optometrists’ offices, daycare centers, neighborhood health centers, substance abuse clinics, mental health centers, and pharmacies.

In 2000, 823 million visits were made to physician’s offices; 83 million visits were made to hospital outpatient departments (many hospitals do not have outpatient facilities); and 108 million visits were made to hospital emergency rooms, 39 million of which were related to injuries.

---

33Ibid.
34Ibid., p. 207.
including occupational and motor vehicle accidents. What is perhaps most noteworthy is that, although the hospital is still the center of complicated and high-tech care, the ambulatory care setting has increasingly become the site of choice for what used to occur in the hospital. For example, arthroscopic procedures on the knee have practically disappeared as an inpatient procedure; endoscopies have increasingly become an outpatient procedure; and hernia repairs are frequently done in ambulatory facilities. An interesting example of change is in the area of eye care. A Web page from a Massachusetts group promotes their day surgery services, and they note that their most frequently performed same-day procedures are “[c]ataract extraction with intraocular lens implantation, cornea transplants, laser surgery for treatment of glaucoma and retinal surgery.”

For a number of years, the federal government’s National Center for Health Statistics has conducted an annual survey of ambulatory medical services provided by physicians in office-based practices. This study, the National Ambulatory Medical Care Survey (NAMCS), provides valuable insights into the practice of medicine. The following are some extracts from the data highlights section of their year 2000 report:

In 2000, 823.5 million visits were made to physician’s offices—about 300.4 visits per 100 persons.

a. The visit rate for white persons (3.2 visits per person) was higher than for black persons (2.1 visits per person).

b. Approximately 30% of the visits were by health maintenance organization members.

c. Medicare or Medicaid was the expected source of payment in 28.3% of all visits.

d. General medical examination was the most frequently mentioned reason for visits, accounting for 7.8% of all office visits.

e. Complementary and alternative medical therapies were ordered or provided at 31.6 million physician’s office visits, representing 3.8% of all visits.

f. Since 1997, there has been an increase in the percentage of office visits in which a cardiovascular-renal drug (by 21%), hormone (by

36 Health, United States, 2002, Tables 83 and 84.
25%), or metabolic/nutrient drug (by 49%) was ordered, supplied, administered or continued.\textsuperscript{38}

The largest percentage of visits to physicians’ offices are made to general or family practitioners (24.1%); 15.2% are made to internists, 12.6% to pediatricians, and 7.9% to obstetricians and gynecologists.\textsuperscript{39} In 2000 the United States had 690,128 professionally active physicians, 525,691 of whom were graduates of U.S. medical schools; the remainder were international medical graduates. Of these 690,128 physicians, 631,431 were engaged in patient care, with 490,398 in office-based practice. The four largest specialty groups were the primary care specialties of general practice, internal medicine, obstetrics and gynecology, and pediatrics, which together account for 230,174 office-based physicians, or 47%.\textsuperscript{40}

But the health system is not merely physicians and hospitals. Indeed, managers are primarily responsible for managing the human resources of the system, which includes 168,000 dentists, 2.2 million nurses, 97,000 nutritionists/dieticians, 55,000 occupational therapists, 29,500 optometrists, 208,000 pharmacists, 144,000 physical therapists, 10,300 podiatrists, 97,000 speech therapists, 47,200 chiropractors, and, in this generation, countless massage therapists and New Age healers.\textsuperscript{41}

OTHER HEALTH CARE INSTITUTIONS AND PROVIDERS

The United States’ health system includes scores of categories. For example, in the year 2000, 1.3 million people received services as home-care patients, 105,496 people were hospital patients, and over 1.5 million people were in nursing homes. Fully 80 million people obtained their care from health maintenance organizations.\textsuperscript{42}

It is sometimes difficult to know the boundaries of the “health system.” What should be included and excluded within a definition of health services, as opposed to other social services? For example, should the

\textsuperscript{38}\textit{U.S. Government, Department of Health and Human Services, Advance Data from Vital and Health Statistics, 328} (June 5, 2002), p. 2.

\textsuperscript{39}\textit{Ibid.,} p. 3.

\textsuperscript{40}\textit{Health, United States, 2002}, Table 101.

\textsuperscript{41}\textit{Ibid.,} Table 103.

\textsuperscript{42}\textit{Health, United States, 2002, Tables 88, 97, 132, and 105.}
definition include pharmacies that not only dispense prescription drugs but also sell billions of dollars of nonprescription, over-the-counter preparations that people use to self-medicate? Clearly, the corner drugstore for many is the source of primary care; thus, it is important to count it in a tally of health care resources. What about the range of nontraditional healers, such as herbalists and therapeutic masseurs? No doubt they help people. For the most part, however, they are excluded from the traditional health system in that they cannot utilize the system’s major resources (such as hospitals) and often have only limited access to its insurance mechanisms. For the purposes of this review, they shall generally be excluded. However, the extent of their involvement in the health system should be recognized.

Sometimes the exclusion of practitioners is a matter of medical politics. For example, as part of my doctoral work I studied the history of midwifery in the United States. My research clearly demonstrated that during the early twentieth century there was a campaign of organized medical professionals, in particular professors of obstetrics in the major medical schools, against American midwives. This campaign was not based on sound scientific evidence but rather based on self-interest in establishing the new medical specialty of obstetrics and gynecology. Indeed, had the United States followed the lead of England at that time, this country would have had a totally different approach to obstetrical care—perhaps even a different health system.43

THE NEW ORGANIZATIONS IN TOWN

It sometimes appears that the past decade or two has spawned an entire generation of organizations whose prime concern is either regulating or redirecting the health system. Some of these organizations are not actually new, but are reincarnations of older and similar programs.

The regulators are likely to be on any manager’s mind. There are literally hundreds of organizations involved in regulation in the health care field; others want to be. The Federal Trade Commission is interested in instigating some antitrust activity in the health field, and the Federal

Communications Commission has expressed concern over the proliferation of sophisticated electronic medical equipment that is allegedly causing problems with certain communications equipment. At the federal level, in addition to the organizations fully involved with health—primarily large sections of the Department of Health and Human Services, including the Centers for Medicare and Medicaid Services (formerly the Health Care Financing Administration) and the Office of the Inspector General—other nonhealth-related executive branch departments, such as the Bureau of the Budget, the General Accounting Office, and the Office of the U.S. Attorney General, play critical roles in the health system.

State governments have similar structures: health departments that often have considerable regulatory power, and various related organizations, such as rate commissions and health planning departments. The local level also has a range of government or government-related health planning bodies and, again, some regulatory agencies, such as boards of health.

Organizations for personal professional development, special medical interest groups, and lobbying groups appear to be omnipresent. Virtually every health profession (or group of workers) has its own organization. Specific disease- or problem-oriented organizations are abundant, as are the lobbyists, some of whom tend to focus on organizations, such as the American Medical Association or the American Hospital Association, and some on fund-raising for activities to combat specific diseases, such as Alzheimer’s disease, multiple sclerosis, alcoholism, mental retardation, AIDS, or mental illness.

The picture is one of an expensive, complex, and quite fragmented system. Clearly, the health system is not simply a group of well-defined and integrated components, all of which relate to a common goal. On the contrary, it is a system with considerable overlap, waste, and a multiplicity of goals.