

MMI 401: American Health Care Systems

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Part I: Health Policy

Chapter 1 The current US Health Care System

Defining Characteristics of the U.S. Health Care System

Our view is that we don't have a "health care system." Rather we have many health care systems that, when put into the same framework, constitute a "system" for the purpose of studying health care, rather than for the purpose of organizing and delivering health care services.

A first defining characteristic of the health care enterprise is the line between activities directed at keeping people healthy and those directed at restoring health once a disease or injury occurs.

Keeping people healthy is the business of the public health system, activities associated with behavioral health, and actions associated with our social system.

being poor is perhaps the single largest determinant of health status;

In general, changing an individual's behavior has much greater impact on health and mortality than does medical care. Despite excellent research documenting the importance of healthy lifestyles and healthy communities, as a country, we spend nine times more on medical care than on public and behavioral health.

Additional defining features of the U.S. health care system include:

The importance of **institutions** in delivering care. These include hospitals, nursing homes, community health centers, physician practices, and public health departments.

The role of **professionals** in running the system. These include physicians, nurses, managers, policy advocates, researchers, technicians of many types, and those directing technology and pharmaceutical businesses.

Medical technology, electronic communication, and new drugs that fuel changes in health care delivery. New techniques in imaging, electronic communication, pharmaceuticals, and surgical procedures are remarkable and expensive ways of improving health care.

Tension between "the free market" and "government control." This tension shapes America's culture. Relative to citizens of other countries and among ourselves, **Americans differ more over whether health care, or certain health care services, are goods or rights.** And part of the equation are nonprofit health care services, which make up an important part of the health sector. For example, most community hospitals are not-for-profit and nongovernmental.

The dysfunctional financing and payment system. The financing and payment system is dysfunctional for all parties to it— providers, payers, patients, pharmaceutical companies, all of whom feel it either (a)

costs too much or (b) brings too little revenue. How we pay health care providers does not provide adequate incentives to emphasize quality, value, and efficiency.

Major Issues and Concerns Facing the Health Sector

- Improving quality:
- Improving access and coverage: Even when Americans have insurance coverage, access to health care is not always assured.
- Slowing the growth of health care costs: Health care costs are the product of price of services multiplied by the volume of services.
- Encouraging healthy behavior:
- Improving the public health system:
- Improving the coordination, transparency, and accountability of local systems of care: **Problems of quality, cost, and access are largely attributable to the fragmentation and lack of coordination within the system.** This lack of coordination exists within health care organizations as well as between them. It is affected by a lack of integrated and electronic record systems, but also by cultural traditions of independence. Each doctor practices independently and usually each hospital does, too. Little attention is paid to all the services that a patient may need to get well or return to functioning if they are found outside the walls of the doctor's office or the hospital.

Constraints and Opportunities for Change

STAKEHOLDERS WHO CONSTRAIN OR PROPEL CHANGE Stakeholders with interests in health care delivery include:

- **Consumers and taxpayers.** Typically those who need medical care want more of it and more choice regarding how they get it, whereas taxpayers who are healthy are more likely to urge health care cost containment.
- **Doctors, nurses, hospitals, and other health providers.** All those who work in the health sector want to receive higher incomes for their work. All are in favor of improving the quality of care but they typically disagree as to how this may best be accomplished.
- **Pharmaceutical, insurance, and other for-profit companies.** These firms want to sell more of their product and increase their profits.
- **Payers and organizations that regulate or accredit health care providers.** These organizations want to slow the growth of costs, improve quality, and improve access.

THE NEED FOR BETTER INFORMATION

Engagement at the Ground Level

Certainly, we have observed that best practices are now being used to improve health care and health across a wide range of health care delivery settings in the United States and worldwide. But we need to speed the process of getting more parts of the system— including more professionals and more of our population— engaged in best practices.

Chapter 1A AN OVERVIEW IN CHARTS

“Get Government Out of My Health Care!”

The federal government affects all aspects of health care at the national, state, and local levels:

The Department of Health and Human Services (DHHS) is the principal federal agency in health-related matters. DHHS has 11 operating divisions—

Coordination of the many moving parts inside DHHS and across departments is not always easy.

The Department of Health and Human Services

The federal government has been involved in health affairs since the late 1700s (Figure 1A. 1). DHHS is the largest federal department after the Department of Defense, with a requested 2011 budget of more than \$ 900 million.

The U.S. Hospital and Physician Supply

Americans living in areas with fewer hospital beds and doctors do receive fewer health care services. However, the most intriguing aspect of these research findings is that health outcomes in these regions, including death rates, are at least as good as— and often better than— those found in areas rich in health care resources.

Doctors have a greater impact on health spending than that figure suggests,

As a result of such factors, the number of hospitals and hospital beds declined, but who goes to the hospital, when, and why depends almost exclusively on doctors.

Specialist physicians generally provide more complex— and costly— services. Other countries encourage citizens to rely on primary physicians for most of their care and to use specialists sparingly. However, in the United States, we do the opposite. Not only is this an expensive way to obtain care, it produces worse health outcomes. Some evidence suggests that a population’s health outcomes, including death rates, improve as the number of primary care physicians increases (Starfield, Shi, Grover, & Macinko, 2005a; Starfield, Shi, & Macinko, 2005b).

given that the above threefold difference in physician supply apparently comes with no health penalty for the low supply regions. Moreover, “higher physician supply per se offers little benefit in population health or in patients’ satisfaction with access and with the care received”

Costs of Care

In 2008, total U.S. health care costs were \$ 2.3 trillion— \$ 7,681 per person

Experts differ about the significance of the rising costs of entitlement programs (Medicare, Medicaid, and Social Security) to the U.S. economy in the long term, but it is clear that health care costs are constraining growth in other areas.

Where the Money Comes From

The nation’s \$ 2.3 trillion in national health expenditures comes from numerous sources: private funds (private health insurance and out-of-pocket payments, plus some smaller sources) and public funds— federal, state, and local (Figure 1A. 5).

In 2007, 54% of total national health expenditures came from private sources.

U.S. households spent almost 6% of their income on health care in 2008

In the U.S. Constitution, states are given responsibility for health matters, but, especially with the advent of Medicare and Medicaid (the cost of which is shared with states), the federal government dominates the public sector’s expenditures on health. The federal share accounts for a third of total expenditures, whereas state and local governments are responsible for less than 13%.

Health Care Quality

The technical quality of U.S. health care, especially for people who are acutely ill, can be excellent. The United States has among the world’s most advanced science, equipment, techniques, facilities, and training for dealing with complex and life-threatening illnesses and injuries.

people with chronic diseases, mental disorders, substance abuse, behavioral health problems, and end-of-life issues. These people have found the system faltering, fragmented, and frustrating

Blinded by the “best in the world” mythology, health care leaders and professionals have been slow to examine underlying factors in professional training and health care system performance that determine how— and how well— care is delivered

Hospital safety itself remains a problem. Health Grades, Inc., an independent health care ratings organization, reports that in the 3 years of 2006 to 2008, nearly a million hospital patient-safety incidents occurred among Medicare patients (the group for whom the best data are available), resulting in almost 100,000 deaths and \$ 9 billion in costs.

IMPACTS ON INDIVIDUALS

Satisfaction With Care

For many years, public opinion polling has made it clear that Americans are unhappy with the U.S. health care system.

Almost always, the more a country spends on health care, the more satisfied residents are with their personal health. In this regard, the United States is a unique case. Despite the substantially larger amounts spent on health care in the United States, Americans fall somewhere in the middle, compared to residents of the 29 other OECD countries, with respect to their satisfaction with personal health

The Health Care Workforce

the future outlook for health care jobs is excellent.

Chapter 2: Health Policy and Health reform

With the enactment of the Patient Protection and Affordable Care Act of 2010 (ACA), government's role is about to expand dramatically, especially when it comes to insurance coverage. Some of the new provisions take effect soon: young adults will be able to stay on their parents' private health insurance policies until they turn 26 years old, private insurers will be prohibited from discriminating against children with preexisting health conditions, and thousands of adults with such preexisting conditions will be able to buy affordable coverage through newly created "high-risk" insurance pools.

The Government as Payer: The Health Insurance Safety Net

For much of U.S. history, the national government and the states were minor players in the nation's health and welfare systems. The social welfare system was shaped instead by the principles that governed the English poor law system. Social welfare programs were a local responsibility

By the mid-1950s, employer-sponsored private insurance was on its way to becoming the vehicle through which most Americans could afford the rising cost of health care

By 1949, mainstream Democrats had abandoned their visions of universal insurance and proposed instead that the Social Security (retirement) system be expanded to provide hospital insurance for the aged, reasoning that the elderly were a sympathetic and deserving group, and hospital care was the most costly sector of the health care system.

As Congress debated these various proposals, President Johnson (working behind the scenes) convinced Congressman Wilbur Mills, powerful chair of the House Ways and Means Committee and an aspiring presidential candidate, to demand that his colleagues enact all three expansion initiatives (Blumenthal & Morone, 2009). The president's proposal for hospital insurance for the aged became Medicare Part A;

the Republican proposal for physician insurance for the aged became Medicare Part B. The AMA's effort to expand Kerr-Mills became Medicaid. These government programs, for the first time, became a true health insurance safety net for Americans without employer-sponsored coverage (Marmor, 2000).

MEDICAID

Medicaid is not a single national program, but a collection of 50 state-administered programs, each providing health insurance to low-income state residents, but with differing eligibility rules, benefits, and payment schedules. Each state initiative is governed by various federal guidelines and the federal government contributes between 50% and 78% of its cost (the poorer the state, the larger the federal contribution). In 2007, the various Medicaid programs covered roughly 58 million Americans at an annual cost of just under \$ 339 billion (Kaiser Family Foundation, 2010a).

Medicaid expansions had become the federal government's main strategy for reducing the ranks of the uninsured.

Two trends dominated Medicaid policy during most of the 1990s. First, states used their expanded discretion to encourage or require recipients to enroll in managed care delivery systems. Between 1987 and 1998, the percentage of enrollees in Medicaid managed care increased from less than 5% to more than 50%, from fewer than 1 million people to more than 20 million. Second, growth in the number of Medicaid enrollees ended and a slow decline began.

During the late 1990s, state and federal officials undertook a major effort to increase Medicaid enrollment. One strategy was to simplify the eligibility process (shortened application forms, mail-in applications, and more eligibility-determination sites). A second strategy was to simplify eligibility rules

The growth in enrollment, along with higher costs for prescription drugs, services for people with disabilities, and long-term care, has led to escalating Medicaid costs and, for some years, states' Medicaid expenditures have exceeded what they spend on education.

MEDICARE Like Medicaid, Medicare was enacted in 1965 to provide health insurance to segments of the population not generally covered by the mainstream employer-sponsored health insurance

Difference between Medicare and Medicaid

- **Medicare is a social insurance program, providing benefits to the aged and the disabled regardless of income, whereas Medicaid is a welfare initiative, offering coverage only to those with limited income.**
- Medicare is administered by federal officials and the private insurers they hire to perform particular tasks, whereas Medicaid is administered by the states following federal guidance.
- Medicare is funded primarily by the federal government (plus beneficiary co-payments and deductibles), whereas Medicaid is funded by the federal government and the states without any beneficiary contribution.

- Medicare has a relatively limited benefit package that excludes much preventive care, long-term care, and, until 2006, prescription drugs outside of the hospital and the oncologist's office, whereas Medicaid offers a far more generous array of benefits.

For the first 30 years of its existence, Medicare had two separate parts, each with different funding sources and eligibility requirements. Medicare Part A covers inpatient hospital care.

Medicare Part B, in contrast, is a voluntary program, providing coverage for outpatient care for beneficiaries who choose to pay a \$ 110 monthly premium

The 1997 legislation also created a new program, known as Medicare Part C, which offers beneficiaries the option of enrolling in a private, "Medicare Advantage" plan. Part C plans typically are structured as health maintenance organizations or preferred provider organizations. Although they offer all of the physician and hospital benefits of Parts A and B, and often additional benefits, enrollees are limited in the choice of physicians and hospitals they may use

There were instead three competing views about how to respond. One camp emphasized the need to undo some of the cuts in provider reimbursement, another focused on the importance of expanding the benefits package, and still another argued against new spending measures, whether on behalf of providers or beneficiaries.

Medicare Part D. Under this legislation, beneficiaries can receive outpatient drug coverage through a managed care plan or, if they wish to stay in fee-for-service Medicare, through a private prescription drug plan. In most communities, seniors can choose between dozens of plans, some of which offer limited coverage for a small monthly premium, whereas others offer more generous benefits for a higher premium.

RECENT EFFORTS TO HELP THE UNINSURED

The best explanation for the rise in the number of uninsured is the decline in the number of Americans with employer-sponsored private health insurance.

The decline in employer-sponsored coverage is due to several factors.

- Many employers have increased the share of the bill that the employee must pay, prompting some employees to abandon their coverage.
- Other employers are eliminating coverage for spouses and children or phasing out retiree health coverage.
- Still others are hiring more part-time workers and outside contractors, thereby avoiding the need to offer health insurance.

Following the collapse of the employer mandate strategy, policy makers (especially at the state level) enacted a host of efforts designed to make health insurance more available and more affordable in the small group and individual insurance markets (see Chapter 8). These reforms focused on three structural problems in the health care system:

- Employers in the small business community often cannot afford to provide health insurance to their employees. These employers lack the market clout to negotiate a good deal, particularly given the high administrative costs associated with insuring a small group.
- People who are self-employed or employees of small businesses generally earn too little to purchase health insurance in the individual market.
- People with a high risk of catastrophic medical costs are often excluded from the individual insurance market, regardless of their ability to pay.

Congress enacted the State Children's Health Insurance Program (SCHIP, changed to CHIP in 2009). States can use CHIP funds to liberalize their Medicaid eligibility rules, to develop a separate state program, or to create a combination of the two. The main advantage to using CHIP funds to expand Medicaid is administrative simplicity for both the client and the state.

there are several advantages to creating a separate state program:

- Enrollment can be suspended when the dollars are spent, unlike with Medicaid, which is an entitlement program.
- The state has more discretion when developing the benefits package.
- It can impose co-payments and premiums, which generally are not allowed under Medicaid.
- Beneficiaries and providers may be more likely to participate because the new program lacks the stigma associated with Medicaid.

Despite the growth in public insurance programs like Medicaid and CHIP, the number of uninsured keeps rising, leading to an ongoing debate over whether and how government should aid this population.

THE ACA AND THE UNINSURED

President Obama needed to develop a strategy to overcome the interest group, ideological, and institutional obstacles to reform. By mid-2009, he had developed his strategy.

- First, he declared health reform to be his top domestic priority
- Second, he urged that health reform be enacted during the first year of his term, recognizing that delay was the enemy of reform.
- Third, he delegated the task of developing a health reform plan to congressional leaders, eschewing the White House-centered approach that ran aground in the Clinton administration, hoping instead to persuade the leadership (especially the Democratic leadership) to be fully invested in the reform initiative.
- Finally, he encouraged administration officials to negotiate with key interest groups, emphasizing the need to compromise and build incrementally off the current system.

At its core, however, is an ambitious effort to provide insurance coverage to more than 32 million of the currently uninsured. The ACA accomplishes this with five key initiatives, most of which take effect in 2014:

1. Federal law will require nearly all Americans to have some form of health insurance or pay a penalty through the tax code.
2. State Medicaid programs will be required to provide coverage to all persons (and their dependents) with incomes below 133% of the federal poverty level. As a result, an additional 16 to 18 million people are expected to enroll in Medicaid over the next several years.
3. Each state will be required to create a so-called "insurance exchange," a vehicle through which the uninsured and the small-business community can presumably purchase more affordable private coverage. The federal government will then provide subsidies to persons with incomes up to 400% of the federal poverty level to help them afford the more reasonably priced coverage. This initiative is expected to result in private coverage for another 16 to 18 million of the currently uninsured.
4. Employers with more than 50 employees will be required to either provide coverage to their employees or to pay a financial penalty to the federal government.
5. Private insurance companies will need to comply with a host of federal regulations that seek to eliminate the practice of discriminating against persons with preexisting conditions or who are otherwise likely to incur high medical costs.

The Government as Regulator

The states' ability to regulate health insurers was constrained in 1974, when Congress enacted ERISA. ERISA was intended primarily to prevent unfair denial of pensions to employees. But the law also contains a provision that prohibits states from regulating employee benefit programs unless the regulation is part of the "traditional" state regulation of insurance, a provision that has led to endless confusion, controversy, and litigation.

More ambitious efforts consistently failed, however, for more than a decade, until the political logjam broke in 2010 with the enactment of health reform (ACA), which for the first time imposes comprehensive federal oversight over the private health insurance industry.

- For example, health plans are no longer able to deny coverage to children based on a preexisting condition,
- young adults can now stay on their parents' coverage until age 26, and
- health plans in the large group market must spend at least 85% of their revenue on patient care (and plans in the small group and individual markets must spend at least 80%).
- Moreover, when the new law is fully implemented in 2014, health plans will not be able to deny coverage to anyone based on a preexisting condition,
- there will be no lifetime limits on coverage, and
- health plans will not be able to charge higher premiums based on health status or gender.

The Government as Health Care Provider

THE VETERANS HEALTH ADMINISTRATION The VHA is required to offer health care to eligible veterans, their dependents, and their survivors.

VHA's NCPS takes a different approach. It focuses on finding the root cause of the error, a much more effective strategy for preventing future errors. For example, if a medication error is due to unclear labeling of drugs, it is better to fix the label than punish the individual who misread it.

