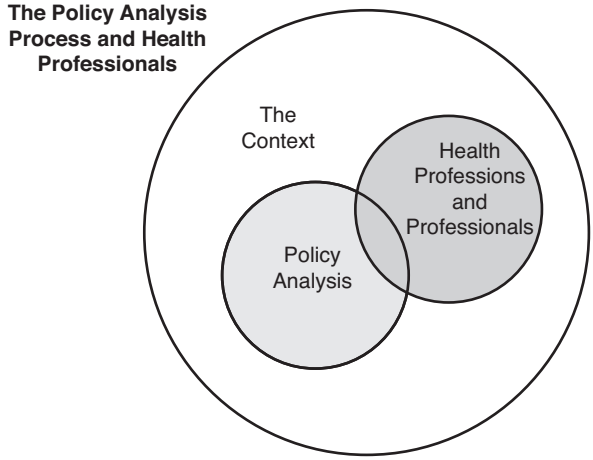
Part I

The Context



Although this book is designed to be valuable to anyone engaged in health policy development, its primary purpose is to enable current and future health professionals to understand and then participate in the health policy process. The figure above shows policy analysis and the work of the health professions taking place within the context of the health care system. The first section of this book develops that context through a discussion of the current status of the U.S. health care system (Chapter 2) and a review of factors that influenced its development as the decentralized system we have today (Chapter 3). The case accompanying Chapter 3 provides a chance to look at the experiences of other countries and develop some hypotheses about how these countries achieved their current status. Chapter 4 reviews the many and varied objectives for the U.S. health care system being expressed by various policy participants. Chapter 5 presents some of the recommendations for government action being suggested. One educational outcome you should try to achieve is to understand these

positions, their underlying assumptions, and their strengths and weaknesses. This is followed in Chapter 6 by a discussion of the responses that service delivery organizations, providers, payers and employers, and initiatives they have undertaken.

These chapters provide both the context and vocabulary for moving on to the second part of this book, which outlines available tools for rational policy analysis—one of the circles within a circle in the diagram. The third part of this book looks at the role of the health professions and professionals and, in particular, how they can and should participate in policy analysis.

Chapter 2

Where Are We?

American health care is in a state of flux as new scientific knowledge and clinical experience continue to change our definitions of illness and wellness. As a society, we respond by changing the ways health care is delivered. Health services increasingly impact our society—from health status to employment to budgetary economics to recreation to professional concerns to our perceptions of our own well-being.

American health care is also in flux because now that it has grown to more than one-sixth of our economy it threatens to squeeze out public goods such as education and infrastructure maintenance. People have wanted to do something about cost and access to care problems for a long time. The 2010 Affordable Care Act (ACA) is doing much to address access issues, but opposition to certain provisions is strong. Employers are steadily shifting more risk to employees and their families, and there is a real tension between Washington and the state capitols over Medicaid expansion. Medicare trust funds are forecast to disappear over the next decade or so. Washington is unlikely to tolerate another major health reform battle, although major changes may come as a side effect of a "grand" government overhaul of spending and tax policies. The future is highly uncertain, and still we must plan and act as we go along.

This chapter reviews the current status of the U.S. health care system from several points of view:

- Current outcomes and costs
- Quality
- Leadership
- Complexity
- Industrializing structures for delivery
- Medicalization of our society
- Redistribution of wealth

CURRENT OUTCOMES AND COSTS

Health care expenditures were projected to rise to close to 20% of the U.S. gross domestic product (GDP) by 2015 (Borger et al., 2006), but more recent estimates from the Centers for Medicare & Medicaid Services (CMS) project it to be 18.2% for 2015 and 19.5% by 2021 (CMS, 2012). Average annual family health insurance premiums were estimated for 2012 at $15,745, with $11,429 paid by employers. The 4% growth rate for 2012 was slow by historical standards but still more than twice the growth rate of wage income. The comparable total insurance cost for a single individual was $5,615. Large employers (98%) offered health care benefits to workers but were cutting back on retiree health benefits. Only 50% of firms with 3 to 9 workers and 73% with 10 to 24 workers offered health benefits. Many small companies do not provide health benefits. At the same time, control of health care by health professionals is being threatened by outsiders calling for more reliance on government programs, more consumer-centered care, or both.

High Comparative Costs and Low Comparative Outcomes

The United States spends far more on health care per capita and as a percentage of GDP than other developed countries, yet does not seem to be much better off for it. **Table 2-1** illustrates this by comparing 11 countries on these two resource-input dimensions and on two outcome dimensions: overall life expectancy at birth and infant mortality rates. Similar rankings result when a number of other outcome variables are examined. The health care systems of these other countries offer virtually universal coverage, but the mechanisms they use range from mostly private insurance to a national health service. The incongruous combination of high U.S. costs and low

Table 2-1 Selected International Comparisons of Health Inputs and Outcomes, 2011

	Health Expenditures (US$) per Capita	Health Expenditures as % of Gross Domestic Product	Population Life Expectancy at Birth (Years)	Infant Deaths per 1,000
United States	$8,508	17.7	78.7	6.1
Switzerland	$5,643	11.0	82.8	3.8
The Netherlands	$5,099	11.3	81.3	3.6
Canada	$4,522	11.2	81.0**	4.9**
Germany	$4,495	11.3	80.8	3.6
France	$4,118	11.6	82.2	3.5
Belgium	$4,061	10.5	80.5	3.3
Sweden	$3,925	9.5	81.9	2.1
Australia	$3,800*	8.9*	82.0	3.8
United Kingdom	$3,406	9.4	81.1	4.3
Japan	$3,213*	9.6*	82.7	2.3

* 2010 data, ** 2009 data

Source: Data from: OECD Health Data 2013. Copyright OECD 2013. http://www.oecd.org/els/health-systems/oecdhealthdata2013-frequentlyrequesteddata.htm

U.S. outcomes does not seem to be associated with any one specific organizational or financing approach, yet that is about all on which experts seem to agree.

Anderson et al. (2003, p. 103) noted that "U.S. policy makers need to reflect on what Americans are getting for their greater health care spending," concluding that "It's the prices, stupid." Administrative costs for our system, estimated to account for as much as 30% of overall health care costs, are also high when compared with the rest of the world (Woolhandler, Campbell, & Himmelstein, 2003). Much of these overhead costs can be attributed to intermediaries who try to make up for or take advantage of imperfections in the marketplace. Examples include pharmacy benefits managers and third-party administrators.

Cannon and Tanner (2005) would explain away comparative international differences because

- Data definitions and collection methods are not comparable.
- Health care is partly a consumption good that normally rises with income.

- The U.S. infant mortality rate is increased by our efforts to save low-birth-weight infants that would be stillborn elsewhere.
- There is little proven relationship between longevity and health care expenditures.
- Our cost figures include the costs of medical research and innovation that are not incurred elsewhere.

They argue that disease-specific data are a better measure. On the mortality-to-incidence ratios for AIDS, colon cancer, and breast cancer, for example, the U.S. system looks very good.

Overinsurance and Overutilization Arguments

If the United States spends more on health care than any other nation without top-notch results across the board, does that mean we are spending too much? Overspending can be about price (paying more than we need to for a service) or quantity (buying more services than we need or not getting what we paid for). In health care, it is probably a bit of both. The number of physician visits and hospital beds per capita was lower in the United States than the Organisation for Economic Co-operation and Development median (quantity), while health care worker wages, hospital supplies, and drugs were much costlier in the United States (price) (OECD, 2013). U.S. health care wages are the highest in the world.

Quantity factors are typically discussed under the rubric of overutilization. Some argue that overutilization is due to our fee-for-service (volume-based) payment system. Others argue that it is due to patient demand; patients are insulated from risk by our tax-subsidized health insurance system. Research also shows that an increased supply of health professionals leads to more utilization, yet attempts to restrict the supply of specialists using licensing systems have led to charges of illegal restraint of trade. Like health care, professional education is a confusing mixture of a public good and a personal investment. Many alternative methods—certificate of need regulations, for example—can be used to try to control overuse or underuse by influencing the supply or demand for health care services.