A major strategy in VHA quality improvement efforts has been widespread implementation of information technology. Over the past few years, it has spent hundreds of millions of dollars on an electronic medical records system, bar-coded medication administration, and computerized physician order entry.

STATE FACILITIES FOR THE MENTALLY ILL

By the turn of the 20th century, state governments had emerged as the primary providers of care for people with mental illnesses and behavioral disorders. Behavioral health became the only health problem with a separately financed and managed treatment system, and state governments assumed responsibility for the entire system

state governments began a massive effort to discharge patients from state hospitals and to divert others from admission.

LOCAL GOVERNMENT AND THE SAFETY NET FOR THE POOR

the average big-city public hospital is three times the size of the typical, non-government-owned facility, has four times as many inpatient admissions, provides five times as many outpatient clinic visits, and delivers seven times as many babies. Public hospitals, both large and small, treat a disproportionately high percentage of the poor and uninsured. Generally, public institutions are "providers of last resort," treating the homeless mentally ill, the babies addicted to cocaine, and the victims of violence.

Key Issues on the U.S. Health Care Agenda

Health care policy makers currently are grappling with a host of difficult issues, ranging from reorganizing health care delivery to slowing the rising costs of health care to developing a long-term care system that is responsive to the growing number of senior citizens.

The task of implementation will be enormous.

- State governments will need to expand their Medicaid programs dramatically (and find health care providers willing to serve the new enrollees).
 - States also need to create brand new "insurance exchanges."
 - Federal officials need to promulgate thousands of new regulations that will govern the changing insurance industry, as well as
 - create new institutions (such as the new Medicare Independent Payment Advisory Board),
 - implement contentious reimbursement cuts, and develop, implement, and
 - evaluate a host of payment and delivery reform pilot programs.
-

chapter 3: Health Care Financing

General Overview of Health Care Financing

But health care is not a normal commodity or service because of two features: (1) need for health care varies starkly from one individual to another (20% of Americans use 80% of all health care dollars expended in any given year); and (2) the cost of health care is very high, and many people just could not afford it if they had to pay cash each time they needed a service.

To overcome the obstacle of high costs, the United States has developed an insurance system where we collectively pay for services. Put most simply, we pool our risks for needing health care.

1. There are many types of insurance; some are publicly paid for through taxes, whereas others are paid by employers, and yet others are paid by individuals directly.
2. Insurance does not pay for the entire costs of an individual's health care. Usually, insurance pays only a share of the costs while the individual pays the rest. How this co-payment arrangement is structured varies greatly from insurance plan to insurance plan and can be quite complex.
3. Once insurance is involved in the transaction between a service provider and a user of the service, there have to be rules regarding which services the insurer will pay and how much it will pay for them. These insurance reimbursement rules also can become incredibly complex and confusing.
4. When people do not directly and fully pay for services, economists worry that they will use more services than they need or that a provider will deliver more care than needed. An insurance system must create incentives to avoid overuse and oversupply, or system-wide expenditures could skyrocket.

What the Money Buys and Where It Comes From If we consider all types of expenditures in the health system, the total national bill in 2009 is expected to be \$ 2.6 trillion dollars. The overwhelming share of this money (\$ 2.1 trillion, or 84%) will pay for personal health care services to individuals, whereas the balance will pay for public health services, research, and administrative costs associated with running the delivery and financing system (see Table 3.1). Among personal health care services, 81% of expenditures will focus on four types of care: hospital care (the largest type by far), physician and other clinical services, nursing home care, and prescription drugs.

HOW INDIVIDUALS PAY FOR HEALTH CARE

To start, we should go back to basics and consider how individuals pay for health care when they become ill or injured. In essence, there are two main ways the transaction for a service happens: either through a person's insurance coverage or out-of-pocket from income or savings. If the person is uninsured and has no money, there is a third option: they can attempt to obtain the service free, as a charity case, through a "safety-net provider."

HOW PROVIDERS ARE PAID FOR HEALTH SERVICES THEY DELIVER Again, starting with basics, providers are paid from the same three sources that individuals tap into: public or private insurance programs, cash payments from individuals, or various sources of indirect payments from insurers or government to help pay for charity care.

These differences in payer mix have very large implications for the financial health of these three hospitals. Private insurers and Medicare tend to pay relatively good rates for each day of hospital care, whereas Medicaid and charity care tends to pay much lower rates. This means that NYU receives much more revenue per day to cover its costs than do Montefiore or Lincoln, and Montefiore has a healthier payer mix than Lincoln Hospital, which serves the most vulnerable of the population.

The ability to provide good care depends on the mix of patients (and insurance plans) the hospital serves and its ability to negotiate good rates with each type of payer.

How Health Insurance Works A range of insurance types covers different subsets of the American population. The first key differentiation among them is public programs vs. privately sponsored insurance products.

PUBLICLY FINANCED PROGRAMS Medicaid Medicaid originally was designed to assist recipients of public assistance— primarily single-parent families and low income people who are aged, blind, and disabled.

Medicaid is administered by the states, and both the state and federal governments finance the program.

As a result, there are many seemingly arbitrary differences in eligibility and benefits across states.

The 2010 federal health reform law will expand state Medicaid programs substantially because it will set minimum eligibility levels in states at 133% of the federal poverty line. As described later in this chapter, the new law is expected to enable some 32 million more Americans to obtain health insurance by 2014, with approximately half of the newly insured covered by an expanded Medicaid program, whereas the balance would be covered by subsidized private insurance policies.

Medicare Administered by the federal government, Medicare originally targeted people 65 and over, but was quickly expanded to cover people with disabilities and severe kidney disease.

Medicare has two parts: Part A, which is hospital insurance, and Part B, which is supplemental medical insurance covering physician services and outpatient care. The Balanced Budget Act of 1997 established the Medicare + Choice program, designed to build on existing Medicare managed care programs and expand options under Part B.

George W. Bush included a promise to add drug coverage to Medicare in his 2000 presidential campaign. This time the political stars were aligned and Congress passed and the president signed into law the Medicare Modernization Act in December 2003.

Other Public Programs In addition to Medicaid and Medicare, the United States has a patchwork of government health care programs for special populations— active duty and retired military personnel and their families, American Indians, and injured and disabled workers.

The Veterans Health Administration operates the largest integrated health care system in the United States, providing primary care, specialized care, and related medical and social support services to U.S. veterans and their dependents.

PRIVATELY FINANCED HEALTH CARE The private share of health care expenditures has been declining since the 1960s, as Medicare, Medicaid, and other public sources of payments have increased.

Over the next several decades, the employer-based health insurance system became increasingly entrenched. By the end of 2002, more than 64% of Americans received health insurance through their employer (Glied & Boirzi, 2004). Since then, the percentage of Americans obtaining employer-based health insurance has slowly, but steadily, decreased, reaching 61% in 2008.

The Individual Insurance Market

The Employee Benefit Research Institute found that, in 2008, although more than 160 million nonelderly Americans were covered by employment-based health benefits, about 16 million purchased coverage for themselves and family members in the individual insurance market

the 2010 Patient Protection and Affordable Care Act will offer substantial subsidies for many Americans to purchase insurance as individuals. As many as 16 million people uninsured in 2010 may be able to purchase subsidized private insurance after the law is fully implemented in 2014.

COBRA The Consolidated Omnibus Budget Reconciliation Act (COBRA) of 1985 attempted to reduce gaps in insurance coverage for individuals between jobs. It requires employers to extend health insurance benefits to former employees for up to 18 months.

MANAGED CARE The biggest change in the privately financed portion of the U.S. health care system over the last three decades is the shift toward various forms of managed care.

Health Maintenance Organizations Managed care plans structure and reimburse care differently than conventional insurance does. Very strict managed care plans, like health maintenance organizations (HMOs), use capitated payments and control which providers participate in their network. Capitated payments are fixed annual payments for each person for whom the provider is responsible to provide care, regardless of the amount and kinds of services eventually needed. HMOs also require primary care physicians to be gatekeepers to other types of services, by requiring referrals for diagnostic tests and specialty care.

The theory was that capitation would encourage providers to think more carefully about the necessity of costly tests and procedures and discourage unnecessary referrals to expensive specialists.

Despite capitation's limits on reimbursement, providers were expected to participate because they would have a "captive audience" of patients— in other words, they could make up any reimbursement shortfall by having increased numbers of patients. For patients, in return for giving up the freedom to use whichever physician or hospital they chose, care would be more organized and specialist and primary care more effectively coordinated.

The best known HMO, Kaiser Permanente, uses a defined network of physicians and owns its hospitals.

Today, most consumers do not choose to enroll in HMO plans. Only in California and, to a lesser extent, the other West Coast states, do HMOs represent a significant share of the insurance and service delivery market. And, in many areas of the country— including most of the Eastern half— HMO penetration is minimal.

Preferred Provider Organizations

At the "liberal" end of the managed care spectrum are the rapidly growing preferred provider organizations (PPOs), which negotiate discounts with a list of physicians that they encourage plan members to use, for which they are rewarded with lower out-of-pocket costs (deductibles, co-pays, and co-insurance). Patients who use an out-of-network provider often must pay the difference between the insurer's reimbursement rate and whatever the physician charges.

Accountable Care Organizations

Quickly rising health costs and the prospects of sharply rising direct co-payments (deductibles and coinsurance) suggest that consumers may be more amenable to trading freedom of provider choice for more coordination of care and lower co-payments.

Consumer-Driven Health Care and High Deductibles An approach to financing that focuses on making consumers sense "price signals" when they purchase health care is often called "consumer-driven health care." This approach generally involves setting a large deductible before individuals receive insurance benefits.

How Health Reform May Affect the Financing System

The Patient Protection and Affordable Care Act of 2010 (ACA) is expected to have a major impact on the financing of health care, principally by expanding insurance coverage to approximately 32 million of the current 50.7 million uninsured by 2014. If this goal is reached, 95% of all Americans will have health insurance coverage.

Individuals in families that earn between 133% and 400% of the federal poverty level will receive substantial subsidies to enable them to purchase insurance through an "insurance exchange" that will link private insurance companies to eligible individuals. Unless the subsidy an individual family can receive is too small, the family will be required to purchase insurance and, if it fails to do so, it will have to pay a financial penalty through its federal tax return. Employers with more than 50 employees also will have to pay financial penalties if they fail to offer their employees private insurance.

The new law also requires that insurance companies offer insurance to all individuals, even those with existing health care problems. Although insurance premiums may vary

The new law does not change the overall structure of the health care financing system, which will continue to rely on a blend of private and public insurance plans. Instead, it builds on the existing system. Coverage provisions of the law will be implemented over a 4-year period, with the major insurance expansions occurring in 2014.

The reform law includes a host of provisions that will change reimbursement policies, in order to create incentives for providers to improve the quality of care and the value of health services (described later in this chapter; political aspects of the reform law are discussed in Chapter 2). Many of these proposed changes have the theme of encouraging more resources and more attention to the management of chronic conditions in “health homes,” with the goal of better balancing the health system’s focus on acute, high-technology services with the need for more efficient clinical management and prevention of chronic medical conditions.

Reimbursement Approaches

HOW DOCTORS ARE PAID

Physician services are a significant component of our national health care bill, accounting for more than one-fifth of all health care spending.

The way public and private insurers reimburse physicians for care has changed a great deal in the past two decades. Traditionally, physicians were paid on a fee-for-service basis. They set their price and the patient or insurer paid it. Because insurers simply passed the costs along to employers in the form of higher premiums, which employers in turn built into the price of their products and services, no one had an incentive to keep fees down.

The fee-for-service system is often blamed for some of the rapid health care cost growth on the one hand and for government regulation of Medicare and Medicaid reimbursement rates on the other.

GOVERNMENT REGULATION OF PHYSICIAN PAYMENT RATES

The federal Medicare program responded to price inflation in the late 1980s by developing a complicated set of fixed rates for specific physician services. The system, which covered a large number of services, is called the Resource-Based Relative Value Scale (RBRVS) (Hsiao et al., 1988). The rates were determined through detailed research measuring the expected time and other resource inputs that physicians needed to deliver a specific service.

Each state’s Medicaid program also developed physician reimbursement rates, generally adopting the federal “take it or leave it” model. The Medicaid rates are often much lower than Medicare rates for the same services, which may result in fewer physicians accepting Medicaid

HOW HOSPITALS ARE PAID

Approaches to paying hospitals are similar to the approaches used to reimburse physicians. Medicare and Medicaid offer “take it or leave it” rates, often based on complicated formulas, whereas private insurers negotiate rates with hospitals individually. Insurers often permit managed care enrollees to use only certain hospitals.

DIAGNOSIS-RELATED GROUPS AND PROSPECTIVE PAYMENT

The diagnosis-related groups (DRGs) system set rates prospectively— that is, Medicare said up-front that it would pay a fixed amount for the hospital stay of a patient with a specific diagnosis and no more (with some outlier exceptions), no matter how much the patient’s care eventually cost or how long the hospitalization turned out to be. Fixed payments give hospitals a powerful incentive to increase efficiency, minimize unnecessary tests and services, and shorten patients’ hospital stays. A newer approach to payment is the concept of “bundled payments,” which provide both the physician and the hospital a fixed amount to take care of an episode of care or for a time period of care, in the case of patients with chronic conditions.

PER DIEM HOSPITAL REIMBURSEMENT

Many private insurers and state Medicaid programs have not adopted the DRG payment approach and instead continue to negotiate per diem (daily) rates for hospital care.

Insurers and hospitals alike use their market power to influence favorable rates. Insurers— especially if they cover a substantial share of a hospital’s potential patient pool— have considerable clout if they can prevent their covered patients from using hospitals with higher rates, whereas hospitals have market power, because many employers will not purchase insurance plans that do not include in their networks popular, highly regarded hospitals. This negotiation environment more closely mirrors how prices are set in other markets involving large purchasers and producers (e.g., the market linking automobile manufacturers with the many companies that make auto parts). When the market works smoothly, both parties will come to agreements that push efficiency but leave the supplier— in this case, the hospital— with sufficient reimbursements that it can achieve high-quality care and stay financially viable.

Current Policy Issues in Financing

Designing insurance exchanges that will link private insurers to individuals who can purchase subsidized insurance policies will be an administrative, information technology, and policy challenge. States need to adapt current state insurance regulations and current Medicaid rules to the requirements of the new law.

At least the early implementation of health care reform will take place in a time of great economic difficulty for state and federal government due to the national economic downturn.

Two policy issues are key to the success or failure of implementation: whether the growth of health care expenditures can be constrained; and whether effective “insurance exchanges” can be implemented in all 50 states.

CONSTRAINING THE GROWTH OF HEALTH CARE COSTS

the costs are largely paid by government and employers. These growing expenditures force higher taxes in the public sector and increased product prices and depressed wages in the private sector. All of these problems are considered bad for our economy. If individuals paid for health care directly, making choices between buying health care versus buying other items, growing health care expenditures would not be seen as so burdensome to the economy.

cost containment in health care will happen if we can figure out how to invest in healthy lifestyles in ways that lead to long-term financial and health returns.

Unfortunately, it has been difficult to coordinate these investments and their potential benefits: often the costs associated with preventive services are paid by one set of actors but the returns on these investments go to other actors. This means nobody has the financial incentive to make the investments in the first place.

Misaligned financial incentives are present throughout the health system. For example, primary care physicians do not generally have incentives to avoid unnecessary referrals to costly specialists or expensive diagnostic tests. Hospitals traditionally have not had an economic incentive to coordinate posthospital services that would reduce the need to readmit patients.

Many policy experts believe that aligning financial incentives to promote efficient investment of resources is the key to reducing health care costs in the coming years.

One provision in the new law would fund systems of providers that wish to act as “accountable care organizations” and take various types of capitated payments to coordinate all of the care required by people in the covered group. Because they will receive only this fixed amount, providers will have strong incentives to invest in prevention, wellness, disease management, and various systems that assure the efficient use of health care resources. Other provisions of the law will encourage new approaches to meeting long-term care needs with community-based, rather than institutional, forms of care. And yet other provisions will penalize hospitals that have high rates of readmissions of patients within 30 days of discharge.

IMPLEMENTING EFFECTIVE INSURANCE EXCHANGES

A key feature of the 2010 federal health reform legislation is the creation of insurance exchanges that will offer private insurance policies with premium rates subsidized by federal dollars.

The exchanges are intended to play at least three key roles:

- calculating the amount of the subsidy for a given family,
 - explaining the features of each private insurance offering, and
 - linking each family to the insurance option the family selects.
- Exchanges also will most likely determine which insurance offerings meet federal qualifications to be offered on the exchange.

- And, some states may choose to have their exchanges facilitate enrollment in public insurance plans, such as Medicaid.

Perhaps the greatest challenge in establishing the exchanges is to assure seamless enrollment in unsubsidized private policies, subsidized private policies, and the publicly supported Medicaid program.

If enrollment and income documentation systems vary from one insurance category to another, many families will have difficulty making transitions among insurance types. In particular, many people who become eligible for Medicaid coverage may fail to comply with complex enrollment processes.

What will happen if federal health reform does achieve the anticipated expansions of access and control over the growth in health care costs? One of two radical options will most likely emerge: a collapse of the private approach to health care financing, which would lead to a single-payer public system like those of most other parts of the developed world (see Chapter 4), or the emergence of a two-tiered system of care that maintains access for Americans with comfortable incomes but restricts access for everyone else— a particularly brutal form of rationing.

Chapter 4 Comparative Health System

Basic Health Care System Characteristics

HEALTH CARE SPENDING

A starting point is how much money a country spends on health care; one commonly used measure is total spending.