Cutler, Rosen, and Vijan (2006) concluded that if 50% of the increase in longevity between 1960 and 2000 is attributable to our increased medical care expenditures, we have gotten an acceptable return on our money. They suggest that the cost of a life-year gained was reasonable, especially for those younger than 65 years. They caution, however, that the returns from added expenditures, especially for older people, have diminished over time.

Continued High Cost-Inflation Rates

The CMS Office of the Actuary is responsible for providing estimates used to assess the financial viability of Medicare and Medicaid, which are two huge government programs. Its report, *National Health Care Projections 2011–2021,* concludes that health care spending is likely to outstrip economic growth (GDP growth) throughout the next decade. Although there will be ups and downs because of specific interventions, such as Medicare Part D drug coverage and the ACA, there will be little effect on aggregate health care spending, which will grow at a rate 2% higher than the overall economy. The government share of health spending will gradually increase, leaving health expenditures financed about equally between government and private sources. Fuchs (2013) suggests that the spread between the two growth rates has been narrowing for almost a decade, but is still a serious problem. **Table 2-2** summarizes historical and forecast data on health expenditures in dollars per capita and as a percentage of GDP. **Figure 2-1** illustrates that, except for the period from 1995 to 1998, the inflation rate for health care costs and health insurance premiums has been well above the inflation rate of the consumer price index and growth of workers' earnings for most of the last 25 years. No wonder workers and employers feel squeezed by the rising costs of health care.

Disappearing Health Benefits

Employee health benefits (73% paid by employers, including government employers, in 2012) are threatening to disappear. Between 2000 and 2004, the percentage of insured people younger than age 65 in employment-based

Table 2-2 U.S. National Health Expenditure (NHE) and Percentage of GDP, Selected Years 2006–2022

	2006	2011	2014*	2017*	2022*
NHE ($ billion)	2,163	2,701	3,093	3,660	5,009
NHE per capita	7,255	8,680	9,697	11,711	14,164
NHE as % GDP	16.2	17.9	18.3	18.4	19.0

* Estimated projections include effects of the Affordable Care Act and an alternative to the sustainable growth rate.

Source: Reproduced from: Centers for Medicare & Medicaid Services, Office of the Actuary. Accessed at http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/downloads/proj2012.pdf

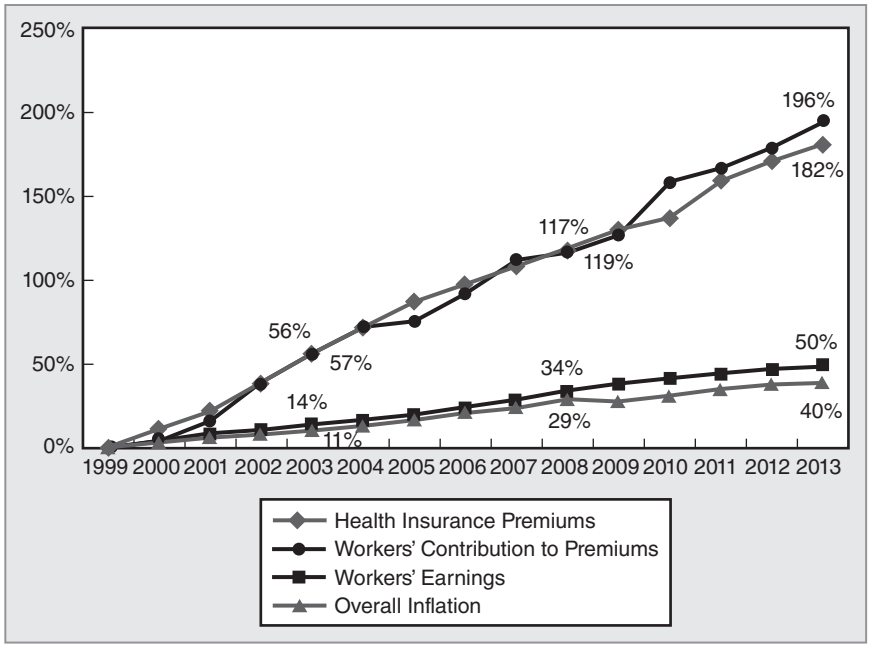


Figure 2-1 Cumulative changes in health insurance premiums, overall inflation, and workers' earnings from 2000–2013.

Source: Reproduced from: "Employer Health Benefits 2013 Annual Survey—Chartpack," (8465), The Henry J. Kaiser Family Foundation and Health Research & Educational Trust

health programs dropped 5%, to 61%. Since then the coverage rate has stayed relatively constant. However, the proportion of employers offering employee health benefits has declined.

Official federal policy has been to encourage employees to participate in health savings accounts (HSAs). The theory is that workers will choose health insurance coverage with high deductibles and coinsurance and will put savings from the reduced premiums into tax-exempt (income and interest) savings accounts that can be used in case of high medical expenses, for future retirement income, or for other uses. These plans got off the ground slowly because employers were concerned about the problem of *adverse selection*, namely that younger, healthier employees would choose the HSA option, leaving higher risk employees to draw from a different and smaller risk pool. Early returns from postal employees showed that the employees signing up for HSAs were much younger than those who chose or kept traditional coverage. By 2012, however, HSAs accounted for 19% of health plan enrollment.

Some employers are also concerned about the "portability" feature of HSAs. If the worker leaves, the premium dollar saved goes with the worker rather than staying to help cover the remaining employees' health insurance claims. Many employers see health benefits as a cost that is necessary to attract good employees and reduce employee turnover. Portability can run counter to that objective (Freudenheim, 2006).

QUALITY: A SYSTEMATIC EVALUATION

In 1980, Donabedian suggested the use of the following framework when evaluating quality of care:

- Access
- Technical management
- Management of interpersonal relationships
- Continuity of care

One could easily add additional categories, but these are a useful starting point (McLaughlin, 1998). All of these factors involve trade-offs with the cost of care, with one another, and with issues of equity and system complexity.

In this section we employ this categorization system with a modification. Donabedian developed this structure before most of our current concerns about costs and at a time when the health community shared a more homogeneous value system; therefore, we must consider the additional factors relating to costs and values, especially notions of equity in health care delivery. We have added costs to the list of categories. We will discuss value in a future chapter.

Within these now five categories, we will discuss three subcategories: structure, process, and outcome. Structure refers to available resource inputs, whereas process refers to conformance to best practices. We have already demonstrated what is meant by outcomes.

Access and Availability

If you were in a serious auto accident, you would want the ambulance to arrive as quickly as possible to stabilize you and transport you to a trauma center. You would want that ambulance to be *available*. If we are in danger, we supposedly are guaranteed *access*. If the situation is life threatening and the hospital participates in Medicare or Medicaid, it must take the patient regardless of ability to pay. For less serious situations, for emergent

medical conditions, and for prevention, there are no such guarantees. Unfortunately, a significant proportion of our population lacks access, availability, or both. Estimates of the number of U.S. residents lacking health insurance coverage in 2011 began at 48 million and went up from there. Federal safety net spending, including Medicare, had decreased the lower-end number by more than a million from the preceding year. Implementation of the ACA should ameliorate many financial barriers to health care. The groundbreaking Massachusetts program reduced the proportion of nonelderly uninsured to single digits.

Numerous other perceived access problems exist. Although coverage for children has improved and the older population receives considerable benefits from Medicare and Medicaid, the working population has become worse off. Even before employer coverage decreased, the biggest access problems were among the *working poor*—those who earn too much to qualify for Medicaid but have little or no access to employer-subsidized health insurance or are unable to pay their share of the costs even when employment-based insurance is available. Even under subsidized programs, such as those offered in Maine and Massachusetts, enrollment by the working poor has been slow (Belluck, 2007).

Many improvements in coverage for children followed the creation of the State Children's Health Insurance Program (SCHIP) in 1997 and have occurred despite reduced private insurance coverage for children. Racial disparities in insurance coverage remain, with the highest rate of uninsurance occurring among Hispanic children (16% in 2011) and African American children (11%). Children uninsured for all or part of the year were more than twice as likely to receive no medical care that year (SHADAC, 2006).

Racial and Ethnic Health Disparities

In the United States, black infants are twice as likely to die as non-Hispanic white infants. A child between 1 and 14 years old in Alaska or Arkansas was about twice as likely to die in 2009 as a child in New Hampshire, Massachusetts, or Connecticut. Even worse, children in Arkansas, Alabama, Oklahoma, New Mexico, and Mississippi were more than three times as likely to die compared to their counterparts in those New England states. In 2010, the heart disease age-adjusted death rate in Mississippi was twice what it was in Minnesota and some 30% above the national average (State Health Facts, 2013).

One hopeful sign is the report from the Centers for Disease Control and Prevention (CDC) that there was no statistically significant difference in the vaccination rate of children 19 to 35 months in 2005, whether black, white, Hispanic, or Asian (CDC, 2006). There has been a continual

narrowing of the gap with programs such as SCHIP and state attempts to recruit children into state programs, but the disparities are still striking.

Providers may also choose to direct their efforts toward consumers who have the greatest ability to pay. They gravitate toward more profitable specialties and may emphasize services that are most likely to generate income. In the United States, some gravitate to areas where malpractice insurance premiums are low. All of these factors can contribute to geographic and income disparities in care availability and access.

Many government and private programs bring services to special populations such as underserved rural areas, the posthospitalized mentally ill, American Indian and Alaskan Native communities, and people with AIDS. In these cases, the nation has modified its focus on a market-driven system to overcome market failures. Phelps (1997) pointed out that government involvement is one of the four features of the economics of health care delivery that differ from the delivery of most professional services. Three other economic differences that Phelps noted are uncertainty, information asymmetry, and externalities.

Structure

The United States stacks up pretty well in the developed world in terms of the total supply of services available, but services are distributed very unevenly. This is, however, a problem almost everywhere in the world. Urban centers attract trained personnel with job opportunities and educational and cultural opportunities for their families. Rural areas everywhere tend to lack personnel and facilities. That is one reason why in 2004 a third of U.S. patients could see a primary care physician the same day, but a sixth had to wait six or more days, and 16% reported going to the emergency room for a condition that could have been treated elsewhere if a regular doctor or source of care had been available (Schoen et al., 2004). Over time, this rural problem has lessened as the supply has increased and primary care physicians and even some specialists have moved to smaller communities in response to market forces (Rosenthal, Zaslavsky, & Newhouse, 2005).

Process

When asked in 2001 about prescriptions not filled; doctor visits needed but not made; and treatments, tests, or follow-ups missed, all because of costs and problems paying medical bills, 35% to 40% of U.S. respondents with below-average incomes reported experiencing such problems. This was almost double the rates in Australia, Canada, and New Zealand and six

to nine times as large a proportion as in the United Kingdom. For the U.S. uninsured, the rate exceeded 50%. More than half of U.S. respondents with below-average income and a quarter of those with above-average income were delaying dental work because of the cost; however, these rates were also high in all of the five countries except the United Kingdom (Blendon et al., 2002). People everywhere seem to use every reason possible to avoid going to the dentist.

Outcomes

Outcomes reflect the fact that the greatest access barriers are economic ones. Morbidity in the nonelderly population is concentrated in the lower socioeconomic strata. Certainly, high morbidity contributes to loss of income, but that effect is small compared with the effects of social status on access to care.

Technical Management

Many efforts to improve U.S. care have focused on the processes of care delivery. For many years, medical error was an unmentionable among professionals. Finally, in the 1990s, the advent of evidence-based medicine and the resulting protocols led to the recognition that the best processes were often not used and that medical errors were all too common.

Structure

In the United States, most health professionals are well trained. Their credentials are carefully checked by the institutions where they work, and their licensing boards and certifying bodies require continuing professional education. Entry by foreign physicians is relatively tightly controlled, with requirements for additional postgraduate training and testing before practicing; however, the results of this process still show providers and institutions to be poorly distributed. Poor states, rural areas, inner cities, and areas with high minority concentrations and low incomes have very different health care utilization rates from the more privileged areas of the country.

Process

To ensure quality of care, most systems focus on the process of care delivery. They concentrate on the variability in treatment approaches among practices, among various areas of the country, and on failure to implement

evidence-based practices. This focus on specific care processes, supported by measurement and reporting systems such as the National Committee for Quality Assurance's Health Plan Employer Data and Information Set (HEDIS) system, has improved the rate of conformance in the areas measured, but there is still a long way to go.

One indicator of poor resource allocation and questionable quality is variability in medical care delivery from one area to another. Wennberg, Fisher, and Skinner (2002) showed, for example, that Medicare spent twice as much per enrollee in Miami than in Minneapolis, without any apparent improvement in results. The Miami patients might have been sicker to start with, but case-mix differences were unlikely to justify a doubling of average costs in a fee-for-service program. These authors suggested that there is relatively little variability where the medical evidence for best practices is strong and much more where the evidence is less so, such as with hospital-based care during the last six months of life.

Estimates of waste in the U.S. health care system run as high as 30% to 40%. Not only are tests duplicated and medical records often unavailable, but there is little attempt to optimize processes and coordinate activities to maximize the use of personnel. Each specialty and department tends to operate to meet its own preferences and maximize revenue, rather than to improve system efficiency. Staff departments assigned to improve processes have fallen by the wayside during cost-cutting drives (Sahney, 1993). Experience at the Mayo Clinic shows the potential that can be realized by rebuilding in-house industrial engineering staff and empowering mid-level scheduling personnel (Berry & Saltman, 2007).

Outcomes

Much attention has been paid to medical error rates in recent years. The 2000 Institute of Medicine (IOM) report *To Err Is Human* and the follow-up report, *Crossing the Quality Chasm,* focused the attention of the government and a reluctant medical profession on this problem (IOM, 2000, 2001). The Leapfrog Group, an employer-oriented organization, has suggested several measures that are in the process of being implemented, including computerized physician order entry and widespread use of intensive-care hospitalists. The 100K Lives program and the Cystic Fibrosis Society databases have illustrated the magnitude of the improvements that could be achieved.

The ACA called for the formation of a Patient-Centered Outcomes Research Institute, thus institutionalizing the support of evidence-based medicine that was part of the American Recovery and Reinvestment Act

stimulus package. Its effectiveness remains to be seen due to the restrictions in the legislation; for example:

> (e) The Patient-Centered Outcomes Research Institute established under section 1181(b)(1) shall not develop or employ a dollars-per-quality adjusted life year (or similar measure that discounts the value of a life because of an individual's disability) as a threshold to establish what type of health care is cost effective or recommended. The Secretary shall not utilize such an adjusted life year (or such a similar measure) as a threshold to determine coverage, reimbursement, or incentive programs under title XVIII. (PPACA [Consolidated], Sec. 6301/9511 IRC)

Management of Interpersonal Relationships

Most Americans believe it is important to have a relationship with a personal physician. Most do not want to be told which doctors they may or may not see. Many will even pay extra to have the relationships that they think will suit their needs.

Structure

Americans rebelled in the past when it was found that health maintenance organizations (HMO) could interfere with their existing relationships with their personal physicians. The public clearly values the patient–physician relationship where it exists; however, a substantial number of Americans report financial and spatial access problems and use less personal services, such as emergency rooms or urgent care centers. Many are concerned that as the ACA is implemented and financial access is improved, there will not be enough primary care providers to fulfill the demands for care.

Process

Much of the expressed dissatisfaction with interpersonal relationships in U.S. health care has to do with the brevity of encounters. Patients feel rushed by their primary care providers, who are under pressure to see more patients as preferred provider contracts and government discount pricing have eroded income per visit. This weakens patients' confidence that their providers have their welfare at heart. Clinically, it means that many emotionally fraught issues—issues that used to be addressed when the provider listened carefully for the "by the way" comment toward the apparent end

of the visit, or what some counselors call the "doorknob moment"—are no longer addressed. Increased reliance on electronic medical records may or may not improve efficiency after the slowdown that typically occurs during the break-in learning period.

Outcomes

Increasingly, payers evaluate providers on the basis of questionnaires that measure consumers' satisfaction with the interpersonal aspects of their encounters. For example, the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) 32-Item Survey Instrument asks questions such as the following:

- During this hospital stay, how often did nurses treat you with courtesy and respect? This question is repeated to ask about interactions with doctors.
- During this hospital stay, how often did nurses listen carefully to you? This question is repeated to ask about interactions with doctors.
- During this hospital stay, did doctors, nurses, or other hospital staff talk to you about whether you would have the help you needed when you left the hospital?