A better alternative is to compare total health care spending per person (per capita), adjusted to achieve purchasing power parity, or PPP. Purchasing power parities are used in addition to exchange rates to reflect differences in the cost of acquiring basic goods in a given country.

Economists generally prefer to compare different countries' total spending on health care as a percent of their gross domestic product (GDP).

In summary, comparative international data on spending show that the U.S. health care system is the most expensive per capita, U.S. health care spending is growing more rapidly than spending in most other OECD countries, the United States spends the highest percentage of its GDP on health care among all OECD countries, and this higher spending has persisted for the last 40 years.

PRIVATE AND PUBLIC SPENDING

care. In recent years among most OECD countries, approximately three-fourths of health care spending was from public funds, whereas the remaining quarter was from private funds. Private insurance and business play a relatively small role in health care funding in most OECD countries.

HEALTH COVERAGE AND ACCESS

Two other common measures of access to health care are (1) the availability of health care resources and (2) the rate of utilization of available resources. Consistently, the United States has had fewer health care resources than other OECD countries, with fewer physicians and fewer acute care hospital beds per 1,000 residents. U.S. citizens visit the doctor less often than people in other countries and stay in the hospital for fewer days.

HEALTH OUTCOMES

In summary, on most indicators the United States has not achieved the best health outcomes, compared to other countries, in spite of our high levels of health care spending. Overall, the health status of the U.S. population is in the middle of the OECD countries and, in the last few decades, improving more slowly than are other nations.

Health Care Quality Similarities Across Models

IMPROVING QUALITY OF CARE

Estimates are that half of the increase in U.S. health spending can be attributed to new technology.

Relative to other OECD countries, the United States has done well on some quality of care indicators, such as cancer survival rates and screenings, but more poorly on indicators such as immunizations and asthma care

PATIENT SATISFACTION

No country's citizenry is completely satisfied with its health care system. But in most surveys, larger percentages of Americans have expressed serious dissatisfaction with the U.S. system,

Evolution of Health Care Systems

BISMARCK MODEL

The oldest health care system model— the social insurance model or Bismarck model— was introduced in 1883 by German Chancellor Otto von Bismarck.

The Bismarck model is based on a philosophy of national solidarity. Every worker and employer must contribute to the social insurance system commensurate with their income. Multiple funds were created to collect and redistribute these contributions, according to government regulations, in order to cover the costs of illness care. Hence the funds are called sickness funds.

Bismarck's objective was to offer universal coverage that provided nationally defined benefits, the Bismarck model remains the foundation of the German system. Its elements can be found in the health care systems of Japan, France, the Netherlands, and many other countries.

BEVERIDGE MODEL

Rather than the employer/ employee-based contribution model developed by Bismarck, the Beveridge model is chiefly characterized by progressive tax-financing (i.e., taxes increase in proportion to increases in income). The British government acts as the single insurer. Variations of the Beveridge model can be seen in New Zealand, Spain, and Scandinavia. The Beveridge model is a government-run, single-payer system.

NATIONAL HEALTH INSURANCE

The Bismarck and Beveridge models have been combined in several countries to create a variety of insurance systems. Canada has adopted one such combination model. Its National Health Insurance (NHI) program differs from the Beveridge model, in that the private sector plays a strong role in providing health care services. The similarity is that the government collects and finances care through a single-payer system, rather than through multiple sickness funds, as under the Bismarck model. Taiwan and South Korea have achieved universal insurance coverage financed primarily through payroll taxes, cross-subsidized by general government revenues. These systems feature a relatively high degree of private sector involvement in the delivery of health care services, especially outpatient care

PRIVATE HEALTH INSURANCE

In contrast, the U.S. health care system gives a prominent role to private health insurance. Similar to the Bismarck model, the private health insurance system is financed through employer and employee contributions. However, most private sector insurance is premium-based: that is, insured individuals pay a set amount determined by the insurance company, rather than a percentage of their income determined by the government.

Exploring Major Health System Models

PRIVATE HEALTH INSURANCE

Financing and Pooling

In the United States, when most individuals enter the workplace, they voluntarily contribute a portion of their pre-tax income, which is added to a contribution by their employer, to purchase health insurance. In other words, employees pool their risk among their coworkers

U.S. citizens with private health insurance face a variety of cost-sharing requirements: co-payments (a fixed amount paid per visit or per procedure), co-insurance (requiring them to pay a set percentage of treatment costs, commonly ranging from 5% to 20%), and/ or deductibles (out-of-pocket payments as

high as \$ 2,500 before insurance kicks in), depending on the specific provisions of their health insurance plan. The Medicare program also includes a variety of cost-sharing arrangements.

Countries are exploring a variety of payment options. In the United States, fee-for-service (payment for each service rendered) is the typical reimbursement mechanism for preferred provider organizations (PPOs), whereas capitated (per person) payments are characteristic of health maintenance organizations (HMOs). The various financing mechanisms allow for different levels of gate-keeping to reduce costs. Some private insurance plans still pay hospitals on a combination of itemized and per-diem (for “hotel” services) charges or, as in Medicare and HMOs, on a fixed-price basis, depending on the patient’s diagnosis. In Medicare’s case, these set prices are established under the diagnosis related groups, or DRG system. Under this system, whether a patient with pneumonia, say, is hospitalized 2 days or 2 weeks, the hospital receives the same payment.

The private health insurance market in the United States is not as strongly regulated as in most OECD countries, although the 2010 U.S. health reform law is a step in this direction.

NATIONAL HEALTH INSURANCE PROGRAMS AND THE U.S. MEDICARE PROGRAM

Financing The federal Medicare program combines the Bismarck and Beveridge models. Financial contributions to Medicare come through payroll taxes collected by the federal government, and all employees must contribute a percentage of their income, which their employer matches. Other parts of Medicare, such as physician services, are financed through general tax revenues.

Provision of Services NHI provides universal coverage to all citizens regardless of ability to pay, as is the case in Australia and Canada. Medicare also is a near-universal entitlement for all Americans over 65 and some people with disabilities. The federal government sets reimbursement rates for physicians, hospitals, and other care providers.

Regulation

Medicare provides less explicit governmental control, given that multiple private health insurance programs also exist in the United States and that health care providers are not required to accept payment from Medicare.

NATIONAL HEALTH SERVICES AND THE U.S. VETERANS HEALTH ADMINISTRATION

Financing

The U.S. Veterans Health Administration (VHA) contains elements of the Beveridge model. The VHA also is financed from general tax revenues.

Provision of Services

Physician services are funded through an annual global budget (a lump sum, prospective budget) approved by Congress as part of the overall federal budgeting process. For 2011, the VHA budget for medical care is more than \$ 48 billion.

Regulation

SOCIAL INSURANCE

Elements of the Bismarck-based social insurance model exist in the United States, although with some modifications. In Germany, payroll tax contributions are pooled into the more than 200 not-for-profit, nongovernmental sickness funds described earlier. These funds have many attributes in common with U.S. private insurers.

MEDICAID/ CHIP In the United States, Medicaid and the Children's Health Insurance Program (CHIP), which serve low income Americans, contain elements of several basic health care system models. Funds for Medicaid/ CHIP come from state tax revenues, with matching contributions by the federal government.

Similar to the case in many other countries, a person's eligibility for the Medicaid/ CHIP program is determined by both federal and state rules. Medicaid/ CHIP eligibility criteria are based primarily on income. Such means tests are unnecessary in countries with universal coverage,

PRESCRIPTION DRUG PLANS

Most countries are adopting some form of comparative effectiveness evaluations to determine the value of new and existing pharmaceuticals.

Common Challenges Facing Systems

SPENDING INCREASES

- Growth of the private health insurance market with increasing administrative complexity;
- Supplier-induced demand, or the ability for physicians to recommend services that may or may not be medically necessary;
- Defensive medicine, or services ordered by health providers primarily to reduce the risk of malpractice law suits;
- Factor productivity, or the ability for health workers to complete more tasks in the same amount of time; and, what is often considered the most significant factor,
- Medical technology, or expensive, advanced capital investments.

AGING POPULATION

in the long term, increasingly older populations will experience a higher incidence (emerging cases) and prevalence (existing cases) of costly chronic conditions that could increase health care spending.

CHRONIC DISEASE AND COORDINATION OF CARE

Compared to European countries, the United States has consistently higher prevalence and treatment rates for these diseases

Receiving coordinated care within private health insurance plans in the United States remains difficult, due to complex benefit designs and limited networks. The increased use of electronic health records—already widely implemented in other OECD countries as well as in the VHA system— may improve coordination, and thereby improve quality of care and reduce costs

IMPROVING QUALITY

One method to improve quality of care that many countries have adopted is to develop, implement, and enforce national clinical guidelines to guarantee a basic level of quality care. An additional benefit of national guidelines is the reduction in costs because of fewer unnecessary visits, tests, and procedures (see Chapter 13). Another approach to improving quality is to emphasize first improving access to care and health system data, then compare performance with benchmarks for similar countries or across regions of the same country.

Each health system has pros and cons and it's clear that no one system has found the magic combination that leads to high levels of satisfaction, quality, and value. Lower costs tend to be associated with more centrally administered health systems, due to lower overhead and stronger cost-control measures. The tradeoff is that more decentralized health systems may offer more consumer choice, by relying more heavily on private health insurance options to supplement or cover gaps in benefits.

Section II: Population Health

Chapter 5: Population Health

Whether people live long and healthy lives is largely determined by powerful social factors such as education, income, racial or ethnic group, and the quality of environments where they live, learn, work, and play. In fact, the effects of the systematic differences in health care are far smaller than the effects of the nonrandom differences in other determinants of health on a population's overall health outcomes.

The Population Health Model

The population health model seeks to explain and intervene in the causes of the systematic differences in health between different groups

To do so, it analyzes the patterns or distribution of health between different groups of people in order to identify and understand the factors leading to poorer outcomes. These factors are often described as “upstream” factors, in the sense that they influence health through a series of pathways that may not be immediately visible

In addition, population health employs an **integrative model**, meaning that different factors are highly likely to intersect and combine to produce good or poor health and should be assessed in combination. Population health scientists use the term determinants of health rather than factor or cause, and the term the multiple determinants of health to describe five different types of determinants:

1. The social and economic environment— including factors like income, education, employment, social support, and culture
2. The physical environment— including urban design, housing, availability of healthy foods, air and water safety, exposure to environmental toxins
3. Genetics
4. Medical care, including prevention, treatment, and disease management
5. Health-related behavior, such as smoking, exercise, and diet, which in turn is shaped by the preceding determinants

Some health care outcomes can, in turn, affect the determinants; that is, they can have a reverse causality impact on determinants. For example, although social determinants like income have an impact on health outcomes, becoming unhealthy also can have a negative impact on income

The Medical Model

The medical model, in contrast, hones in on individuals and focuses on the factors that are more immediately linked to the pathophysiology of a person's disease.

Historically, the health care system has placed less value on and provided less reimbursement for efforts to promote health or prevent illness and injury.

The medical model does not ask why an epidemic of obesity has occurred over the past 20 years.

In contrast, the population health model has identified a wide variety of causes that have worked synergistically— an unintended conspiracy of causes over time— to produce the epidemic and the differing patterns of obesity observed among population groups.

The Influence of Social Determinants on Health Behavior and Outcomes

The population health model, conversely, requires multiple disciplines to collaborate and integrate different social science concepts, methods, and data sources with those of the biological sciences.

Mortality rates increased steadily with every reduction in rank. Such a steady increase is known as a “gradient” in the population health model and a “dose-response effect” in the medical model, where it is taken as evidence of a robust relationship between causal factor and outcome.

The researchers concluded that rank correlates directly with a better ability to cope with stress.

social disadvantage can result in prolonged stress (also known as toxic stress) and multiple studies of toxic stress have documented negative effects on a variety of biological systems, leading to permanent organ damage.

Educational attainment may influence healthy choices and better health via multiple pathways.

“risk behaviors are not the dominating mediating mechanism for socioeconomic health differences.”

the population health model calls for integration of the multiple determinants of health, with consideration of both negative and positive interactions among different factors.

Leading Determinants of Health: Weighting the Different Domains

The five different domains or categories of health determinants, described previously in this chapter, do not make equal contributions to the health outcomes of populations.

Health behavior (smoking, physical activity, substance abuse, sexual activity, diet, and so on) is considered a major determinant of health in both the medical and population health models.

The best weighting scheme to determine the combined effects of determinants from different domains obviously depends on the health outcome of interest. Some outcomes will be more dependent on certain determinants than on others. Researchers have therefore estimated the relative contributions of the multiple determinants of health through what are called summary measures of mortality and morbidity: that is, measures that summarize the length and quality of life.

The America's Health Rankings report ranks states in order of health status and uses an expert panel to assign weights to four categories of determinants: behavior at 36% percent, community environment at 25%, public and health policies at 18%, and clinical care, 21% (United Health Foundation, 2007). The main point is that there are many ways to calculate the relative impact of various factors on health and, of them all, medical care is never the most significant.

The bottom line message of the County Health Rankings is that some places are healthy and others are not, so that where people live matters to their health.

Health Policy and Returns on Investment

In the United States, two-thirds of what we spend on health care is attributable to diseases that are preventable. Yet, we invest less than 5% of our more than \$ 2 trillion annual spending on health on efforts to prevent illness, whereas 95% goes to direct medical care.

The population health model suggests that investments and policy decisions in areas that are not traditionally considered the province of health care are more likely to have a significant impact on improving a population's health than will increased spending on medical services.

an investment of \$ 10 per person per year in proven community-based programs to increase physical activity, improve nutrition, and prevent smoking and other tobacco use could save the country more than \$ 16 billion annually within five years. This is a return of \$ 5.60 for every \$ 1 [invested] (Trust for America's Health, 2008).

to consider the health effects of policies, programs, and projects in other sectors can be achieved through the use of Health Impact Assessments (HIAs) (www.healthimpactproject.org/).

HIAs provide a framework for analyzing the trade-offs between different outcomes, including health outcomes, to guide the public and its leaders.

what population health does not refer to: it is not a concept related to management of a capitated population in a health care management organization; it is not the patient population of a hospital system or potential patient population in the current framing of nonprofit hospital “community benefits” tax rules; and population health improvement cannot be accomplished by clinical preventive care alone.

population health is not only about primary prevention, because the social, behavioral, and environmental determinants of health also strongly affect patients’ ability and likelihood to carry out medical care providers’ recommendations related to managing or reversing illness and disability.

Chapter 6: Public Health: Policy, Practice, and Perceptions

Who’s in Charge of Public Health?

Public health is defined as “organized community efforts aimed at the prevention of disease and promotion of health” that focus “on society as a whole, the community, and the aim of optimal health status” (Institute of Medicine, 1988). It is the science, practice, and art of protecting and improving the health of populations.

DIVIDED RESPONSIBILITIES AND ISSUE-SPECIFIC ORGANIZATIONS

At least four factors account for the complexity and diffuse responsibility for public health in the United States.

1. The first factor is decentralized government;
2. Second is the distinctive American tendency, first recognized by Alexis de Tocqueville in the 1830s, to design laws, policies, and organizations that are problem-specific, rather than general.
3. A third distinctively American approach is the heavy reliance on nongovernmental organizations to achieve public health goals. Yet these organizations also tend to be issue-specific.
4. The fourth cause of diffused responsibility lies in the broad definition of health goals and debates over what should be done to achieve them.

The World Health Organization, in its widely cited 1978 definition, asserts that “health is more than the absence of disease, it is “a state of complete mental, physical and social well-being.”

A Healthy Population Is in the Public Interest

Two key assumptions distinguish public health from the health care delivery systems discussed elsewhere in this text:

- (a) a healthy population is in the public interest; and

(b) working at a societal or community level, we can improve a population's health.

THE HEALTH OF POPULATIONS

Public health focuses on the health status of entire populations, not just individuals. It is concerned with the incidence, prevalence, and distribution of health problems (see Chapter 5).

In the present day, health still is most strongly determined by behavioral, community, and societal-level forces, not by medical care

Public health takes action on the health risks of the whole population.

THE PUBLIC INTEREST JUSTIFICATION

in the 19th century, when bacteriology emerged as a discipline and cities created clean water and sanitation systems. In that era, public health was justified mostly on utilitarian grounds: the greatest good for the greatest number.

public health today is also justified as a human right, and public health is seen as a means to achieve social justice by addressing social and economic disparities in health.

A COLLECTIVE FOCUS ON PREVENTION AND HEALTH PROMOTION

Prevention

Public health focuses primarily on health promotion and disease prevention. Prevention works at a collective level through health education and health promotion, changes in policy or law, and consensus of professional societies about relevant individual prevention efforts.

The U.S. Preventive Services Task Force (U.S. Agency for Healthcare Research and Quality, 2009) uses three long-accepted categories to describe the full array of potential preventive interventions:

- Primary prevention, helping people avoid the onset of a health condition, including injuries
- Secondary prevention, identifying and treating people who have risk factors or preclinical disease
- Tertiary prevention, treating people with an established disease, in order to restore their highest functioning, minimize negative impact, and prevent complications

TABLE 6.1
Differences Between the Roles of Individual Medical Care and Public Health

	Individual Medical Care	Public Health
Primary prevention	Encourages patients to maintain healthy weight, be physically active, and not smoke	Works to establish bike and walking paths and to eliminate trans fats from foods, offers smoking quit-lines, advocates for smoke-free public spaces and higher cigarette taxes, provides prevention guidelines to medical care providers
Secondary prevention	Regular checkups for detecting and treating high blood pressure, elevated cholesterol, and other risk factors	Mounts public service campaigns about the importance of controlling blood pressure and "knowing your number" for cholesterol, provides guidelines to medical care providers on diagnosis of blood pressure and hypercholesterolemia
Tertiary prevention	Medical treatment to save the heart muscle after a heart attack or to prevent complications from stroke, treatment of atherosclerosis, cardiac rehabilitation, and medication to restore function and prevent recurrence	Provides guidelines to medical care providers, creates widespread awareness of the symptoms of heart attack and stroke and the need to seek help quickly, provides CPR training, provides automated external defibrillators in public places and worksites, establishes effective emergency systems, sponsors patient support groups

Health promotion is defined as “the combination of educational and environmental supports for actions and conditions of living conducive to health” (Green & Kreuter, 1999). Health promotion often focuses on prevalent types of behavior that promote or impair health (see Chapter 7). An important resource for public health, the federal Department of Health and Human Services’ guide, Healthy People,

Disease prevention and health promotion are rarely completely effective, because there are no “magic bullets” for most health problems. A residual group of people will continue to fall prey to illness and injury.