The results of a hospital's HCAHPS surveys are posted for the public to see on the Hospital Compare website, http://www.medicare.gov/hospitalcompare/search.html.

Costs

Although a discussion of cost occurred earlier in this chapter, it is worth considering cost issues again in the context of quality using the same framework applied to the categories above.

Structure

As noted, the unit costs of health care inputs are high in the United States, especially for professional salaries, drugs, medical supplies, and devices. Health care provider salaries, are the highest in the world. Costs could go even higher as unmet needs are addressed. There are huge untapped needs in the fields of child psychiatry and community psychiatry. People report being constrained on their consumption of psychotherapy because

of limitations on insurance reimbursement. We also know that the poor do not see physicians and other providers as much as those with adequate insurance, although that can beg the question of whether the problem is overutilization by those with health insurance, underutilization by the poor, or both. Given that a significant proportion of the poor are poor because of their health status, one would expect higher utilization on their part if they had sufficient insurance.

Process

Variability in processes is evident through differences in costs across areas and institutions. A substantial amount of gaming goes on between providers and the payment system. When the system will not pay for a diagnosis and an office procedure on the same visit, a dermatologist may schedule two visits. If the patient needs multiple minor procedures but the payer will not pay for each one separately, there again may be as many visits as procedures, wasting patient time and payer money. Kleinke (2005) reported that the three large independent clinical laboratory firms had failed to adopt a common reporting system that is available to them because they do not want to support electronic data interchange that might avoid tens of billions of dollars in duplicate laboratory tests. According to Kleinke,

> In an industry rife with dirty little secrets, this is health care's dirtiest: Bad quality is good for business . . . the surest road to bad quality is bad or no information. The various IT systems out there are expensive to buy, implement, and train staff to use, but this expense pales in comparison to all the pricey and billable complications those systems would prevent. (2005, p. 1250)

The second dirtiest little secret, Kleinke says, is that "[o]ne organization's unnecessary medical product or service is another's revenue source" (p. 1252).

Outcomes

Earlier sections of this chapter provided information on health costs and outcomes for the United States compared with other developed nations. They also noted that perceived cost and inability to pay were major impediments to obtaining needed health care. The magnitude of those costs is also motivating major corporations to dismantle their employment-based insurance plans for employees, families, and retirees and keeping many smaller employers from offering health care plans to their staff.

COMPLEXITY

One barrier to access may be the complexity of publicly financed programs. Some programs have been available only to those who at are below the federal poverty level (FPL), whereas other specific state programs can enroll families up to 300% of FPL. It should be noted that a family needs to make 200% to 300% of FPL before it has money left after purchasing food, shelter, and other essentials to pay for discretionary items, which have traditionally included health insurance and nonurgent health care services. Programs also have requirements for cost-sharing with premiums, copayments, and deductibles.

Health coverage will expand for low- and moderate-income families as the ACA is implemented, but, if anything, the complexity of finding the most appropriate and affordable coverage will increase. Consider the following explanation of ACA benefits from the Kaiser Foundation (2012):

> The ACA establishes a new continuum of coverage options that includes an expansion of Medicaid to a national eligibility floor of 138% FPL ($26,334 for a family of three in 2012) and the creation of new Health Benefit Exchanges with tax credits for individuals up to 400% of FPL ($76,300) for a family of three in 2012. These expansions will significantly increase availability of coverage for low and moderate-income populations. . . . Roughly 60% of nonelderly uninsured Blacks, Hispanics and American Indians/Alaska Native have income below the Medicaid expansion limit of 138% of FPL and over 90% have incomes below 400% FPL. (p. 6)

Then there is the fact that since the 2012 Supreme Court ruling on the constitutionality of the ACA, a number of states are choosing not to participate in the Medicaid expansion under that law. We know that the implementation of Massachusetts reforms similar to the ACA provisions for insurance reduced the number of uninsured significantly, but the ACA has yet to play out fully.

Compromise and Complexity

The political give and take that has marked the development of health care policy in the United States has left us with incredible financial complexity in our health system. **Table 2-3** lists the primary federally financed programs, each of which has its own often-changing set of regulations.

In the Medicaid program, we have more than 50 distinct government health care systems, one for each state and territory, the District of

Table 2-3 Major Federal Programs

Medicaid is the federal health insurance program for the poor and disabled. It can cover pretty much all their medical bills, including nursing home care and drugs. Eligibility levels and services vary by state.

Medicare is the federal health insurance program for those older than 65 years of age, some disabled individuals younger than age 65, and individuals with end-stage renal failure. It consists of three programs:

- Part A is hospital insurance and is covered by payroll taxes. In addition, it may cover hospice care, some home health care, and brief post-hospitalization nursing home care.
- Part B is medical insurance for which the premium due is deducted from one's Social Security check. It pays some parts of physicians' and other providers' fees. It also provides some coverage for home health care, outpatient services, medically necessary physical and occupational therapy, and home health services.
- Part D is insurance for prescription drugs coverage. Most participants pay a monthly premium to a private insurer for coverage under a plan-specific formulary.

Dual eligibles are poor disabled or elderly persons who are eligible for both Medicare and Medicaid. This population accounts for 18% and 16% of the respective beneficiaries of these two programs. Medicare pays for physician, prescription drug, and hospital care, while Medicaid pays the Medicare premiums and cost sharing and covers other health needs, such as long-term care.

Columbia, Puerto Rico, and the Virgin Islands. More than 1,100 current waivers of the rules have been granted to individual state programs to allow expanded coverage and use of managed care approaches. Each state system has its own reimbursement rate, the Federal Medicaid Assistance Percentage, which is based on a complex formula involving income levels in the state. For 2013, the basic federal match ranged from 50% federal payment in a number of wealthier states to 73.43% in Mississippi (see where the states stand in **Table 2-4**). Then there are also additional temporary federal Medicaid subsidies due to the stimulus package, disaster relief, and program expansion under the ACA.

Whether a person is eligible for Medicaid depends on the state in which he or she lives, because income eligibility and some overages vary by state. In 2013, for example, a pregnant woman may have been covered if her family income was at or below 133% of the FPL or 150% or 162% or 185% or 200% or 235% or 275% or 300%, depending on where she is enrolled (State Health Facts, 2013).

Those covered by Medicaid may include the following:

- Categorically needy
  - Families receiving Aid to Families with Dependent Children

Table 2-4 FY 2007 Federal Medicaid Assistance Percentage (FMAP) by State and Territory

Percentage Grouping	States and Territories in Category
50.0	California, Colorado, Connecticut, Delaware, Guam, Illinois, Maryland, Massachusetts, Minnesota, New Hampshire, New Jersey, New York, Virginia, Puerto Rico, Virgin Islands
50.01–50.99	Alaska, Nevada, Rhode Island, Washington, Wyoming
54.00–57.99	Hawaii, Michigan, Nebraska, Pennsylvania, Wisconsin
58.00–60.99	Florida, Kansas, Ohio, Texas, Vermont
61.00–64.99	Georgia, Indiana, Iowa, Maine, Missouri, North Carolina, North Dakota, Oregon, South Dakota, Tennessee
65.00–67.99	Arizona
68.00–69.99	Alabama, Kentucky, Louisiana, Montana, Oklahoma, South Carolina
70.00–73.99	Arkansas, District of Columbia, Idaho, New Mexico, Utah, West Virginia
76.0	Mississippi

Source: Reproduced from: Federal Register 11/20/2011 Doc 2011-30860

  - Pregnant women and children younger than 6 years with family income up to 133% of the FPL
  - Children ages 6–19 with family or caretaker income up to 100% of the FPL
  - Supplemental Security Income (SSI) recipients or aged, blind, and disabled persons whose requirements are more restrictive than SSI
  - Individuals and couples living in medical institutions who have monthly incomes up to 300% of the SSI income standard
- Medically needy individuals whose income or assets exceed those of the categorically needy
  - If a program exists, Medicaid must cover pregnant women through a 60-day postpartum period, children under 18, certain newborns for the first year, and certain protected blind persons.
  - The program has the option of covering:
    - Selected groups of full-time students between 18 and 21 years old
    - Caretakers (relatives and legal guardians) living with children
    - Aged persons over 65 years old

        - Blind persons
        - Disabled persons meeting state or SSI standards
        - Persons who would be eligible if they were not enrolled in an HMO
    - Special groups
        - Medicare premiums, coinsurance, and deductibles may be covered for Medicare beneficiaries with incomes below 100% of FPL and resources below 200% of the SSI allowable. States can also cover groups up to 135% of that level.
        - States may provide extended Medicaid eligibility while disabled persons learn to work and seek employment and as their conditions improve.
        - Individuals with tuberculosis may be covered for tuberculosis-related treatment costs.
        - Women with cervical or breast cancer may receive time-limited full coverage for cancer-related care.
        - Long-term care (institutional and home health) is covered in all states, but eligibility requirements vary by state.