Universal prevention means that everyone receives an intervention equally, whereas targeted prevention involves identifying and serving people at higher risk.

Targeted prevention is an important focus for public health when the risk is prevalent and when there are effective means to identify and treat it.

Core Functions of Public Health

DEFINITION OF CORE FUNCTIONS

Public health serves three core functions to solve health problems at a population level

- (a) Assessment of public health problems involves understanding their prevalence, severity, and causes, using various well-tested statistical tools. New applications of such tools as geographic information systems (GIS) make it possible to assess local environmental factors that contribute to poor health—

- (b) The second core function, policy development, is to create and advocate for solutions to achieve public health goals.
- (c) The third core function, assurance, involves enforcement of policy,

In order to fulfill all three core functions, public health organizations are highly dependent on other organizations and individuals.



FIGURE 6.1
The circle of public health activities.
Source: U.S. Department of Health and Human Services. (2001, revised January 2007). *The Surgeon General's Call to Action To Prevent and Decrease Overweight and Obesity* (p. 3). Rockville, MD: Author.

Governmental Authority and Services

STATE AUTHORITY FOR PUBLIC HEALTH

Inconsistencies among states' public health laws create problems when diseases and emergencies cross state lines, as they do in the event of bioterrorism, natural disasters, or pandemic disease.

For these reasons, public health law is reemerging as a powerful force to improve effectiveness. The Model State Public Health Act takes a systematic approach to establishing authority and implementing public health responsibilities.

Public health professionals advocate enactment of the Model State Public Health Emergency Powers Act. It aims to ensure timely and effective planning and response to public health emergencies while respecting individual rights.

State Health Departments

The way various health-related programs are organized affects how well public health activities can be coordinated.

This situation often leaves less opportunity for effective interaction with the health department,

INTERGOVERNMENTAL RELATIONS

Federal– State Relations

Although the states have constitutional authority to implement public health, a wide variety of federal programs and laws affect their work. Federal law relating to public health preempts state laws, just as state law preempts local laws. Preemption is extremely important to many areas of public health, because the federal government can require minimum protections below which states cannot go— a “floor preemption.”

Both the state and federal governments have strengths and resources for public health. States and localities usually understand local problems better and how local conditions affect services. Meanwhile, the federal government has greater resources and scientific expertise for tackling large and complex health threats.

Delegation of State Authority to Local Health Departments

PUBLIC HEALTH SERVICES

Essential Services

the specific activities and services provided vary widely across states and localities.

Public Health Departments as Providers of Last Resort

In the mid-1970s, many state and local health departments shifted resources away from traditional public health initiatives and became direct providers of primary and preventive care for people with limited options for care (Wall, 1998).

however, the growing emphasis on direct-care services meant fewer resources for activities to improve the health of populations. This shift prompted concern among many public health leaders.

The federal health reform law, the Patient Protection and Affordable Care Act of 2010 (ACA), will change this situation over time.

Challenges and Opportunities

In order to maintain public protections and make further progress, public health must

- improve its infrastructure,
- communicate its value to the public,
- be more effective in advocating for policies that affect health, and
- engage the wide variety of nongovernmental organizations that are so vital to carrying out its goals.

IMPROVING THE INFRASTRUCTURE

New Federal Resources; Declining State and Local Resources

Training, Certification, and Accreditation

NEW RESPONSIBILITIES FOR PUBLIC HEALTH

Since the 2001 anthrax attacks, public health agencies have faced the added responsibility of protecting the public against bioterrorism threats and other public health emergencies, such as pandemic influenza.

EFFECTIVE COMMUNICATION AND ADVOCACY

Public health needs to build a constituency that understands its value in order to create coalitions, gain allies to solve public health problems, and advocate effectively

we don't think about public health until one of these systems breaks down.

Public Health Flashpoints

Public health goals can sometimes conflict with other social or political agendas.

Building and Maintaining Public Trust

Public health practitioners sometimes can be seen as authoritarian or paternalistic, especially when they stress science and technology ("what's good for you") while ignoring collaboration and democratic processes.

new form of leadership in public health— one that engages people on their own terms, in order to engender trust and cooperation.

EFFECTIVE POLICY VOICES

The nonprofit organization, Trust for America's Health, is emerging as an especially vigorous and articulate champion. The Trust advocates passionately for attention to specific health problems— what Americans generally respond to— tying these issues to the need for a better public health infrastructure.

A positive national development is the growing number of state-level public health institutes (PHIs). These institutes are outside state government and can accept private funds and implement ideas much more quickly than health departments can.

Because health is rooted in social conditions, the field has started using an approach called "health in all policies" (Puska & Stahl, 2010). In this approach, health advocates engage policy makers across various sectors to make sure that decisions will promote, or at least not adversely affect, health.

A new approach to public health advocacy is to include Health Impact Assessments on any policy or program that might affect the public's health.

SHARED INTERESTS AND SHARED RESOURCES

Local public health departments have always connected to grassroots leadership and other public services in order to solve collective problems. However, their leadership abilities for cross-sector collaboration are now being cultivated as never before, in what has become known as the collaborative leadership approach.

Collaborative leadership means understanding where public health shares common goals with other interest groups and building coalitions based on those common interests.

Chapter 7: Health and Behavior

behavioral choices— how we live our lives— are the key instruments that determine Americans' health and well-being.

Social marketing strategies apply the concepts and tools of successful commercial marketing to the challenge of health behavior change.

Many parallels can be drawn between what we have learned about ways to promote health through individual behavior change and what we have learned about improving health care quality through provider behavior change.

Behavioral Risk Factors: Overview and National Goals

A more recent analysis by Mokdad, Marks, Stroup, and Gerberding (2004) confirmed this estimate, finding that the four leading behavioral risk factors— tobacco use, alcohol abuse, sedentary lifestyle, and unhealthy diet— together accounted for more than 900,000 deaths in 2000.

more well-rounded improvements across multiple health indicators are needed in order to advance quality of life and reduce health disparities significantly (Koh, 2010).

TOBACCO USE

Tobacco use causes more preventable deaths and diseases than any other behavioral risk factor,

ALCOHOL USE AND MISUSE

People who abuse or misuse include those who are alcohol dependent as well as those whose drinking is risky (perhaps because they drive afterward) or harmful (perhaps because they suffer the effects of occasional binge drinking).

PHYSICAL ACTIVITY

The health risks associated with physical inactivity and sedentary lifestyle are numerous.

DIET AND NUTRITION

Four of the 10 leading causes of death— coronary heart disease, some cancers, stroke, and type 2 diabetes— are associated with an unhealthy diet.

Changing Health Behavior: Closing the Gap Between Recommended and Actual Health Lifestyle Practices

A BRIEF HISTORY OF BEHAVIOR CHANGE INTERVENTIONS

Early behavior change efforts in the 1970s and 1980s relied primarily on public education campaigns and individually oriented health education interventions. They were guided by the health belief model and similar theories (the theory of reasoned action, the theory of planned behavior) that emphasized the cognitive and motivational influences on health behavior change.

And cumulative findings made it clear that people needed not only motivation but also new skills and supports to succeed in changing deeply ingrained health habits.

Social learning theory, which emphasized interactions between internal and external environmental influences on behavior, provided the primary theoretical basis for this evolution and it remains the dominant model for effective cognitive-behavioral health behavior change interventions

Lifestyle change interventions derived from social learning theory combined education and skills development. They included techniques such as modeling and behavioral practice to help people learn not just why but how to change unhealthy habits.

Effective multicomponent treatments were initially delivered and tested in multisession, face-to-face group or individual clinic-based programs, typically offered in clinical or medical settings and usually led by highly trained (e.g., MD, PhD) professionals.

health behavior change was a multistage process:

- Precontemplation: not planning to change behavior; behavior is not seen as a problem.
- Contemplation: seriously planning to change behavior within the next 6 months, weighing the pros and cons, and building supports and confidence.
- Preparation: plans to change are imminent; small initial steps are taken.
- Action: active attempts are made to quit smoking, drink less, become more active, or change to a healthier diet and to sustain changes for up to 6 months.
- Maintenance: change is sustained beyond 6 months.
- Relapse: the individual returns to any earlier stage and begins to recycle through the earlier stages.

the emergence of this model propelled a dramatic shift away from one-size-fits-all approaches to individualized, stage-tailored strategies that could be effectively applied to entire populations— in

communities, worksites, and health care settings— assisting people at all stages of change, not just the motivated volunteers in action stages, but also those needing motivation and support to reach action stages.

A final force in the evolution from individual to population-based approaches was the emergence of social marketing strategies, which apply the concepts and tools of successful commercial marketing to the challenge of health behavior change.

THE ROLE AND IMPACT OF PRIMARY CARE INTERVENTIONS

Patient surveys have repeatedly found that patients expect and value advice from their providers about diet, exercise, and substance use and are motivated to act on this advice (Woolf, 2008). And, most primary care providers describe health behavior change advice and counseling as an essential part of their role and responsibilities.

address healthy behavior in a “string of pearls” approach, capitalizing both on teachable moments— for example, introducing physical activity or diet counseling when test results show elevated cholesterol levels— and a therapeutic alliance that often extends beyond the patient to include key family members.

Progress in developing effective minimal contact, primary care interventions occurred first in the area of smoking cessation, culminating in the development of an evidence-based practice-friendly intervention model now known as the 5A’s: Ask, Advise, Agree, Assist, Arrange Follow-up.

The first step is always to assess not only the relevant behavior (using a standard health risk appraisal or brief screening that can easily be administered in a busy practice setting), but also the individual factors that are helpful in tailoring the intervention,

Based on this information, ideally with reference to the patient’s immediate health concerns and symptoms, the clinician provides brief, personalized advice,

The next critical step is to negotiate and agree on a collaboratively defined behavior-change goal and treatment plan, which commonly includes practical problem solving to assist the patient

The final step is to arrange follow-up support and assistance,

However, several important limitations and gaps remain. The greatest limitation is the lack of long-term maintenance (12 months or longer) following successful behavior change.

MULTILEVEL MODELS FOR POPULATION-BASED HEALTH BEHAVIOR CHANGE

The lackluster performance of individual treatment approaches was especially apparent when contrasted with new evidence from public health research showing far-reaching and lasting health impacts from environmental and policy changes that eliminated the need for individual decision making.

With the stage well set, the final push for a change in approach came in the 1990s with the development of social ecological models of health behavior. These models integrate behavioral science with clinical and public health approaches.

they emphasized that a person's health behavior is affected by multiple levels of influence: interpersonal factors (e.g., physiologic factors, knowledge, skill, motivation), social factors (e.g., social-cultural norms, supports, and networks), organizational and community factors, broader environmental influences, and public policies.

The model McKinlay proposed (see Table 7.2) recommended interventions across a broad spectrum of factors, linking downstream individual clinical approaches with midstream interventions aimed at health plans, schools, worksites, and communities with upstream macro-level public policy and environmental interventions strong enough to subvert or redirect countervailing societal, economic, and industry

the authors recommended population-based health promotion efforts that:

- Use multiple approaches (e.g., education, social support, laws, incentives, behavior change programs) and address multiple levels of influence simultaneously (i.e., individuals, families, communities, nations)
- Take account of the special needs of target groups (e.g., based on age, gender, race, ethnicity, and social class)
- Take the long view of health outcomes, because changes often take many years to become established
- Involve a variety of sectors in society that have not traditionally been associated with health promotion efforts, including law, business, education, social services, and the media

Changing Provider Behavior: Closing The Gap Between Best Practice And Usual Care

A landmark study of the quality of outpatient health care found that U.S. adults, on average, receive about half the services recommended for people with their specific health problems and even less—only 18%— of the recommended lifestyle screening and counseling services

Early efforts to improve provider adherence to recommended clinical practices mirrored early efforts to boost patient adherence to recommended health practices.

Systematic evidence reviews conducted in the 1990s found that most educational approaches, including traditional CME, had limited impact; more interactive and skills-based educational efforts that used principles of adult learning and were consonant with the principles of social learning theory (including modeling by respected peer “opinion leaders”) were somewhat more effective; and **multicomponent interventions that addressed the multiple intrapersonal and environmental barriers to provider adherence, especially system barriers, were most effective.**

MULTILEVEL MODELS FOR IMPROVING DELIVERY OF EFFECTIVE HEALTH BEHAVIOR CHANGE INTERVENTIONS

Crabtree and colleagues (1998) introduced a “practice ecology model” emphasizing the need to address not just the behavior of individual providers, but also the powerful effects of the health care systems in which they practice.

They and other proponents of a broader view of health care improvement emphasized the need for broad spectrum strategies addressing multiple levels of influence: downstream intrapersonal/ individual provider-level factors; midstream interpersonal/ practice team, office micro-systems, and health plan influences; and upstream macro-level health care systems and policies (Goodwin et al., 2001).

Responding to the same evidence, the Institute of Medicine’s (2001) Crossing the Quality Chasm report described the need for a new model for national health care quality improvement as follows: “The current care systems cannot do the job. Trying harder will not work.

project_ : Changing systems of care will” (p. 4). The report went on to recommend a fundamental re-engineering of the nation’s health care system— moving from a system designed primarily to support and pay for the delivery of reactive acute and remedial illness care to one that would support and pay for the proactive, preventive and behavioral care needed to manage and prevent chronic disease.

the chronic care model:

- Assuming accountability
- Providing patient support
- Building relationships and agreements among providers (including community agencies) that lead to shared expectations for communication and care
- Developing connectivity via electronic or other information pathways that encourage timely and effective information flow between providers (including community agencies)
- 1. Decide as a primary care clinic to improve care coordination.
 2. Develop a tracking system
 3. Organize a practice team to support patients and families
 4. Identify, develop and maintain relationships with key specialist groups, hospitals, and community agencies
 5. Develop agreements with these key groups, hospitals, and agencies
 6. Develop and implement an information transfer system

This model applies equally to the prevention as to the treatment of chronic disease, both of which require helping patients to change the behavioral risk factors that cause or complicate their illnesses.

This successful plan applied all six model elements as follows:

- Health care organization: health plan leaders made reducing tobacco use their top prevention priority, provided financial and other incentives to providers (including hiring dedicated clinic counselors), and eliminated patient co-payments for counseling.
- Clinical information systems were used to create a registry of the tobacco users enrolled in the health plan, track their use of treatment resources and programs, and generate proactive telephone quitline calls for patients and feedback reports for providers.

- Decision support tools included extensive provider training, ongoing consultation, automated patient assessment and guideline algorithms, and reminder tools.
- Practice redesign and self-management support included self-help materials and a telephone quit line to deliver counseling and pharmacotherapy without burdening the provider.
- Community resources and policies included referral to community and worksite quit-smoking clinics and related healthy lifestyle change programs; focused on stress management, exercise, and weight loss; as well as support for worksite smoking cessation.

In the long run, just as upstream macro-level societal and policy change is needed to sustain individual behavior change, upstream macro-level health system and policy change is needed to improve care in office practices and health plans. Such changes include quality performance measurement and public reporting; “pay-for-performance” initiatives that reward providers based on the quality of care they offer; and improved information technology to support care improvement.

Conclusion

The landmark 2010 health care reform legislation affords just this kind of breakthrough potential. This bill places prevention at the heart of the efforts need to improve the nation’s health and health care.

Chapter 8: Access To Care

In 2010, the landmark Patient Protection and Affordable Care Act (ACA) became law and is expected to lead to greatly expanded health insurance coverage; the Congressional Budget Office (CBO) estimates that the new law will decrease the number of uninsured in 2019 by 32 million, leaving 14 million nonelderly United States residents uninsured, including an estimated 30% of whom may be unauthorized immigrants.

Having a large number of uninsured patients also has deleterious effects on the health care delivery system, as providers struggle to shift costs to other payers who can subsidize the expenses incurred.

However, access to care is not a one-dimensional problem. The underinsurance issue shows that insurance card alone does not eliminate barriers to access.

In most of the country, the delivery of care remains largely fragmented and uncoordinated (see Chapter 9), making it difficult for many insured Americans to arrange for and obtain the services they need efficiently.

Economic Barriers to Care

CHARACTERISTICS OF THE UNINSURED (PRE-REFORM)

When U.S. employers that historically have offered insurance stop providing coverage to their workers, or when an individual becomes unemployed, the risk of becoming uninsured increases enormously.

In addition to the categorical requirements noted here (children, the aged, people who are blind/ disabled, etc.), states set minimum income standards for Medicaid eligibility. Historically, these standards were tied to welfare payment levels, again with considerable differences among states. Federal reforms in the 1990s broke this link and gave states more flexibility in setting eligibility standards. The ACA raises the floor for Medicaid income eligibility to 133% of the federal poverty level across all states by 2014 and preserves states' discretion to offer higher limits.

In the pre-ACA world, questions about health insurance coverage and the uninsured dominated the access conversation. In the post-ACA world, at least for the foreseeable future, questions about how to avoid underinsurance and how to respond to noneconomic and quasi-economic barriers to timely and effective care, as well as efforts to ensure quality and cost-conscious health care consumption, will likely dominate the access conversation.

UNDERINSURANCE AND OTHER LIMITATIONS OF COVERAGE

The ACA immediately prohibits preexisting condition exclusions for children and, over time, will prohibit preexisting condition discrimination for employer-sponsored, individual market-purchased, and exchange-bought plans.

As mandated by the ACA, commencing in 2013, cost sharing will disappear for Medicare, Medicaid, and private insurance plans for preventive care areas such as immunizations, prenatal services, and certain cancer screenings for high-risk individuals.

Even after these specific reforms come into play, older Americans, particularly those with chronic conditions, could still pay upward of \$ 1,500 a year for prescription medicines. This is less than half of what many pay under the current system, but will remain a significant financial challenge for many low income older Americans.

As a result of these gaps, Medicare traditionally has paid less than half of elderly Americans' total costs of health care, and many people have purchased supplemental coverage for some of these expenses (" Medigap" plans), either directly or through their employer/ retirement plan.

Although Medicaid payments to hospitals historically have been guaranteed at levels reasonably related to costs, payments to physicians are set by state administrative agencies that are facing staggering increases in program costs.

While uninsurance promotes underutilization, it also has the effect of steering uninsured patients to places and providers that must provide care, regardless of the patient's ability to pay— typically, hospital outpatient departments, emergency rooms, and community-based clinics.

These care patterns can also create financial disequilibrium. Providers serving large numbers of uninsured patients must somehow cover the costs of unreimbursed care.

Noneconomic and Quasi-Economic Barriers to Care

MEDICAID COVERAGE DOESN'T ELIMINATE ALL BARRIERS

RACE /ETHNICITY

Large and persistent differences in health status, utilization, and outcomes among racial and ethnic groups are well documented.

In the United States, socioeconomic status and race/ ethnicity are intertwined, and research has attributed many, but not all, racial/ ethnic disparities in health care and health status to socioeconomic conditions.

A landmark study in which a large sample of physicians were presented with computerized patient scenarios in which actors were interviewed about their hypothetical chest pain showed that race and gender were important independent determinants of physicians' decisions to refer patients for advanced diagnostic procedures.

Managed care may offer some hope of establishing a "medical home" or "patient-centered medical home" for all enrollees, but it may erect other barriers to appropriate care.

CULTURE/ ACCULTURATION/ LANGUAGE

Several studies have attempted to evaluate how increased acculturation tends to resolve these impediments to access.

SEX AND GENDER

Three emerging lines of research underscore the potential seriousness of sex-related impediments to health care for women.

- First, women have been systematically excluded from clinical trials for new drugs and procedures (Cotton, 1990).
- A second body of research has begun to document how physicians' gender can affect practice patterns and the service utilization patterns of their patients.
- Finally, many women do not have access to family planning, abortion counseling, or abortion services.

EDUCATION

RESOURCE AVAILABILITY/ PERFORMANCE

The supply and distribution of health care resources has obvious implications for access.

The issue for access, however, is the availability and capacity of providers, not the supply.

Growing evidence suggests that changes in health system capacity, even in comparatively resource-rich areas, can be associated with measurable changes in access.

There are legitimate concerns that, as more people have insurance, service usage will increase, particularly in areas in which providers are already under stress. The ACA contains a number of provisions designed to address these anxieties. Among them, the ACA will increase, in 2011, the number of graduate medical education (i.e., medical residents) slots available to rural and underserved areas and provide states with grants for providers in rural and underserved urban areas.

providers also can organize their practices to reduce many indirect barriers to care discussed previously (e.g., eliminating language barriers, reducing wait times, developing a culturally sensitive environment, and developing more effective techniques to help chronic disease patients who have literacy problems).

MORE ON THE IMPACT OF NONECONOMIC AND QUASI-ECONOMIC BARRIERS: PREVENTABLE /AVOIDABLE HOSPITALIZATIONS

A growing body of analysis, which began in the mid-1990s and produced unique, still-relevant data sets, has begun to explore how barriers to primary care services can result in increased use of other health care services, such as more costly hospital care

Conditions that can be effectively managed on an outpatient basis are called ambulatory care sensitive (ACS) conditions. Researchers have documented huge differences in hospitalization rates for ACS conditions in different geographic regions.

8.3). Admission rates for ACS conditions in low income areas are on average 2.5 to 3.5 times higher than in more affluent areas, and rates in some low income neighborhoods are as much as 20 times higher than in higher income areas of the same community

The impact of the noneconomic and quasi-economic barriers discussed previously is undoubtedly a substantial contributor to hospitalization rates for ACS conditions.

Nonfinancial barriers to timely and effective care are substantial and serious. Clearly, successful access initiatives must go beyond simply providing an insurance card to the uninsured.

State and Federal Health Care Reforms

STATE INITIATIVES TO IMPROVE ACCESS: INNOVATIONS AND LIMITATIONS

In 2006, Massachusetts and Vermont followed Maine with ambitious strategies, each targeting coverage of at least 95% of state residents. Like Maine's, these states' plans are multifaceted and complex. Two strategies are at the center of the Massachusetts plan: a law requiring nearly every person in the state to have coverage and a new program for individuals and small-employer groups to purchase affordable coverage, foreshadowing the key coverage strategies of the ACA.

The reforms in Maine, Massachusetts, and Vermont have important elements in common.

- All three states started with the advantage of having low uninsured rates compared to other states and comparatively robust employer health insurance sectors.

- All three programs use subsidies to help pay premiums for families whose household income is less than three times the federal poverty rate— well above Medicaid and CHIP eligibility thresholds in most states.
- Each of the states brought new revenue to the table, and
- all three found ways to bring in new federal funding through Medicaid.
- The political culture of New England also may have played a role in bringing these plans to fruition, although, notably, these reforms all had bipartisan support, and in some cases, bipartisan leadership.

These initiatives also illustrate the limitations of reform at the state level.

- states are required to balance their budgets, so periods of economic downturn threaten the financial sustainability of expensive programs.
- Second, employer financing of coverage— a common source of revenue for state reforms— is constrained for two reasons. Imposing employer mandates and taxes works against states' economic development efforts to recruit and retain jobs within their boundaries, and federal law (the Employee Retirement Income Security Act [ERISA]) restricts the degree to which states can regulate and tax employers' benefit plans.
- states that have moved ahead with the boldest coverage reforms had comparatively low uninsured rates and high per-capita incomes.

AT THE FEDERAL LEVEL: THE LONG AND TORTUOUS PATH TO REFORM

Key provisions of ACA include:

- A substantial expansion of Medicaid, raising the floor for eligibility to 133% of the poverty level across all states and including, for the first time, coverage for childless adults
- “Pay or play” provisions for employers with 51 or more employees, with fines for those who do not provide coverage
- An “individual mandate” provision for adults, who must obtain coverage or pay a fine of \$ 695 annually or 2.5% of household income, whichever is greater
- State-based exchanges where individuals (and ultimately employers) can obtain subsidized coverage for individuals and families with incomes up to 400% of the federal poverty level
- Insurance reforms mandating guaranteed issue, regulating premium rating, and prohibiting restrictions on coverage for preexisting conditions and lifetime limits on coverage
- Allowing adults up to age 26, regardless of student status, to be covered under their parents' health insurance plan

The Future: Continuing and Emerging Issues

First, rising health costs create barriers to patients without coverage (the 14 to 16 million who will not be covered even when ACA is fully implemented), as well as for insured patients

insured patients are largely insulated from the costs of care (except for co-payments and deductibles) and there remains substantial asymmetry of information between doctors and their patients.

a fragmented health care delivery “system,” where a lack of integration means that (a) each segment of the “system” is working to maximize its revenue, (b) there is lack of information-sharing among components (despite the promise of electronic health records), and (c) there are often failures at handoff points between components

Another likely critical emerging issue is the plight of “safety-net” providers that serve patients regardless of their ability to pay. Many of these disproportionate share hospitals (DSH) worry that reimbursements for newly covered patients will not offset reductions in DSH payments.

Health reform also does little to address directly the noneconomic barriers to care.

In another limitation, the current health reform does not significantly change incentives around prevention and health promotion for providers, patients, or insurers.

Overcoming barriers to enrollment— excess paperwork, frequent reenrollment requirements, language problems, limited outreach efforts, etc.— will be essential in order to achieve the expected benefits of expanded coverage.

Part III: Medical Care Delivery

Chapter 9: Organization of Medical Care

Basic Framework of Medical Care Delivery

PATIENTS

At an individual level, how patients interact with the medical delivery system depends on their insurance coverage (the type of coverage and whether they are insured at all), their medical history (diagnoses, medications, relationships with providers, and so forth), and their medical need.

Types of care also are classified by medical need: acute care (treatment of medical conditions of recent onset), chronic care (treatment of a chronic condition: any illness or impairment expected to last a year or longer that limits what one can do, or requires ongoing medical care), long-term care (a range of supportive, rehabilitative, nursing, and palliative services provided to people— young and old— whose capacity to perform daily activities is restricted due to chronic disease or disability), end-of-life care (care given to patients in their final stages of life, including symptom, pain, and medication

management), or palliative care (a comprehensive type of care, addressing physical and mental health issues, spirituality, and family care).

HEALTH CARE PRACTITIONERS

PROVIDER ORGANIZATIONS

Provider organizations range from doctor's offices and general hospitals to more specialized organizations, such as ambulatory surgery facilities, eye-and-ear hospitals, and hospices. Pharmacies and medical laboratories provide ancillary services.

INSURERS AND PAYERS

The payment mechanisms adopted by health insurers and payers greatly influence provider organizations' and practitioners' incentives, strategies, and structures. These include fee-for-service reimbursement, capitated payment plans, pay-for-performance approaches, and the establishment of networks of contract providers who provide services at discounted fees

LAW, REGULATION, AND POLICY

ACCREDITATION

Medical Knowledge

Technology

The degree to which these components interact to create a safe, effective, high-quality delivery system depends on the coordination among multiple stakeholders and participants, the consistency between the different levels and parts of the system, and the extent of systematic planning and oversight. In its current state, the U.S. health care system lacks the necessary coordination and intentional design required to consistently deliver effective and efficient care to all patients.

Characteristics of the Medical Care Field

Much of the blame for this combination of high costs and suboptimal care is attributed to the way the U.S. delivery system is organized— and disorganized. In its current state, the delivery system is complex, diversified, fragmented, and stratified.

SOURCES OF COMPLEXITY

Medical Knowledge Medical knowledge has improved to the point that (t) here is, quite simply, too much to know

Insurance Plans The rules of health insurers, including those of Medicare and Medicaid, vary markedly,

Patient Population: Prescription Drugs

Patient Population: Chronic Conditions

TYPES OF DIVERSIFICATION

Specialist vs. Generalist Practitioners

As a consequence of the growing proportion of specialist physicians, the percentage of physician visits provided by generalists has declined.

“Superspecialization”

As medical knowledge has become more complex and specific, specialties have branched into “superspecialties”:

New Types of Provider Organizations

1970s. In recent years, specialized provider organizations have experienced significant growth, including ambulatory care centers, long-term care facilities, and chronic disease management services.

Insurance Plans and Reimbursement Strategies

Many different types of insurance plans exist, including traditional fee-for-service insurance, preferred provider organizations, health maintenance organizations, point-of-service plans, and high-deductible health plans with a savings option. Reimbursement strategies include fee-for-service reimbursement, prospective payment, pay-for-performance, and capitation (see Chapter 3). Insured Americans could have one or more different sources of coverage:

SOURCES OF FRAGMENTATION

Physician Silos Specialization has created rigid “silos,” in which the various specialists train, research, teach, and practice independently from one another. Stores of knowledge are sequestered within each specialty, rather than integrated across the physician population. The predominance of small physician practices creates an additional kind of silo— one in which a patient’s medical information is kept within the practice, inaccessible to outside providers.

Underdeveloped Health Information Technology (IT)

Practitioners lack the information technology (IT) infrastructure necessary to connect to other practices and collaborate with other physicians, hospitals, and other organizational providers. If providers have IT at all they use independent, site-based information systems

Lack of Care Coordination

At present, no medical provider bears the responsibility for coordinating the care and treatments provided by these multiple practitioners.

For a primary care provider, coordinating patient care across practitioners would take considerable time and resources.

The result: “most patients and physicians have come to expect chaos when patients leave the hospital”

Lack of Incentives to Coordinate Care

Focus on Acute Care

However, advances in medical technology and improved life expectancy have increased the need for chronic and long-term care. Yet, the emphasis on acute care persists, reinforced by fee-for-service reimbursement, which treats each office visit, test, and treatment as an individual unit. In addition, patients change physicians fairly frequently, which creates disincentives for practitioners to plan for patients’ long-term health and invest in developing the relationships that would improve care coordination.

TYPES OF STRATIFICATION

Uninsured Americans

Uncompensated Care In the United States, some provider organizations bear a greater burden than others for uncompensated care— that is, the care they provide people who cannot pay for it, either through insurance or out-of-pocket. These organizations include the nation’s approximately 400 teaching hospitals and more than 100 public hospitals.

The uninsured, underinsured, and other vulnerable populations often seek care at hospital emergency departments (EDs), because they have no source of regular primary care.

Critical Issues Facing the Delivery System

SHORTAGE OF PRIMARY CARE PROVIDERS

Currently, the United States faces a shortage of generalists combined with an increasing demand for primary care (New England Healthcare Institute, 2010) (see also Chapter 15). The American Academy of Family Physicians projects a shortfall of 40,000 family physicians by 2020, in part because of the aging population (American Academy of Family Physicians, 2010).

In the United States, state-level variations in the proportion of generalists versus specialists also are associated with varying health outcomes.

Increasing the proportion of primary care providers relative to specialists could be accomplished with increased national control over medical training.

a number of countries, including Australia, Canada, France, Germany, and Japan, pay for medical school, which gives the federal government the ability to direct a larger proportion of medical students into primary care (American College of Physicians, 2008). Another possible solution is to provide specialized training for general practitioners, as done in the United Kingdom, which lessens the need for specialists.

UNCOORDINATED CARE

In a number of other countries, primary care practitioners are given financial incentives for coordinating care.

Without incentives, primary care providers are much less likely to have the time and resources to provide this level of coordination, lack of which critically reduces the quality and safety of patient care.

UNDERDEVELOPED HEALTH INFORMATION TECHNOLOGY

Developed countries with better health outcomes, such as lower infant mortality, longer life expectancy, and lower proportions of adults with activity limitations, have much higher rates than the United States of electronic medical records (EMRs) and integrated health IT systems.

ACCESS, COST, AND THE UNINSURED

In the United States, Americans of lower socioeconomic status have less access to primary care,

UNMET MEDICAL NEEDS OF THE CHRONICALLY ILL

Treating chronic conditions is costly:

A number of other countries have better chronic care outcomes than the United States, using strategies such as requiring patients to register with a primary care practitioner, providing same-day and after-hours appointments, making medical help lines easily accessible, using EMRs to prompt patients for follow-up and preventive care, and including nurses on primary care teams

Pathways to Better Organized Care

Meanwhile, a number of practitioners, researchers, and policy makers have proposed models of better coordinated and integrated care. These models place the responsibility for change on practitioners, health plans, and, to some extent, health information systems.

THE CHRONIC CARE MODEL

The chronic care model developed by Edward Wagner and his colleagues at Group Health of Puget Sound recommends extensive improvements to the U.S. health care system that could lead to better care for people with chronic conditions (Bonomi, Wagner, Glasgow, & Von Korff, 2002). They propose that the overall health system should be organized to be proactive and focused on keeping people as healthy as possible,

The health care delivery system design should integrate chronic care guidelines into reminders, feedback, and standing orders for practitioners, in order to make them more evident as clinical decisions are made.

In addition to system design, managing chronic care effectively requires access to information not only on individual patients, but on populations as well. A comprehensive clinical information system helps providers issue timely reminders about needed services and allows for an individual patient's health care data to be followed easily and effectively.

A crucial aspect of the chronic care model is the patient's own self-management.

The chronic care model emphasizes that patients who are informed about their conditions and who assume an active role in managing their care— working in tandem with providers who are prepared and supported with time and resources at their disposal— are likely to have more productive health care interactions and better health outcomes

PATIENT-CENTERED MEDICAL HOMES

A patient-centered medical home is a physician-directed medical practice with a team of providers in which each patient has an ongoing relationship with a personal physician. The personal physician coordinates the patient's acute care, preventive care, chronic care, and end-of-life care, across and within accessible health care providers in the patient's community.

ACCOUNTABLE CARE ORGANIZATIONS

The basic idea of an ACO is to create an entity consisting of "a local health care organization and a related set of providers (at a minimum, primary care physicians, specialists, and hospitalists) that can be held accountable for the cost and quality of care delivered to a defined population"

One strategy for developing more ACOs would capitalize on existing relationships and connections between patients, practitioners, and provider organizations in local areas. For example, in a particular location, an ACO called "General" would be a virtual organization centered on General Hospital and its "extended medical staff"; that is, all the doctors who practice at General Hospital and all the doctors who have patients admitted to General Hospital. The physicians of General ACO would be expected to accept a degree of responsibility for all the patients in the local delivery system

The ACO would coordinate across a continuum of care for these patients and receive capitated payments that would require prospective budget planning. The physicians and health care organizations would not be employed by the ACO or formally integrated, but would be expected to work together as a unit.