Until very recently, Medicaid covered prescription drugs, but Medicare did not. Medicare still does not cover long-term care.

LEADERSHIP AT THE STATE AND LOCAL LEVEL

A state is responsible for health insurance regulation as well as for paying up to half the cost of Medicaid. Complexity is increased by the fact that each state has its own system of insurance regulation. Yet this has enabled a wide variety of innovative responses to access and cost issues at the state and local levels. Medicaid is often the largest expenditure category in state budgets and is an open-ended commitment. Jurisdictions that rely heavily on property taxes have major problems dealing with such unpredictable expenditures. State and local governments also end up covering most of the acute care costs of the uninsured. Many of these approaches are discussed in a later chapter.

The ERISA Barrier

Insurance regulation is a strong lever for mandating coverage, access, and high-risk pools. The Employee Retirement Income Security Act (ERISA) of 1974, however, exempted self-insured plans from much of state insurance law because the parent organizations do not have insurance as a primary

line of business. Generally, the courts have upheld this law. One exception is a 1995 Supreme Court decision allowing New York State to place a surcharge tax on health premiums, including self-insured plans, to cover uncompensated hospital care. Other states have followed suit.

Park (2000) reported that in 1993 about half the nation's insured workers were enrolled in self-insured plans (also called Section 125 plans), mostly at large employers. The exemption allows companies to offer a consistent benefit package to all of their employees in various states, shelters them from state taxation of premiums and the costs of regulation, and lets them keep any returns on their capital reserves.

A self-funded company takes on the underwriting risk for its own pool of generally healthy employees. These plans were popular in the 1980s and early 1990s, but then lost market share as companies turned to managed care organizations to reduce costs. They are further losing share as companies cut back their benefit costs and offer defined contribution plans or nothing at all. Remember though that when health benefits were part of labor union contracts, workers had opted through their unions to forego part of their wage increases for better health benefits.

ERISA constitutes a barrier to states attempting to achieve universal coverage. It leaves each state with two health care insurance systems, one regulated and one not. Other arguments against the ERISA exemption point to the possibility that unregulated plans might fail because of mismanagement, that they might abuse sick employees, and that they put employees at a disadvantage if employers discontinue their self-funded plans.

There is also a concern that companies trying to wiggle out of the benefit requirements of the ACA will decide to self-insure. Some insurance companies are encouraging this by offering self-insured plans to much smaller companies than before. The *Wall Street Journal* reported in 2013 that 93% of firms with 5,000 or more employees were self-insured, but only 15% with fewer than 200 and 52% with between 200 and 999 (Weaver & Mathews, 2013).

INDUSTRIALIZING STRUCTURES FOR DELIVERY

The terms *industrialization* and *commoditization* keep coming up in discussions of ways to address undesirable health care trends. When applied to manufacturing early in the 20th century, industrialization meant (1) breaking complex tasks performed by individuals down into simple tasks assigned to different members of a team and (2) studying, analyzing, and specifying the best way to do each of those tasks. The result was that

work moved from the control and *artistry of the craftsperson* to a systematic process that was perhaps more efficient and less personal. Specialization in the industrialized system can imply *deskilling* for some workers, as well as much higher, but narrower, skill levels for others. Managerial control of the system involves both allocating duties and specifying the right way to do them. Usually management includes two groups: (1) line managers who allocate the work and (2) staff specialists whose job is to specify and improve processes. Where the process is well defined and skill requirements can be reduced, *labor substitution* takes place; that is, routine work is done by less expensive personnel with more limited training and less autonomy.

Despite the monopolies offered by licensure and credentialing, many health care tasks can be done by more than one level of health care worker. For example, both midwives and obstetricians can deliver babies. The practice of midwifery nearly disappeared in the United States but is now undergoing a resurgence. Nurse practitioners and physician assistants now are the first level of care for many patient encounters. In many psychiatric practices, the psychiatrist handles the patient's medications but delegates most other care activities to psychologists, social workers, and other counselors. Pharmacies now use pharmacy technicians as well as pharmacists. Dental practices have their own dental hygienists and technicians working in parallel with the dentists. Primary care physicians perform procedures once limited to specialists. The key to further substitution is whether the alternative workers are qualified for the problem at hand and whether their unit cost is less. Most substitutions were initially proposed to overcome a shortage of personnel in one area, but after the experiment worked, more and more organizations have implemented it on a continuing basis to increase access and reduce cost.

A number of authors (Porter & Teisberg, 2006; Bohmer & Lawrence, 2008; Bohmer, 2009) have identified other aspects of industrialization in health care:

- More physicians employed (under management) rather than partners in practices
- Institutional emphasis on process development, including evidence-based medicine and continuous quality improvement
- External exchange of information on relative experience, outcome quality, and prices and costs
- Emphasis on process conformance and transparency, including preauthorizations, carve outs, utilization reviews, and clinical pathways
- Development of focused factories that specialize in a limited range of procedures, such as specialty hospitals and ambulatory surgery centers

- Increasing fragmentation of patient care with offsetting efforts aimed at coordination and teamwork
- Increasing substitution of capital for labor
- A more impersonal relationship between the server and the served

Clayton Christensen (cited in Holstein, 2006) expressed the industrializing view most strongly. He believed that rather than continually trying to reproduce the expertise of doctors and major health care institutions, we must treat that expertise as a commodity. This hinges on our ability to diagnose disease precisely using rules-based medicine. Our diagnostic ability, he noted, is evolving rapidly, but our systems for regulation and reimbursement keep us trapped in high-cost delivery models.

Referring to the historical example of pneumonia and consumption, he argued:

> You had tuberculosis there, at least three types, and you had pneumonia. We thought it was all one disease. So the care had to be left with doctors because they were the ones with the training and judgment, but once you could precisely diagnose the cause of the disease, you could then develop a cure. It was so rules-based that you didn't need a doctor any longer. Today a technician can diagnose those diseases and a nurse can treat them.

Managed care has become a major form of organization for care delivery. Practices and institutions have merged or sold out to a wide array of health care organizations. Primary care physicians report frustration with their loss of autonomy and with the pressures for efficiency expressed as a measure of the number of patients seen (Rastegar, 2004). Physician incomes, especially those of specialists, have dropped rapidly. These are all related to the industrialization of what had been a cottage industry organized along craft lines.