The changes to the delivery system necessary to achieve the promise of ACOs are substantial. Physicians in particular would have to accept responsibility for the quality of care and overall costs of delivering care to a defined population of patients. In addition, without incentives for specialists to work with primary care providers, an ACO might not place enough emphasis on primary care (Rittenhouse, Shortell, & Fisher, 2009). In addition, patients would need incentives to choose ACOs as their care providers (Shortell & Casalino, 2008).

BUNDLED PAYMENTS

A simpler method of coordinating care might be bundled payments, or case rates, which would pay providers for an individual's episode of care instead of the individual treatments provided. A bundled payment could span multiple providers and settings, which would create incentives for practitioners and providers to communicate and coordinate their care plan,

Bundled payments would not require a set of providers to be part of the same organization and would not specify how the care should be coordinated, but it would provide a financial incentive and peer pressure to do so effectively. Bundled payments could be used for both acute and chronic care management.

Barriers to Change

Despite health care reform, many additional system changes are needed. Such changes relate to

- revising provider payment policies,
- encouraging wider use of health information technology (new incentives for adoption are described in Chapter 16),
- care management process redesign and improvements,
- professional cultural changes from individual practice to teamwork and patient-centered approaches,
- as well as stronger managerial and physician leadership.

TEAM-BASED MEDICAL PRACTICE

In team-based approaches, a critical focus is care management.

The culture of professional medicine and the training of future physicians must drastically alter in order to create practitioners who value teamwork and collaboration over setting their own individual standards and maintaining personal independence. In addition, physicians will need to learn how to work more effectively with health care professionals from other disciplines.

PAYMENT STRUCTURES

In order to encourage communication among providers, health plans would need to reimburse practitioners for time spent coordinating care, including answering patients' e-mail, and consulting and meeting with other providers. Finally, the multiplicity of insurers— public and private— offer different incentives for providers to collaborate. Unless all insurers offer similar incentives, clinical integration is less feasible and the higher costs it may entail, less attractive.

LEGAL BARRIERS

In order for medical practitioners to collaborate about a patient's care, they would need legal authority to negotiate contracts and share patient information. A number of federal and state statutes work against physician collaboration

INFORMATION TECHNOLOGY

Health care reform has created strong financial incentives for implementation of electronic health records that have "meaningful use." However, implementation requires sizable upfront costs to medical care providers, due to the complexity of health care information.

Privacy issues pose another challenge, and may prevent sharing information among different systems or providers.

Furthermore, there are significant barriers to integrating health information across different EMR systems which remain to be resolved.

PATIENT ACTIVATION

To date, health care has been practiced upon patients, rather than with patients

health literacy varies greatly among Americans and engaging patients fully in their health care will be a continuing challenge.

Having patients become active participants in their own care is one strategy to stem the further fragmentation of medical care, and the patient-centered approach was supported in recent health care reform legislation.

Chapter 10: Integrative Models and Performance

the six attributes of an “ideal health care delivery system” identified by the Commission, and synthesizes key lessons from their experience.

We use the term organized health care delivery to mean that care providers have established relationships and mechanisms for communicating and working to coordinate patient care across health conditions, services, and care settings over time.

Such relationships and mechanisms may include any or all of the care system redesign imperatives identified by the Institute of Medicine (2001):

- the development of effective teams,
- redesign of care processes,
- effective use of information technologies,
- management of knowledge and skills, and
- use of performance and outcome measurement for continuous quality improvement and accountability.
- It may also include payment mechanisms for sharing risk

The Structure of Integration

The case study sites represent diverse types of organizations that range from fully integrated delivery systems (IDSs) that provide a full scope of health care services and insurance coverage to multispecialty physician group practices (MSGPs) to looser networks of physicians.

MODEL 1: IDS OR MSGP, WITH A HEALTH PLAN

Including the health insurance function in an integrated delivery system provides flexibility, aligned incentives, and expertise in organizing to deliver high-value care. Just one system— Kaiser Permanente— has retained a “closed” model in which affiliated physicians and facilities exclusively serve patients who are members of its health plan.

Kaiser Permanente (KP), founded in 1945, is the largest not-for-profit IDS and group-model health maintenance organization (HMO) in the United States, integrating care and coverage for 8.6 million members in eight regions. KP comprises three separate yet interdependent entities that exist in a “partnership of equals” through exclusive contracts built on common vision, joint decision making, and aligned incentives: Kaiser Foundation Health Plan, Kaiser Foundation Hospitals, and the Permanente Medical Groups.

Geisinger Health System, founded in 1915, is a physician-led, not-for-profit IDS serving an area of 2.6 million people in rural northeastern and central Pennsylvania. The Geisinger Medical Group employs some 765 physicians who practice at Geisinger-owned hospitals and clinics and in non-Geisinger hospitals in the region. About 200 of these physicians provide primary care in 40 community practice clinics; other physicians provide specialty care, predominantly from three large hubs.

MODEL 2: IDS OR MSGP, WITHOUT A HEALTH PLAN

Organizations in this model contract with or accept payment from multiple insurers. Some partner with one or more insurers to better align financial incentives to support mutual objectives for care system redesign, aided by their infrastructure.

Mayo Clinic is the world’s first and largest MSGP. From its roots in a 19th-century family medical practice, Mayo by the 1920s had developed the key attributes that distinguish it today: private, not-for-profit status, a salaried staff, and a mission to “provide the best care to every patient every day through integrated clinical practice, education, and research.”

Partners HealthCare, founded in 1994, is a loosely integrated, nonprofit organized delivery system serving more than 1.5 million patients in greater Boston and eastern Massachusetts.

MODEL 3: PRIVATE NETWORKS OF INDEPENDENT PROVIDERS

This model includes PHOs and independent practice associations (IPAs) that organize independent providers to deliver health care services under contract to one or more insurers. It also includes cooperatives among providers who join together to share and coordinate services. These entities may provide infrastructure services (e.g., performance improvement and information technology) and care management under delegated authority from health plans.

project_: Hill Physicians Medical Group, founded in 1984, is a northern California IPA that contracts with health plans to provide care to more than 300,000 patients enrolled in commercial HMOs, Medicare advantage plans, and Medi-Cal, California’s Medicaid program.

Hill is paid on a capitated basis (fixed payment per-member per-month) by health plans and reimburses physicians on a fee-for-service basis plus bonuses (funded internally and in part by participation in purchasers' pay-for-performance programs) for meeting performance goals including service utilization, clinical quality, and use of information technology.

Genesys PHO is a physician-led organization that negotiates risk-based managed care contracts and participates in pay-for-performance programs with health plans on behalf of the Genesys Regional Medical Center (GRMC) and a network of 150 community-based primary care physicians who practice in medical groups in a five-county service area around Flint, Michigan.

Rural North Dakota health care providers have established cooperative arrangements to provide local access to quality care by sharing scarce resources such as a mobile magnetic resonance imaging service, expertise such as grant development for community health centers, infrastructure such as a rural tele-pharmacy network, and service delivery such as rural mental health services provided by clinical nurse specialists.

MODEL 4: GOVERNMENT-FACILITATED NETWORKS OF INDEPENDENT PROVIDERS

In this model, government takes an active role in organizing independent providers, usually to create a delivery system for Medicaid beneficiaries. They may develop care coordination networks, provide information technology infrastructure, perform care management, or deliver other services characteristic of an organized delivery system.

Community Care of North Carolina (CCNC), founded in 1998, is a public– private partnership between the state and 14 nonprofit community-based care networks that comprise essential local providers including hospitals, primary care physicians, and county health and social services departments.

The state provides resources, information, and technical support, such as performance measurement and benchmarking.

Attributes of Organized Health Care Delivery

EASY ACCESS TO APPROPRIATE CARE

Patients who receive care in a setting that is well organized and offers appropriate access to providers (e.g., in a medical home) are more likely to get the care they need, receive reminders for preventive screenings, and report better management of chronic conditions than are patients who do not receive regular care in such settings

Prepaid care has encouraged Kaiser Permanente and Group Health Cooperative to use telephone visits and secure electronic messaging and Henry Ford Health System to offer patients Web-enabled electronic visits. These often are convenient alternatives to face-to-face encounters for patients with nonurgent needs and an efficient means for physicians and the care team to reach out to patients in need of follow-up. Several sites use telehealth technologies for routine home monitoring of patients with chronic conditions.

Large delivery systems or smaller systems linked through virtual networks or shared services agreements have the resources to develop culturally sensitive programs for diverse patient populations.

INFORMATION CONTINUITY

Many study sites have been leaders in implementing electronic health record (EHR) systems that support coordination of care by making patient information available across providers and settings, promote the delivery of evidence-based care with decision support and patient education tools, and reduce duplication of services because laboratory and imaging tests results are available when needed.

EHRs figure prominently in improving access to appropriate care. For example, advice nurses at the Marshfield Clinic can use the clinic's EHR to view a patient's treatment plan when speaking to the patient on the telephone and add a record of the call to the EHR for the patient's primary care physician to review and follow up as needed. Some organized delivery systems operate walk-in convenience clinics, located in retail outlets, that are linked to the system's EHR to help preserve continuity of care. Telehealth consultations linked to a common EHR at both the transmitting and receiving sites create a powerful combination for delivering virtual care that can equal the quality of face-to-face encounters.

Case Example: Instituting Electronic Health Records at Kaiser Permanente

Although EHRs require more of physicians' time than paper records, they create efficiencies for the care team or organization as a whole while improving patient care. Use of the EHR and online portal is also having positive effects on utilization of services and patient engagement.

project_ : Case Example: Creating Incentives for EHR Adoption at Partners HealthCare A 5-year pay-for-performance contract between Partners and Blue Cross Blue Shield of Massachusetts created incentives, first, for the adoption of EHRs by physicians, and second, for the use of an EHR to evaluate outcomes and identify patients in need of better management. To speed progress, the Partners board required that affiliated primary care groups adopt one of two preferred EHRs as a condition of participation in the network: either a Partners-developed EHR (known as the longitudinal medical record) or a certified third-party vendor system.

CARE COORDINATION AND TRANSITIONS

At the Mayo Clinic, for example, all patients are assigned a coordinating physician to ensure that they have an appropriate care plan, that all ancillary services and consultations are scheduled in a timely fashion, and that they receive clear communication throughout and at the conclusion of an episode of care.

An organized delivery system can provide a supportive environment for developing the primary care "medical home" concept, which aims to make patient care more accessible, continuous, comprehensive, patient-centered, and coordinated. 2 This often entails:

- A team-based, population-health management approach that stratifies patients according to their health risks and needs and leverages physician time

- Enhanced roles for clinical support staff— midlevel practitioners (nurse practitioners or physician assistants), and care managers (trained nurses, social workers, or pharmacists)— to support patients in need of preventive care, disease or medication management, transitional care, and self-care education and
- Integrated mental health and primary care, in order to identify and appropriately treat or refer patients with co-occurring physical and mental illnesses.

Several sites find that routine care management activities are more effective when embedded in or closely linked to primary care teams, often through innovative funding arrangements.

Case Example: Modeling the Primary Care Medical Home at Group Health Cooperative (GHC)

TABLE 10.3

Core Principles of a Medical Home at Group Health Cooperative (Washington state)

1. The relationship between the personal care physician and the patient is the core of all that we do. The entire delivery system and the organization will align to promote and sustain this relationship.
2. The personal care physician will be a leader of the clinical team, responsible for coordination and integration of services, and together with patients will create collaborative care plans.
3. Continuous healing relationships will be proactive and will encompass all aspects of health and illness. Patients will be actively informed about their care and will be encouraged to participate in all its aspects.
4. Access will be centered on patients' needs, will be available by various modes 24/7, and will maximize the use of technology.
5. Our clinical and business systems are aligned to achieve the most efficient, satisfying, and effective patient experiences.

Source: McCarthy, D., Mueller, K., & Tillmann, I. (2009). Group Health Cooperative: Reinventing primary care by connecting patients with a medical home. Retrieved October 16, 2010, from <http://www.commonwealthfund.org/Content/Publications/Case-Studies/2009/Jul/Group-Health-Cooperative-Reinventing-Primary-Care-by-Connecting-Patients-with-a-Medical-Home.aspx>.

Case Example: Patient-Panel Management at Kaiser Permanente of Northern California

Patients are stratified into three levels of care:

- Primary care with self-care support for the 65% to 80% of patients whose conditions are generally responsive to lifestyle changes and medications
- Assistive care management for the 20% to 30% of patients whose diseases are not under control at level one
- Intensive case management and specialty care for the 1% to 5% of patients with advanced disease and either complex comorbidities or frailty

PEER REVIEW AND TEAMWORK FOR HIGH-VALUE CARE

The study sites are typically characterized by a culture of group responsibility and shared commitment to quality care, evidenced in multiple ways. The performance improvement infrastructure frequently consists of interdisciplinary teams of clinical experts who collaborate to develop and spread evidence-based guidelines and standard care processes, often by embedding them in the EHR.

Case Example: Governance at the Mayo Clinic The Mayo Clinic is physician-led at all levels and operates through committees and a shared governance philosophy in which physician leaders work with administrative partners in a horizontal, consensus-driven structure.

Case Example: Teamwork in a Loosely Organized Network Within Community Care of North Carolina (CCNC), a committee of network clinical directors from across the state meets regularly to identify objectives for improvement and best practice models and to create system-wide quality measures and initiatives.

CONTINUOUS INNOVATION AND ORGANIZATIONAL LEARNING

The case studies found widespread evidence of innovation and continuous improvement. Organized delivery systems take advantage of their scale and infrastructure to improve health care quality and value.

Among the various improvement methods in use, many leaders are enthusiastic about the ability of “lean” techniques (borrowed from the manufacturing industry) to bring together frontline staff to design process improvements, minimize waste, and determine measures by which their performance will be evaluated.

Case Example: Clinical Integration at Intermountain Healthcare In 1988, Intermountain initiated a quality improvement training course, based on principles espoused by W. Edwards Deming, known as the Advanced Training Program (ATP).

The process and structure for deploying projects developed during the ATP became known as clinical integration, an overarching strategy that focuses on improving value in key work processes. project_: **The program is built on three pillars: integrated management information systems, an integrated clinical and operations management structure, and integrated incentives.**

Case Example: Building an Innovation Infrastructure at Geisinger Health System Geisinger’s leaders believe that the organization can simultaneously improve quality, satisfaction, and efficiency only by redesigning and reengineering how care is delivered. The organization typically begins its efforts by targeting Geisinger patients insured by the Geisinger Health Plan, in whose treatment clinical and financial responsibilities intersect.

ProvenCare is Geisinger’s portfolio of evidence-based quality and efficiency programs addressing both acute and chronic conditions. Clinical workgroups redesign care processes to deliver reliably a coordinated bundle of evidence-based (or consensus-based) best practices.

project_: For health plan members having certain surgical procedures, Geisinger charges a flat fee (a packaged or bundled price) that includes preoperative care, surgery, and 90 days of follow-up treatment (at a Geisinger facility) including treatment of any related complications.

SYSTEM ACCOUNTABILITY

it may be more appropriate to say that each of the delivery systems as a whole assumed accountability for the patient or member. This arrangement is most explicit when a patient is covered by a health plan owned by an IDS, which creates clear financial, as well as clinical, accountability for patients' total care.

Case Example: Population-Based Care at the Genesys PHO

Two central values that guided the Genesys PHO— consistent care for all patients regardless of their type of insurance and a commitment to improving the health of the community— laid the foundation for its population-based focus.

Cross-Cutting Themes: The “Methods” of Organized Delivery

VALUES-DRIVEN LEADERSHIP, GOVERNANCE, AND ORGANIZATIONAL CULTURE

Organizational and physician leaders appear to motivate the achievement of higher performance among peers and the general workforce by inculcating a mission and culture that appeal to common values, such as patient welfare, professional pride, and shared responsibility for quality and outcomes.

INTERDISCIPLINARY TEAMWORK

Teamwork takes many forms and is a key mechanism in the coordination of care.

INTEGRATION

In general, greater integration makes it possible for a system to better understand and design programs to meet the comprehensive needs of a population so as to improve the quality and efficiency of care.

ALIGNED INCENTIVES

Alignment occurs at the organizational level by integrating care and coverage and/ or by setting budgets centrally, so that services can be organized in ways that make the most sense operationally and clinically.

Delivery systems that include health plans have financial incentives to provide care coordination and care transition services.

MUTUAL ACCOUNTABILITY

physicians work together and with other staff to achieve common goals based on common values. Working as part of a self-governing physician group appears to involve a trade-off in which physicians

sacrifice some individual autonomy for the benefits of group practice, such as the expertise and resources to jointly determine best practice protocols.

TRANSPARENCY

Supporting a culture of accountability, case study organizations engage in rigorous performance measurement, reporting, and recognition— both internally at the unit and individual level to promote peer accountability and externally at the organizational level to demonstrate the value of their efforts to purchasers, patients, and other stakeholders.

Financial losses in the late 1990s and the advent of public performance reporting, reinforced by unblinded internal performance feedback within the medical group, energized the organization to demonstrate the potential of its model by making a stronger push for innovation and quality.

The Value of Organized Delivery

- Commonly reported results of the initiatives and programs documented in the case studies included: Improved clinical quality of care and control of chronic diseases
- Increased patient satisfaction, shorter waiting times
- Reduced hospitalizations, emergency visits, and prescription drug expenses

Some of their achievements may represent the first rewards of a process that will require continuing innovation and effort to sustain a trajectory of improvement and to broaden its reach across all areas of performance. Organizational culture and what one leader calls “pride of purpose” appear to be key factors propelling excellent organizations to sustain such efforts over time.

A recent review of the health services literature found that “more organized systems generally perform better than less organized systems on measures of clinical quality, show promise for reducing health care costs, and have a mixed record in terms of patients’ experiences” (Shih et al., 2008). Similarly, in comparison to external benchmarking data, the study organizations generally performed more highly on clinical quality than on patient satisfaction metrics, although, in recent years, several have made strides in improving the patient experience.

Realizing the Potential

These factors suggest that in seeking to develop or foster organized delivery systems, managers and policy makers should adopt a flexible approach that takes into account not only what is most effective but also what is most feasible in a local context and environment, and that they should focus on building a guiding vision, integrative capabilities, and supportive organizational culture as much as the structural components of an organization.

More physicians are moving to employment relationships with hospitals— a trend that might be harnessed to realize the fuller advantages of an employed group practice model

Hence, the prospects for stimulating greater organization and integration of care in the United States depend in large part on changes in the policy and macro-environment, such as

- aligning financial incentives;
- making changes to the regulatory, professional, and educational environments; and
- developing supportive infrastructure for higher performance

project_: The figure shows that, as the delivery system becomes more organized (e.g., going from unrelated hospitals and small practices toward IDs), more bundled payment methods and robust pay-for-performance programs are not only more feasible, they become more desirable.

By contrast, it is not feasible to implement these payment methods at the small provider level

A Medicare shared savings program will provide incentives for newly designated accountable care organizations (ACOs), such as those described in this chapter, to achieve cost-savings from coordinated care. Experts propose a tiered pathway for ACO evolution and qualification that would reward performance based on the degree of financial risk assumed by the ACO

Conclusion

Their experience demonstrates how higher performance can be attained through convenient access to appropriate care, information continuity, patient engagement, care coordination, team-oriented care delivery, and continuous innovation and learning. Realizing these attributes in turn requires the cultivation of values-based leadership, interdisciplinary teamwork, and aligned incentives (both at the organizational and provider level) supported by accountability for and transparency of results.

Chapter 11: High Quality Health Care

Defining Quality

Quality was defined by the Institute of Medicine as “the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge”

Further, the definition was intended to focus on outcomes or end results important to individuals and to recognize that medical knowledge evolves. A frequently used shorthand definition is “the right care for the right patient at the right time.”

Quality was initially described by Avedis Donabedian (1988) as consisting of three important dimensions: structure, process, and outcomes.

Structure refers to facilities and health care professionals providing care, process to the set of services provided, and outcomes to the end results that people experience and care about.

These efforts also revealed the existence of underuse, overuse, and misuse of services, as well as the substantial time lapse for new scientific findings to be translated into practice— a problem that persists to this day.

Measuring Quality

Since the late 1980s, measuring quality has focused on assessing clinical performance. Process measures are commonly expressed as a percentage of eligible patients who received a specific clinical service— for example, patients with a heart attack who received a beta blocker

Ideally, process measures derive from strong evidence that a specific service results in an improved outcome. Many would much prefer to measure outcomes such as mortality, ability to function, or relief from symptoms.

Thus, a combination of both process and outcome measures is likely ideal.

An important and relatively new dimension of quality measurement is the voice of the individual patient. Quality of care has become synonymous with patient-centered care.

DATA SOURCES

The major currency of health care is information and communication.

The heterogeneity of the U.S. health care system means that most hospitals experience separate demands for information on quality from states, public payers, private-sector payers, accreditors, and others. Advances in measurement science have enhanced our capacity to assess dimensions of care and identify opportunities for improvement. For example, various tools, such as AHRQ's State Snapshots, allow care providers to compare their quality scores with other providers in their region or state and allow states to compare themselves on numerous quality measures with other states (AHRQ, 2010).

Practicing Quality Measurement in Health Care

The problem is that, unlike rating and ranking of cars, performance measures for doctors, hospitals, clinics, home care providers, long-term care facilities, or patient outcomes are much more complicated. First, the inputs to the health care system (i.e., the patients, their physiological characteristics, and their health problems) all vary.

The second factor that makes measuring and assessing health care performance challenging is the fact that there is considerable variation in the theories and processes that drive the delivery of care.

In short, the health care industry has considerably more variation than auto manufacturers would tolerate, not only in the inputs it must deal with, but also in the processes that have been established to deliver service to its customers.

The Quality Measurement Journey

The quality measurement journey (QMJ) consists of two major segments: (1) planning your journey (i.e., determining the aim or purpose of your measurement efforts) and (2) the execution of your journey (i.e., the technical steps and milestones along the way).

WHY ARE YOU MEASURING?

three faces of performance measurement: improvement, accountability, and research.

measurement. Several points related to the aim of measurement, data collection practices, and determining whether the data demonstrate a significant change need to be highlighted.

TABLE 11.1
Aim and Methods Associated with Improvement, Accountability,
and Research Measurement

Aspect	Improvement	Accountability	Research
Measurement aim	Improvement of care (efficiency and effectiveness research)	Comparison, choice, judgment, incentives	Build and test theories; develop new knowledge (efficacy research)
Measurement methods	Tests are observable to those making the improvements and to interested parties	No tests; focus is on evaluating current performance against past performance	Tests are blinded or controlled by using experimental and quasi-experimental designs; reduce confounding factors
Bias	Identify bias and stratify observations or accept a consistent bias over time	Adjust to bias by using severity or risk adjustment methods	Design to eliminate bias and/or control for it
Sample size	"Just enough" data; small sequential samples; monthly or more recent data	Obtain 100% of available, relevant data usually by years or quarters	"Just in case" data (get large databases "just in case" additional questions are asked later)
Flexibility of hypothesis	Hypotheses are flexible; they will be revised as learning takes place	No hypothesis (there is a simple question: Are you better now than the last time we looked at you?)	Fixed hypothesis (the null hypothesis is the basis for deciding whether differences are detected)
Testing strategy	Sequential testing	No tests	One large test or compare performance time 1 with time 2
Determining if the data demonstrate a significant change	Use statistical process control methods	No improvement focus: a percent change might be computed to see whether time 1 differs from time 2	Statistical tests of significance (t-test, F-test, chi-square) applied against the null hypothesis (<i>p</i> values)
Confidentiality of the data	Data used only by those involved with improvement; patient data are protected	Data are made available for public consumption and review	Research subjects' identities protected; institutional review board review frequently required

Measurement Aims

The aim of each approach is fundamentally different. Improvement is pursued in order to enhance the performance of a process or produce more desirable outcomes. This is usually done by improving the efficiency or effectiveness of process performance or by eliminating defects.

For example, reducing the wait time to see a doctor, improving the efficiency of the laboratory test turnaround time process, or reducing hospital-acquired infections are all aims of quality improvement (QI). QI aims usually consist of two parts. First, the aim must

identify “how good” the improvement team wants to be (e.g., to increase patient satisfaction score by 25%). The second aim is to specify “by when” (e.g., by the end of the year). By establishing how good/ by when aim statements, the QI team is laying out the context for improvement.

The measurement aim from the accountability perspective is based on a simple yes/ no question, “Are you better now than when we last looked at you?” This type of question is asked by external groups (e.g., governmental bodies, accrediting organizations, health care purchasing and insurance groups, or business coalitions) as well as internal groups (e.g., governing boards of health care organizations and the senior management team).

The aim is to make comparisons and pass judgment on the performance of the individuals or organizations being evaluated.

Research aims are different from both improvement and accountability aims. The primary aim of academic research is to test existing theories, develop new theories, and build knowledge.

HOW ARE YOU MEASURING?

Measurement Methods

The sample sizes collected for both accountability and research usually consist of large data sets (e.g., thousands of observations or patient records) that are collected over relatively long periods of time (e.g., quarters or years).

In some instances the data will not even be sample-based, but instead will be data

collected on a population (e.g., all Medicare patients seen by a hospital during the year 2010). This approach to data collection can be referred to as “just in case” data. This means that to measure for accountability and research you may have to answer additional questions that you had not even thought about when the study was first conceived. So what do you do? You collect even more data than you initially thought you would need “just in case” someone asks you to do more analysis down the road.

Improvement sample sizes, on the other hand, are relatively small and are collected as close to real time as possible (e.g., record the turnaround time for five laboratory tests during each day shift Monday through Friday). This type of data collection can be characterized as “just enough” data. The idea here is that: (1) you want to get data as close to real time as possible in order to understand variations in the process and (2) the people collecting the data (namely health care professionals who are delivering care to patients) are not full-time data collection specialists like you find in accountability and research settings. Their primary job is caring for patients, not collecting data.

Determining whether the data demonstrate a significant change is another method identified in Table 11.1 that serves as a major point of demarcation among the three faces of performance measurement.

When data are analyzed for accountability purposes, descriptive statistics (i.e., the mean, median, and standard deviation) are frequently used to provide comparative parameters. Percent change calculations (e.g., this year's performance compared to last year's performance) are also a common part of accountability data analysis.

Researchers approach data analysis with a little more complexity and with statistical methods that are more robust than merely computing percent-change statistics.

Once the descriptive statistics are assessed, however, the researchers will usually move on to apply a wide variety of inductive statistical methods.

Classic works by statisticians such as Johnson and Jackson (1959) and Blalock (1960) have guided the application of descriptive and inductive statistical methods to social and biological issues for decades. The classic approach is to establish the null hypothesis (H_0), select a statistical test (e.g., t-test, chi square, F-ratios), establish a significance level that seems appropriate for the hypotheses being tested (e.g., .01 or .05 level of significance), run the analysis, and then decide whether you have sufficient statistical grounds to reject or fail to reject the null hypothesis.

Finally, consider the primary statistical approach used in quality improvement to determine whether the data demonstrate a significant change— statistical process control (SPC) methods.

The run chart and the Shewhart chart (sometimes called a control chart) are the two SPC tools that enable the QI researcher to determine whether the process reflects what Shewhart classified as controlled (common cause) and uncontrolled (special cause) variation

Basically, common cause variation reflects regular, natural, or ordinary fluctuations in the data. It affects all the outcomes of a process and is referred to as stable or "in control" variation. In describing common cause variation, Shewhart said, "A phenomenon will be said to be controlled when, through the use of past experience, we can predict, at least within (statistical) limits, how the phenomenon may be expected to vary in the future" (Shewhart, 1931).

Special cause variation, by contrast, arises from irregular or unnatural causes that are not inherent in a process. Special cause variation affects some, but not necessarily all of a process's outcomes. When special causes are present, a process is considered "out of control" and unstable.

What you should do is to create a run or control chart and determine whether the process is exhibiting common or special causes of variation. If it is truly an upward trend the statistical rules for special cause will verify it. Only after using SPC methods can you determine whether the process is performing differently than it has over the past 2 years.

The growing demand for health care data and results requires that health care workers at all levels in the organization (1) know their data better than anyone else and (2) are very clear about why and how they are measuring.



FIGURE 11.2

Example of the milestones in the quality measurement journey.
Source: Lloyd, R. (2004). *Quality health care: A guide to developing and using indicators*. Sudbury, Mass.: Jones & Bartlett Learning.

The key concepts of interest to the improvement team include inpatient falls, falls risk assessment, and falls prevention.

Concepts are ideas in search of a measure.

For each concept, the options for measuring need to be discussed.

Being able to link specific measures with a concept is a critical early step in your QMJ.

Once you have selected specific measures, you must develop operational definitions for each measure. Without a well developed operational definition, the measures will remain vague and data collection will be confusing, if not incorrect.

An operational definition is a description, in quantifiable terms, of what to measure and the steps to follow to measure it consistently.

Once you have identified measures and developed operational definitions you will be at the data collection milestone.

After assembling the relevant data you reach the analysis milestone.

The two primary statistical tools are the run chart and Shewhart charts.

Both charts provide a graphic display of data over time.

A run chart is shown in Figure 11.4. The data are plotted in chronological order. The unit of time (day, week, or month) is displayed on the horizontal or x axis, whereas the measure of interest is plotted on the vertical or y axis. The **median** of the data set is plotted as the center line, then run chart rules are used to determine whether the data reflect random or nonrandom patterns (Lloyd, 2004; Provost & Murray, 2007; Carey, 2003.).

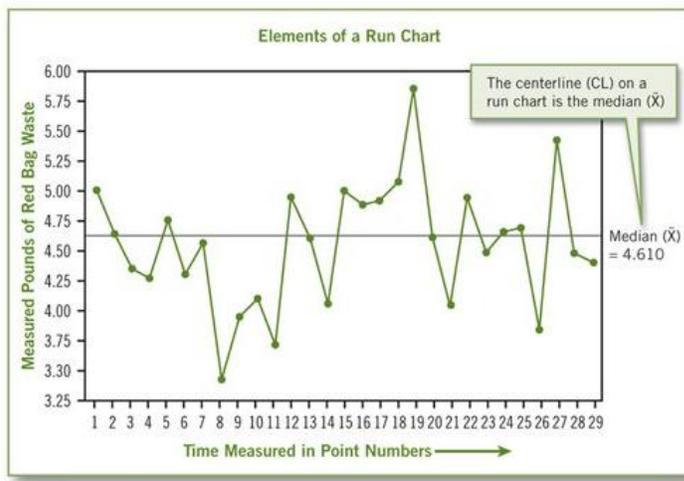


FIGURE 11.4
Elements of a run chart.
Source: Lloyd, R., and the Institute for Healthcare Improvement.

there are many different types of Shewhart, or control, chart. Figure 11.5 shows the basic elements of a Shewhart chart. Just like a run chart, the unit of time is displayed on the horizontal axis and the measure of interest is placed on the vertical axis. The data points are plotted and connected by a line, but unlike a run chart, the mean is plotted as the center line, rather than the median. When the mean replaces the median, we now can analyze the variation from data point to data point and compute what are known as the upper and lower control limits.

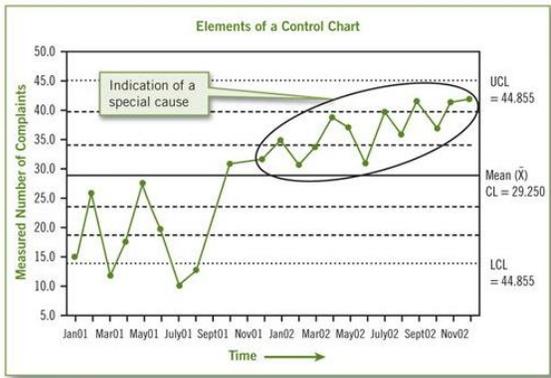


FIGURE 11.5
 Elements of a Shewhart chart.
 Source: Lloyd, R., and the Institute for Healthcare Improvement.

The final milestone in the QMJ is actually the most important. It is the milestone where you stop and take a moment to link the measurement milestones to an improvement strategy. This is the point at which you need to demonstrate skill in turning data into information for decision making. Data without a context or plan for action give the QI team a false sense of accomplishment.

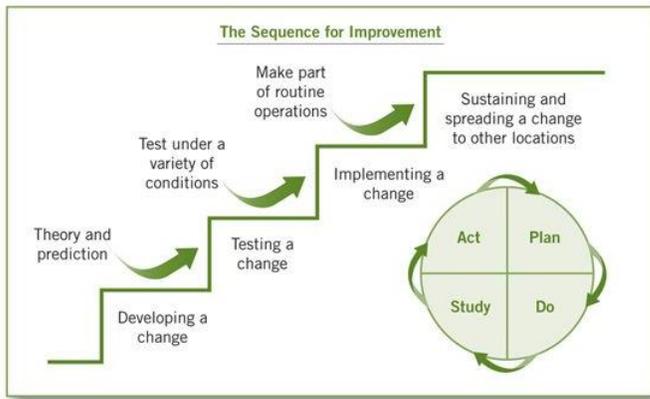


FIGURE 11.6
 The sequence for improvement.
 Source: Lloyd, R., and the Institute for Healthcare Improvement.

Promising Initiatives

Numerous initiatives in policy, health information technology, and clinical strategies promise to improve the quality and safety of care. Public reporting of patient outcomes by hospitals and other care facilities and financial incentives for quality care (so-called “pay for performance”) are policy initiatives already raising the quality bar.

Evidence to support the usefulness to consumers of making these data available has proved somewhat elusive, possibly due to a poor fit between available metrics and what consumers consider important.

Beyond public reporting and what some have termed pay for reporting, numerous local and regional efforts have attempted to link achievement of specified levels of care quality with financial incentives, known as pay for performance.

The ACA directs the Medicare program to launch similar programs for hospitals, referred to in the Act as value-based purchasing, and to explore similar approaches for other settings. These programs hope to counter the fundamental inflationary nature of fee-for-service reimbursement, which rewards the volume of services provided, by implementing initiatives that explicitly reward quality and value.

Transparency and financial incentives command substantial attention and scrutiny in academic and policy circles. However, other levers also are important. Two promising developments are professional incentives that link efforts to improve quality with continuing medical education for health care professionals as well as maintenance of specialty board certification for physicians.

Broad adoption of electronic health records and other health information technology applications also promise to improve data collection and add value to those providing direct care.

Future Directions

Care will be patient focused. Health care providers will collaborate with increasingly more informed patients in decisions about their care, considering alternative treatments and outcomes important to the patient.

Care may be better coordinated. This may be accomplished via use of a “medical home” for each patient, through Accountable Care Organizations or other new arrangements (see Chapters 8, 9, and 10) and electronic medical records that can be accessed by a patient’s primary care doctor, specialists, and other health care providers (see Chapter 16). The hospital discharge process also will be redesigned with use of a discharge coordinator to ensure patients take the proper medications and have the right follow-up upon discharge, so they don’t fall through the cracks and require readmission.