Figure 2-2 suggests one way to think about industrialization and the various process requirements that analogy suggests. Two dimensions are identified: type of case, which ranges from simple to complex, and knowledge base, which ranges from science based (codified) to art (tacit). The drivers of industrialization in health care have been the expansion of the science base of medicine and the codification of product definitions and process specifications. For more about art (tacit knowledge) versus science and product and process improvement trajectories in general, see Victor and Boynton (1998). The applicability of their model to health care is discussed in greater detail in McLaughlin and Kaluzny (2006). An example of the trend toward codification by medical institutions and professions is the effort by the Institute of Medicine to support the "learning health care

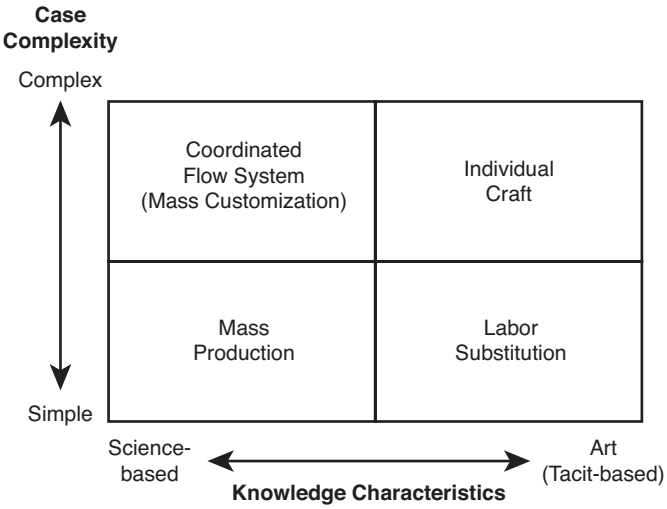


Figure 2-2 Suggested impact of case complexity and knowledge characteristics on process choices in health care.

system." One major output of this effort is the book *Best Care at Lower Cost* (Smith et al., 2012).

Describing medicine before World War II as a craft/guild system implies that medicine was primarily an art lacking decision rules that could be communicated effectively (tacit knowledge) (Ferdows, 2006). With more and more scientific and/or codified knowledge, it was possible to differentiate between cases and processes. Simple industrial activities can be turned into mass production systems that repeat the same process over and over. If the knowledge is still pretty much an art but the task simple, the work can be delegated to less experienced or less trained personnel (as in the *apprentice system*, in which much of the simpler work was delegated to others but the master craftsman maintained control and handled the trickiest parts or the rounding process in the teaching hospital). For example, part of the training process for nurse practitioners is learning what diagnoses not to treat and what to hand off to appropriate experts. Where processes are codified but the cases are complex, and hence varied, patients need to be processed in a coordinated flow between provider subsystems, a process referred to as *mass customization*. The modern hospital can be visualized as a custom job shop process, with a patient moving as needed from the bed tower to the X-ray department to the phlebotomy laboratory to surgery to the intensive care unit to the step-down unit and back to the bed tower. However, we all witness the consequences of matches and mismatches between approaches

high in art that fit with craft (e.g., apprenticeship and job costing or fee-for-service) and those high in science that fit with industrialization (e.g., bundled payments, use of clinical pathways, length-of-stay controls).

Mass production exists in areas such as cataract surgery and other "centers of excellence," but in general there is a widespread desire to avoid mass production of medical services. That desire is legitimate given the high inherent variability in patient anatomy, physiology, and psychological needs and preferences. Mass customization is the logical end point for this process. Health care is a mixture of art and science; however, health care differs from industrial production in the sense that patients present themselves with both simple and complex problems (multisystem problems or comorbidities). Problems that have a clearly optimal treatment regimen and those for which medical knowledge is limited can appear simultaneously in the same individual.

What has kept much patient care from being a well-coordinated process has been the very limited amount of process codification that has taken place and inadequate investment in information technology, as well as a lack of provider commitment to share knowledge and to abide by specified process parameters. This is often attributed to lack of sufficiently aligned professional and institutional incentives.

Ownership of Intellectual Capital

As work is industrialized, work methods are specified by the organization rather than the individual artisan. In health care, we have historically assumed that intellectual capital resides with the professional. This stems from an assumed inability of the public (including lay administrators) to understand the technical processes of health care. This notion is the underlying foundation of medicine's claims of professional autonomy, but that autonomy is threatened by recommendations such as those offered by Enthoven and Tollen (2005), who called for reliance on integrated delivery systems for cost control. As advocates of what has since been labeled *administered competition*, they argued against provider-level competition and for system-level competition because integrated delivery systems:

- Can better motivate clinicians to use best practices and hold them accountable.
- Do a better job of achieving coordination and continuity of care, especially for the chronically ill.
- Are more likely to invest in and implement interoperable information technology.

- Are more likely to adopt and successfully implement "large-scale efficiency measures."
- Are more likely to compete directly with each other on quality and price.
- Are more likely to be selective among providers than loose and inclusive provider networks serving most insurers in a community.

These authors urged employers to offer employees a choice of carriers to motivate insurers to avoid providers of low-quality and high-cost care. Haislmaier (2006) argued that a key innovation of the Massachusetts reforms was the "Connector" exchange system, which allowed individuals insurance portability.

As competition increasingly depends on the implementation of evidence-based practices by an institution, and on rapid dissemination and adoption by practitioners, organizational rather than professional learning becomes the focus. That raises new questions about management–provider conflicts (often called *suits versus coats*), the role of continuing graduate medical education, and access to clinical records and research outputs. Professionals must be prepared to take leadership in issues around developing, disseminating, and compensating for intellectual capital or they will lose even more autonomy.

Horizontal Integration

Compartmentalization of services by their separate funding sources contributes to coordination of care problems and to considerable waste of time and treasure. Many efforts are underway with the support of the ACA and professional organizations to integrate care systems involving acute care, preventive care, behavioral health services, public health services, and social services. For example, the Institute of Medicine and others sponsored a Consensus Report by Committee on Integrating Primary Care and Public Health (Association of Territorial and State Health Officers, 2012) that laid out a "strategic map" of steps needed to move both groups out of their silos and into cooperative population health in the community. The five key priorities identified in the map were:

1. Identify and create demonstrated successes.
2. Realign funding to support coordination and sustainability.
3. Disseminate and scale effective approaches and systems.
4. Develop and implement effective measures of population health.
5. Create the infrastructure to support collaboration and sustainability.

A major provision of recent legislation has been the opportunity for the states to integrate services for dual eligibles. Many states have submitted proposals to integrate and enhance their services by combining the Medicare and Medicaid funding. Many have also opted to cover their institutionalized populations with Medicare Advantage Special Needs Plans.

States have also submitted Medicaid waiver proposals that would integrate traditional health services with behavioral health services and social services in community-based programs. Individuals with chronic disease problems, including mental health diagnoses, also tend to be unemployed and have limited social support. A number of states are looking at integrating these services, especially for dual eligibles. We know that readmissions tend to be higher in safety net hospitals due to the lack of community resources. Reliance on emergency rooms is so expensive that some Medicaid programs are providing medical homes and a wider range of community services to keep "frequent flyers" out of hospital settings. In the United Kingdom, the National Institute for Health and Care Excellence (NICE) has been tasked not only with developing evidence-based practices for health care but for social services as well. It remains to be seen whether this trend will result in less medicalization of society or just lead to the medicalization of social services.

The Professions

One interesting aspect of the U.S. medical system is that it did not industrialize under either corporate control, as many other services have done, or government control. Starr (1982) discussed how the medical profession gained control of health care and maintained it in the face of pressures to consolidate into corporate forms of organization. The cover of his book, *The Social Transformation of American Medicine*, states that it is about "the rise of a sovereign profession and the making of a vast industry." Writing in the early 1980s at the height of the interest in HMOs, he foresaw rapid growth in the corporate form of care delivery.

Much of the ebb and flow of employer, insurer, and government attempts to solve health care system issues flows around issues of industrialization and corporate delivery of medical care. Starr (1982, pp. 229–231) cited five structural changes in American medicine before World War II that strengthened the sovereign position of physicians in health care and enabled them to avoid working in a corporate structure:

1. An informal control system based on dependence on colleagues for referrals and hospital privileges.

2. Formal control of labor markets through the licensing process.
3. Transfer of many overheads and investments—those a typical private corporation that provided medical services would make—to societal organizations such as hospitals, public health departments, and educational institutions.
4. A lack of countervailing organizations that could choose to challenge the political and economic influences of the medical profession.
5. Few attempts to develop integrated care organizations that would attempt to rationalize the highly fragmented, but insulated delivery system.

In 1934, the American Medical Society claimed that "all features of medical service in any method of medical practice should be under the control of the medical profession." Elsewhere in the world the response to that assertion is that control should rest with the government. In the United States, we increasingly hear that it should rest on "consumer sovereignty."

Is there something inherently different about health care? The economist and Nobel laureate Kenneth Arrow addressed this question in his influential 1963 article titled "Uncertainty and the Welfare Economics of Medical Care." He argued that some functions, such as insurance, exhibit usual market behavior, but he also observed that the buyer is not a rational optimizer in a perfect market but rather is a vulnerable, trusting patient who seeks information in an uncertain world from a physician who is also dealing with many uncertainties. He emphasized the following elements of uncertainty and market failure:

- Inequality of information (today called *information asymmetry*)
- Inequality of resources, especially income
- Professional ethic demanding that treatment be independent of ability to pay
- Importance of trust to the effectiveness of the care
- Vulnerability and psychological state of patients
- Longer term implications of the ongoing physician–patient relationship

Arrow pointed to a number of unique structural elements of the health care marketplace, such as professional licensure, nonprofit institutions, sliding fee scales, and government intervention, as responses to these elements. He argued that much of the uncertainty could be handled through insurance and government intervention. His postscript concluded:

> The failure of the market to ensure against uncertainty has oriented many social institutions in which the usual assumptions of the market

> are contradicted. The medical profession is only one example, though in many respects an extreme one. . . . The logic and limitations of ideal competitive behavior under uncertainty force us to recognize the incomplete description of reality supplied by the impersonal price system. (Arrow, 1963, p. 967)

Criticisms of Arrow and of how this article is interpreted are many, but it remains very relevant and influential. Sloan (2003, p. 58) argued that the article is used by those who oppose markets and that "an alternative approach—in my view, a much more fruitful one is to recognize the market imperfections and devise various interventions to empower consumers. . . . Consumer ignorance should not be taken as a given." Rice (1998) raised 15 questions about the assumptions of the competitive market model applied to health care, such as lack of externalities, fixed preferences, absence of monopoly, complete and accurate information availability, and rational decision making. Henderson (2002, pp. 109, 111) accepted the market failure examples but countered normatively that

> On the other hand, no credible evidence supports government remedies as the answer to the perceived inequities either. Markets may fail, but governments may be just as prone to failure. And correcting government failure is inherently more difficult than correcting market failure. . . . Criticism directed at market failure without at least admitting the possibility of government failure is dishonest, or at minimum naïve.

Starr interpreted many of the social institutions that Arrow cited not as social responses to uncertainty, but as steps that organized medicine used to establish its monopoly control over health care and to stave off industrialization, and he cited examples of them increasing uncertainty.

Why has medicine remained a cottage industry? The medical profession has been very protective of its control over health care. Yet there have been a number of moves in the direction of consolidation and corporate structures. Starr (1982, p. 420) suggested five dimensions likely to change should the practice of medicine move toward a more typical American corporate structure:

1. Change in ownership and control
2. Horizontal integration into multisite organizations
3. Diversification and public restructuring with holding companies and subsidiaries with differing product lines
4. Vertical integration involving multiple stages and levels of care
5. Industry concentration of ownership and control of services

Interestingly, all of these have been taking place, albeit slowly and selectively. Now, however, the government is encouraging it due to perceived waste and lack of coordination of care. In fact, many of the implemented proposals and experiments have accomplished aspects of each of these and have created efficiency, effectiveness, and wealth. They have each had their day, yet they have not stemmed the inflationary trends nor overwhelmed the smaller operators. Hospitals and corporations that bought up physician practices in the 1990s experienced problems in recouping their investments. For-profit hospital chains have had their ups and downs. Integrated health systems do dominate in many specific areas, but they have not been terribly successful in replicating their approach elsewhere.

Status of Professions and Professionals

It may seem odd to think of professional status as a variable to manipulate in establishing health policy; however, professional roles are not immutable. New professions emerge as technology changes and others lose ground. Professions are a combination of knowledge, political power, and custom. Ultimately, the public either accepts or denies one group's dominance over a knowledge domain and the delivery of services.

Health workers existed long before the modern medicine era. Most societies have had shamans, birth attendants, and indigenous healers. Before 1850, physicians did not seem to enjoy any consistent status in the United States. With the advent of modern science and modern medicine, governments became alarmed at the amount of quackery going on. They cooperated with the medical profession and conferred on the profession a near monopoly, which has been buttressed by our system of licensing and credentialing.

Starr (1982) traced in detail the parallel political and social development of monopoly power by American physicians. Freidson (2001) saw the professional model as a third alternative to the hierarchical (corporate) model and to "free market autonomy." In the professional model, the professionals maintain considerable control over (1) the information and (2) the means of delivery in their domain; however, many proposed and implemented health policy alternatives have the effect of weakening the existing status of health professionals. This is a natural result of the emphasis on market mechanisms and an informed consumer, as well as the vastly increased access to information that the public now has, especially through the Internet.

Given that professional status and credentials offer privileges with economic value, health policy analysts must consider how that value and power might be allocated to serve the public interest. The literature suggests a number of concepts related to professional status changes in addition to labor substitution and evidence-based medicine, including:

- Outsourcing
- Rising educational barriers
- Disintermediation
- Consumer-centered care
- Patient-centered care
- Incentive systems for quality, cost, and access

Outsourcing

Outsourcing is a relatively new phenomenon in health care, but it can be driven by the same factors as labor substitution. A shortage of radiologists in rural areas has led to networking arrangements in which radiologists living in urban areas receive digital images produced by technicians in rural hospitals, and the urban radiologists read them offsite (in their offices or homes) without ever going to where the patient is receiving care. Digitized information can be read anywhere in the world, and it is not unusual to find that U.S. imaging and electrocardiograms results are farmed out to Asian locations where salaries are much lower. More and more patients who lack adequate insurance coverage but have reasonable incomes are choosing to have elective surgery done in reputable overseas hospitals where the cost is much lower. Pharmaceutical companies are also moving medical research and clinical trials offshore to reduce costs.

Rising Educational Barriers

A pressure running counter to labor substitution is the tendency of each profession to raise the bar a person must leap to be granted professional status. The biggest suppliers of nursing labor in the United States are the community colleges, which have programs that do not always culminate with a baccalaureate degree; however, nursing leadership has argued for the need to have more, if not all, nurses earn 4-year degrees. At the same time, nursing subspecialists that require master's level degrees are proliferating. Pharmacy schools that once offered pharmacy bachelor degrees now produce Pharm.D. recipients. All of these moves require more training,

constrain the supply of personnel in a particular field, and seemingly justify higher wages and greater professional status.

Disintermediation

The term *disintermediation* means removing the person in the middle, the intermediary. One prime example is direct-to-consumer pharmaceutical advertising. Until 1997, companies' selling efforts focused mostly on the prescribing physician. Then the Food and Drug Administration (FDA) eased its regulations on risk reporting sufficiently to allow advertising other than the printed page. Now ad after ad suggests a treatment, syndrome, disease, or risk factor that the patients might not even be aware of (e.g., hypercholesterolemia, acid reflux disease, toenail fungus) and urges them to ask their physician about the branded treatment. This advertising bypasses the physician initially and, given the availability of imported drugs, may bypass the physician entirely. **Table 2-5** provides examples of how physician care is being bypassed when it comes to control of medical information and/or of the means of delivery of care.

The primary care provider is not the only intermediary that can be targeted. The decentralized and disjointed nature of the health care industry has allowed the rise of an array of middlemen who have profited greatly by aggregating the demand of small actors and matching them up with provider organizations with surplus capacity, allowing them to obtain discounts. Middlemen have also achieved at least a temporary knowledge advantage that has enabled them to take advantage of the market (sometimes called *arbitraging*). The *Wall Street Journal* ran a series of articles on these highly profitable intermediaries in 2006, focusing on pharmacy benefits managers, billing consultants, catastrophic case care managers, Medicaid HMOs, nursing home pharmacy firms, and insurers (Wessel, Wysocki, & Martinez, 2006).

Consumer-Centered Care

Quality reporting is relatively new in health care. Diagnosis-related groups (DRGs), introduced in the 1980s, classified hospital services in 467 bundles of care. A parallel relative-value scale system was also developed to evaluate professional fees. It had not been possible to adjust cost data for severity and patient characteristics, nor to maintain quality control records, until those product definitions were established and widely adopted. Once data on costs could be associated with specific diagnoses and compared across

Table 2-5 Disintermediation Activities Affecting the Primary Care Physician

Actor	Activities Affecting Information Control	Activities Affecting Transaction Control
Pharmaceutical companies	Direct-to-consumer advertising (DTCA) websites	Moving patent-expired drugs over the counter (OTC)
Screening centers	DTCA	No referral required
	Direct patient reporting	Direct patient pay
Nurse practitioners/ Physician assistants	Independent practice	Independent practice
Psychologists	Independent practice	Gaining prescribing authority
Insurers	Deep portals for enrollees	Forcing drugs OTC
	Case management	Case management
Case management firms	Taking over patient management	Patient advocacy in community
	Self-care advice	
Pharmacy benefits management firms	Formulary feedback to patients	Multitiered copays
Employers	Educational programs and web portals	Screening programs
Academic medical centers	Newsletters/Web sites Telemedicine programs	Telemedicine programs
Government agencies	Websites/advertising	Preferred drug lists
	Screening recommendations	Screening programs
	Case management	
Patient/disease advocacy groups	Websites/advertising	Screening programs
	Screening recommendations	
Pharmacists	Counseling centers	Screening programs
Hospitals	Protocols shared with patients and their families	Formularies
		Screening programs
	Formularies	

Source: Reproduced from: Table 1, p. 72 from C.P. McLaughlin et al., "Changing Roles for Primary-Care Physicians: Addressing Challenges and Opportunities." *Healthcare Quarterly*, Vol. 8, No. 2, 2005. Copyright © Longwoods Publishing Corp.

cases, providers, regions, and institutions, then the tools began to fall in place for corporate-level analysis, allowing a more industrial approach to health care management. Pressure from employers and patients, the ultimate payers, has led to increased transparency, with more and more information about quality of care becoming available on the Internet. To

encourage more careful consumption, more and more plans and employers are offering high-deductible health plans coupled with one or more tax-sheltered saving accounts. We will look at these plans in more detail in a future chapter. For the employer, this approximates the substitution of a defined benefit for a defined contribution plan.

Patient-Centered Care

More recently, emphasis has been placed on involving patients in decisions about health care choices. For example, the ACA calls for "patient-centeredness" to be one of the quality measures for a pilot program, and it has mandated the establishment of the Patient-Centered Outcomes Research Institute. However, the ACA leaves it up to the secretary of Health and Human Services to define what the term means. Don Berwick (2009) has suggested the following definition: "The experience (to the extent the informed, individual patient desires it) of transparency, individualization, recognition, respect, dignity, and choice in all matters, without exception, related to one's person, circumstances, and relationships in health care" (p. w560).

The ACA makes it clear that there is a link to evidence-based medicine, even while it constrains the use of some economically oriented outcome measures by the institute.

Incentive Systems for Quality, Cost, and Access

Once cases could be assessed for process quality, outcomes, and costs, payment could be based on overall experience rather than on the inputs utilized in the specific case (fee for service). We discuss bundling and pay-for-performance later in the text. Many demonstrations of bundling, penalties for readmissions and medical errors, and medical homes are available, and more are contemplated under the ACA.

MEDICALIZATION OF SOCIETY

Looking back over 30 years of sociological research, Conrad (2007) observes that:

> Clearly, the number of life problems that are defined as medical has increased enormously. Does this mean that there is a new epidemic of medical problems or that medicine is better able to identify and treat existing problems? Or does it mean that a whole range of life's

> problems have now received medical diagnoses and are subject to medical treatment, despite dubious evidence of their medical nature? (p. 3)

Examples given include erectile dysfunction, sleep disorders, idiopathic short stature, and ADHD.

These definitions of medical conditions impinge on our perceptions of what is tolerable and what is changeable within our society, as well as on our self-perceptions. A 2006 study showed that white, middle-aged British patients reported better health status than Americans, despite spending much less per capita on health care. Some attribute the differences to high U.S. stress levels; however, an alternative point of view is that the high rate of expenditure on medical care, especially the amount of screening taking place and the constant barrage of health care–related advertising, has resulted in a reduced perception of wellness. In essence, the greater the proportion of our economy that goes into health care–related activities, the more "sickness" we experience. According to Welch, Schwartz, and Woloshin (2007), "As more of us are being told we are sick, fewer of us are being told we are well. People need to think about the benefits and risks of increased diagnosis: the fundamental question they face is whether or not to become a patient."

This goes back to the definition that we have heard attributed to any number of sources—that a healthy person is one who has not been sufficiently examined by a physician. Consider, for example, comparisons of high blood pressure and high cholesterol levels in U.S. and British 40 to 70 year olds. Americans self-reported more of these problems; however, measured blood pressures were the same, and Americans had lower cholesterol levels. Some attribute lower levels of reported illness among Britons to the fact that British primary care physicians do much less routine screening (Hadler, 2004; Kolata, 2006). Some see the U.S. screening penchant as a transfer of scarce medical resources from the sick poor to the worried, insured well, and consider it a logical outcome of the medicalization of life together with the industrialization of medicine (Heath, 2005). Some attribute much of the growth of health care costs to screening and treatment of risk factors that are asymptomatic (Hadler, 2011).

Other issues related to the medicalization of U.S. society include the dependence of the economy on the growth of this sector. A 2006 cover story in *BusinessWeek* asserted that two sectors, construction and health care, accounted for all the growth in private sector employment over the preceding 5 years and that growth in health care employment was the greater of the two. "Since 2001, the health care industry has added 1.7 million jobs. The rest of the private sector? None" (Mandel, 2006, p. 55).

Career choices and educational offerings have changed in response to the perceived demand.

Health issues have received increased emphasis in news reporting, television programming, television advertising, and recreation facilities. We have had visitors from other countries ask, unprompted, why we have so much medical and pharmaceutical advertising. There are pluses and minuses to this increasing presence of health care issues throughout our society. We are not arguing that it is good or bad; however, the analyst must take this trend into account when making recommendations. Overall, medicalization tends to increase both the political and economic risks of rapid or radical change to our health care system.

REDISTRIBUTION OF WEALTH

All commerce and most taxation can lead to a redistribution of wealth, but health care in the United States presents some special challenges, including the following:

- Federal Medicaid Assistant Percentage (FMAP) payments to the states are paid out of general revenue and differ from state to state. As a rule, the payments are based on the following formula:

  $$FMAP = 1 - .45 \times [(\text{State PCI})^2/(\text{U.S. PCI})^2]$$

  Where PCI is per capita income as computed by the Department of Commerce's Bureau of Economic Analysis. It is subject to a minimum of 0.50 and a maximum of 0.83. This formula was designed to give a greater share to poorer states.
- Medicare Part A is supported by a tax on current earnings of wage earners. This is a transfer from younger working adults to the mostly retired elderly.
- The ACA provides for premium subsidies for low-income workers funded out of a number of tax penalties and excise taxes.
- To the extent that Medicare Parts B and D are not covered by the premiums paid by the elderly or those premiums are subsidized based on income, there is a further transfer of wealth to the elderly.
- Hospitals with a large number of indigent patients (Medicaid, SSI, uninsured) can qualify for Medicare and Medicaid Disproportionate Share payments under complex formulas. The ACA has continued the trend of cutting these payments and tying them more directly to the costs of the uncompensated care. These payments tend to

go heavily to large urban hospitals, especially teaching institutions. There are provisions for special attention to rural hospitals as well.

These transfers create strong special interests and add greatly to the complexity and overhead costs of the U.S. health care system. They also provide plentiful fodder for policy debates, which we hope you will carry over into class discussions.

CONCLUSION

This chapter examines the status of the American health care system in terms of access, technical management, management of interpersonal relationships, and costs. It offers international comparisons of expenditures (both per capita and as a percent of GDP) alongside life expectancy and infant natal mortality. It also outlines possible linkages between these variables, or the lack thereof. With such data, the educated citizen can join the debate about where the United States wants to go. Although the recent legislation overhauling health insurance and patient access has been extensive, it has done relatively little to lower costs, and the policy focus is shifting toward competition, quality and value of care, and increasing efficiency.

Other concerns as the debate continues include the distribution of care and care dollars and the impacts of changes and trends on the professional environment of health care. Two related constructs discussed in this chapter are the industrialization of health care and the medicalization of American society.