Health information technology will transform care.

Prevention and chronic disease management will be a focus. In many cases, so-called complex patients with multiple conditions can be followed by a disease management team that may consist of a physician, nurse, dietitian, care coordinator, and other professionals.

Patient safety will become even more important.

The goal is to promote health care safety with a team that collaborates to report systemic safety problems rather than blaming individuals.

Quality care will be rewarded. New financial incentives put in place by the ACA will reward health care providers for care quality and safety.

Core Competencies for Health Administrators

Addressing near-term challenges specified by the ACA— including preventing health care-associated infections, avoidable hospital readmissions, and avoidable patient harms— will require a new vision for understanding how individual health care facilities relate to others in the community or region.

The hospital administrator's job will no longer be confined to the hospital walls. In the future, part of the job will include working with community partners, perhaps via health education and disease prevention programs.

In short, a focus on improving quality and safety cannot be outsourced to the quality department; rather, it will become a strategic imperative for every department of organizations that succeed and thrive. At this time we are much better at measuring quality and safety than improving it.

Success in the years ahead will depend on the ability of administrators to implement and continuously enhance environments that promote excellence in response to individual patient needs and preferences, promote effective teamwork, and celebrate efforts to identify innovations that make the right thing the easy thing to do.

Chapter 12: Health Care Costs and Value

So, let's start to answer the question, what do we know about the growth of health care costs over time? We know that they have grown substantially. We know that they have increased faster than either the population or the GDP. And we know that, if unchecked, health care spending will consume an ever-larger percentage of the nation's GDP, squeezing out other spending. Because most economists and policy makers view this last possibility with concern, health care cost containment has been and continues to be an important national issue.

The Value of Medical Spending

The first question is, how do health care expenditures add value?

Health economists have used various methods to measure value created by health care. One common measure is called quality adjusted life years (QALY) (see also Chapter 13). There are two factors whose product results in the QALY: These factors are (a) a measure of the patient's quality of life on a scale

where 0.0 is essentially death and 1.0 is perfect health, and (b) the number of years the treatment will extend the person's life (explained further in Chapter 13). The value of a given treatment would be the treatment's cost divided by the QALY, giving an annualized figure.

Even with value measures such as QALYs, controlling spending means either becoming vastly more efficient in providing health care services or placing limits on the health care services provided.

These are difficult questions and begin to broach the subject of rationing health care— that is, limiting the consumption of health care services to those situations that add the greatest value.

The answer, at least in the short run, is to identify areas where the health care community can improve the cost effectiveness of health care services, thereby controlling costs while not limiting the level of health care services provided

What Is Cost, Anyway?

1. Third-party payers, defined as any entity paying on behalf of a patient (the first party) or a provider or supplier (the second party).
2. Employers, who pay for some or all of the health care coverage for their employees as a fringe benefit.
3. Providers defined as any party or entity that provides health care services to patients.
4. Suppliers defined broadly as any entity that supplies a product either directly or indirectly to patients.
5. Individuals are not only patients currently seeking treatment, but also people who may become patients in the future.

Third-Party Payers

Payers identify a set of services for which they will cover a set population for a certain premium. Health maintenance organization (HMO) payers refer to their beneficiaries as “members” and non-HMO payers refer to their beneficiaries as “lives.”

Numerous ratios have been developed to address each aspect of a payer's revenues and expenses, for example:

- Overall medical cost per-member (“ per life”) per-month (PMPM), which is the total medical cost to the payer divided by the number of “member months.” Member months are the summation of the number of months members have been enrolled in a plan during the year.
- Cost PMPM divided by the premium revenue PMPM, called the medical loss ratio (MLR), is the percentage of the insurer's revenue consumed by medical costs. If an insurer's MLR is 80%, then 80% of the insurer's premium revenue is being used for medical costs, and the remaining 20% is available for administrative costs and the insurer's profit.
- “Units of service PMPM” are calculated for selected activities, such as physician visits or prescriptions filled— all on a PMPM basis.

- “Units of service per thousand members (lives),” commonly referred to as simply “x per thousand.” These figures may be calculated for such services as inpatient hospital days, prescriptions, or hospital discharges— all expressed as “per thousand.”

A gap for payers is that decisions for patient care are made at the clinician-patient level.

most payers need to more effectively influence care management at the clinician-patient level.

ESTABLISHING LIMITED NETWORKS

Insurance Models

HMOs, preferred provider networks (PPOs), and similar insurance models may seek to create a network of providers willing to perform their services at less than their “standard” fee. Under a limited network plan, members are assured of coverage only at selected providers and may face significant costs if they use providers outside the network.

Centers of Excellence

payers have successfully limited the number of providers whose services they cover. To do so, they have created centers of excellence (COEs), selecting participating providers based on quality indicators.

The most common COEs provide organ transplant services. The federal Centers for Medicare and Medicaid Services (CMS) has established COE programs for all transplant services and certifies programs based on minimum volume levels, complication rates, and survival rates. Providers not certified by CMS may not be paid for providing services to Medicare and Medicaid recipients.

COEs have been designed for open heart surgery, major joint replacement, and major spine surgery, too, as an effective means to control costs by funneling expensive, clinically intensive procedures to providers who achieve better outcomes at lower cost.

The COE approach does raise a question regarding the ability for a new program to meet growing market demand.

For example, if a hospital is located in a growing market that has a need for heart transplant services and all payers enforce COE programs, how would the hospital reach the required volume of transplants and related quality indicators to qualify for COE heart transplant programs? The hospital may be able to reach agreement for exceptions with a few payers; however, it will be required to provide the service without payment before it can break into the limited network of COE facilities.

Tiered Networks

Under a tiered program, members are encouraged, through lower deductibles and co-pays, to use a core group of providers. Members may use a second or even a third tier of providers if they are willing to pay the higher out-of-pocket costs of doing so. Tiers are often determined based on quality and cost factors.

For tiered networks to be successful they need to provide reasonably acceptable access to providers in the first tier so the employees will feel confident that they will receive convenient and timely treatment.

QUALITY INCENTIVE PROGRAMS

Medicare has developed two quality-based programs called Hospital Quality Initiatives

(HQI) and Hospital Acquired Conditions (HAC). HQI was initiated in 2003 with the goal of equipping patients with hospital quality measures so that they may make informed decisions about their care. The program also had a goal of transparency that would encourage hospitals to improve quality of care.

The incentive Medicare provides— possibly better described as its penalty— is a reduction to the annual rate increase for any hospital that fails to supply its HQI data.

The HAC program was initiated in 2005 and is designed to eliminate specific problems created within the hospital environment.

Medicare is further moving down the path of providing hospitals with incentives for improved quality with value-based purchasing (VBP). Under VBP, Medicare will redistribute inpatient diagnosis related group (DRG) payments to better performing hospitals and reduce inpatient DRG payments for the lowest performing hospitals.

Commercial payers are instituting quality initiatives similar to those of Medicare. These have had varying success depending on the market and provider. Hindering greater progress are factors such as: providers' mistrust of payers, the complexity of programs, and the difficulty of maintaining multiple quality programs with different measures for different payers.

CONTRACTS AND RATE NEGOTIATIONS

Over the years both payers and providers have become very sophisticated in their negotiation of agreements and rates. Often they will create large databases and spend months analyzing claims data in preparation for a negotiation.

Payers will protect themselves by limiting rate increases for services with potentially high growth.

The opportunity exists within payer agreements to incorporate quality measures and continuous improvement programs, with the payer and provider sharing in savings.

END-OF-LIFE AND DISEASE MANAGEMENT PROGRAMS

Health care costs typically are concentrated in a small group of insured individuals. Not surprisingly, the last year of a person's life (when they are sickest) is often that person's most expensive health care year.

By focusing programs on serving this population better, through eliminating unwanted and unnecessary (futile) services, there is the potential to not only improve the quality of life for the dying, but also to leverage considerable savings in this high-cost category.

CMS also has adopted the successful Program of All-Inclusive Care for the Elderly (PACE) that provides support services, such as home health, and other services to beneficiaries in their homes, in combination with adult day services, as an alternative to nursing home care.

Disease management programs employ a similar approach, in which payers identify specific groups of patients or members with chronic diseases that similarly generate disproportionately high ongoing costs and whose complex care is difficult to manage. The core disease management conditions are diabetes, asthma, congestive heart failure, coronary artery disease, and chronic obstructive pulmonary disease.

Disease management programs vary, but the common thread is the identification of members with specific high-cost medical conditions, designing programs to help improve self-care (appropriate frequency of check-ups, clinical instructions that are easy to follow), and developing and refining effective clinical protocols.

PRESCRIPTION DRUGS

better management of prescription drug costs is an opportunity to manage a large segment of overall health care expenditures.

Typically, they define the prescription drugs they will pay for on a formulary

Employers

Employers instead focus on identifying the lowest premium and richest benefit package that they believe is competitive in their employment market.

What hinders employers from becoming advocates for better quality, lower cost health care?

- First, in order to pursue such an initiative the employer needs to make an upfront investment that may pay off over a number of years.
- Second, such an investment requires the employer to be large enough to have the economies of scale to generate a substantial return.
- Finally, the employer must take the perspective that the upfront cost is not just additional overhead, but rather a worthwhile long-term investment whose benefit will be lower future health care premiums.

Providers

Clinical decisions that greatly affect costs are made in the provider community, yet many providers make decisions without full consideration of the effect on the overall costs of care. Providers see themselves as diagnosing, treating, and curing problems, not as fiscal watchdogs.

Changing the behavior and practices of providers to improve their cost effectiveness and quality for an overall population requires alignment of incentives and flexibility of many different parties— payers,

providers, regulators, and suppliers, among others— to implement change, standardize forms and procedures, and so on.

REVENUE AND REIMBURSEMENT

providers may receive dramatically different reimbursement from payers for the exact same service.

At the lower level, the reimbursement may not even cover the cost of care.

Many doctors either won't accept insurance at all or won't accept certain insurance companies—

This is one area that the 2010 health reform law hopes to fix, most notably by increasing reimbursement rates for primary care and reducing interstate program variations (Kaiser Family Foundation, 2010a).

REDUCING EXPOSURE TO POORLY PAYING PAYERS

The first and most obvious way to accomplish this is to locate in an area with where poorly paying insurers (and poor people) do not exist in any large numbers.

Another means is to indirectly limit access.

A more common strategy to offset the losses incurred by treating Medicare and Medicaid patients is cost shifting. With cost shifting, the provider shifts costs not covered by Medicare and Medicaid to other payers, by requiring higher reimbursement rates from them.

BUDGETING AND MANAGING PROVIDER COSTS

How do clinical area managers develop their annual budget? Providers will establish a measure of the expected volume of patients that will be served over the next year and multiply it by a cost factor, per unit of volume, often referred to as a cost driver.

CARE MANAGEMENT

Care management analyzes the services consumed by each patient and the benchmarking of those services against industry standards. To conduct that analysis requires information systems that accumulate the relevant data and provide analytic tools, staff teams that understand how to analyze the data, benchmark comparisons, and clinical teams that may harness the information to effect changes in the clinical management of patients.

OUTSOURCING AND SHARED SERVICES

With the development of health information technology applications, more and more organizations are finding effective means to outsource large components of their services to third parties.

SUPPLY CHAIN

Supplies, capital equipment, service agreements, and inventory costs are areas where hospitals and other providers can find substantial savings.

MANAGING THE PRODUCT AND REVENUE CYCLE

Focusing on high-volume, specialized services allows fixed costs to be shared among a greater number of patients, lowering the cost per patient. This is especially important in areas that require technological depth in the clinical staff, equipment, and information systems.

CLINICIAN ENGAGEMENT

To improve the costs and care, institutional providers need to engage physicians in some portions of the decision process.

Another approach is to share the savings achieved with the physicians, essentially giving them an incentive for working with the hospital to achieve cost savings.

Suppliers

At times, a new technology may promise improved patient outcomes but have a negative financial impact on the hospital.

New technology in its earliest stages is usually more expensive than traditional methods, but often becomes more cost effective as it evolves.

Role of the Individual

Those individuals with very good insurance, who have few limits and low co-payments, will tend to consume more health care services than those with poor insurance and high co-pays.

As individuals, we are in a great position to help control the cost of care, if we truly desired to.

Conclusion

in order to achieve even greater leaps in cost effectiveness and quality, a concordance among perspectives is needed. Incentives must be designed that can align the economic goals of the health care segments and distribute overall savings equitably among the affected segments.

Chapter 13: Comparative Effectiveness

What Comparative Effectiveness Is All About

A well-functioning health system must first ensure that effective new interventions are identified and used for the patients who will receive the most benefit from them. At the same time, unwarranted or unproductive variations in care for patients with the same characteristics should be eliminated.

Comparative effectiveness research (CER) has shown itself to be a key tool employed by health systems in achieving these goals— namely, identifying the best and most cost-effective interventions and standardizing their use.

At its core, CER is simply the comparison of two or more health care interventions in which technologies, products, or procedures are evaluated against each other and against conventional standards of care. CER uses the highest standards of clinical evidence to examine how well a health care treatment or other type of intervention works under real-world conditions, weighing both quantitative and qualitative metrics, such as longevity improvement, quality of life years gained, and intervention costs.

A CER system is a mechanism for synthesizing research about different medical interventions and translating it into guidelines for or restrictions on the use of different types of therapies, in an attempt to maximize good outcomes for patients.

Comparative Effectiveness Program Models

MODELS WITHIN THE HEALTH CARE SECTOR

Restrictions on the Introduction and Dissemination of Technology

Health policy experts generally agree that the much higher utilization of technology in the United States is driven by both an upstream over-proliferation of medical equipment and devices purchased and placed within hospitals and medical practices, a downstream overuse of equipment after it is bought, and a fee-for-service system that creates incentives for overuse.

Coordinated planning of hospital capital expenditures and major equipment purchases is a key element in a CER system that prioritizes the most effective interventions, rather than merely the most technologically intensive ones. Limitations on the availability of expensive technology also have the potential to eliminate the pressure on physicians and hospitals to overuse high-tech equipment in order to recoup its cost, a phenomenon that can result in needlessly invasive procedures that carry higher risks for patients.

Restrictions on Choice of Treatment and Procedures

The most visible effort to restrict physician treatment choices is the United Kingdom's National Institute for Health and Clinical Excellence (NICE). In the UK, the central government sets a budget for National Health Service (NHS) expenditures every year, based on estimated health care needs of the population.

The first step under this system is for the government to estimate the effectiveness of health treatments using a quality adjusted life years (QALY) method.

The NHS sets guidelines on cost per QALY for every health medical treatment and procedure. Currently, the guideline for the maximum acceptable cost is between £ 20,000 and £ 30,000 (\$ 30,000 and \$ 45,000) per QALY (Towse, 2009). If NICE rules that a therapy is too expensive relative to its benefits, the NHS will not pay for it.

NICE allows exemptions for life-threatening situations, as long as supervising physicians agree that there is the potential for an improvement in patient outcomes. In addition, if they can afford it, patients can

pay out-of-pocket for expensive therapies that are not paid for by the government under NICE guidelines.

Restrictions on Sites of Care

Waiting times could be reduced substantially by encouraging wealthier patients to use private, fee-based services, which would lessen care delays for patients who must rely on government services

Restrictions on Choices of Provider

Provider restrictions can be enforced through varied mechanisms, usually centered on fee schedules or a gatekeeper structure, in which primary physicians must provide patients with a referral before they can see other specialists.

Benefits of Comparative Effectiveness Systems

QUALITY IMPROVEMENT

The Institute of Medicine in its 2009 report, *Initial National Priorities for Comparative Effectiveness Research*, states that “comparative effectiveness research provides an opportunity to improve the quality and outcomes of health care by providing more and better information to support decisions by the public, patients, caregivers, clinicians, purchasers and policy makers” (p. 29). This clearly places quality improvement as a central objective of a CER system.

In the United States, by contrast, decisions about how to respond to CER findings are in the hands of private bodies.

COST SAVINGS

The second important benefit of CER systems is their impact on health care costs. More specifically, using CER enables health systems to control costs without compromising patient outcomes.

Public and Private Comparative Effectiveness Systems

PUBLIC COMPARATIVE EFFECTIVENESS SYSTEMS

United Kingdom NICE is the UK’s entity for CER, housed within NHS, the government’s health plan. NICE’s primary goals are to improve health outcomes, reduce practice variation, and diffuse information about new technologies and their effectiveness.

NICE suggests clinical guidelines for treatment; conducts performance assessments for drugs, devices, and diagnostic tests; and provides guidance on surgical and invasive diagnostic procedures. Information is distributed electronically to clinicians and hospital leaders and to industry, professional, and patient groups.

Following the secretary’s final approval, NICE standards are the basis for NHS reimbursement; services that are not approved can be obtained privately, but NHS will not pay for them.

France

The comparative effectiveness program in France is based in the HAS, an independent, public organization with financial autonomy and a government-appointed board.

HAS supervises the review and approval of drugs, devices, and procedures on behalf of the Ministry for Health and Social Security. Unlike NICE, HAS directly conducts its own research, making both STAs and multiple technology appraisals (MTAs).

HAS's full-time staff numbers 400, plus it has available 734 surveyors and 3,000 external consultants to help conduct its studies. Opinions and recommendations are forwarded to the Ministry for Health and Social Security, which decides whether to reimburse products and the extent to which its policy decisions are circulated

Germany

The CER system in Germany is centered around the IQWiG, created by the government in 2004 to act as an advisory body that would provide evidence-based evaluations of the costs and benefits of pharmaceuticals and medical services, using international standards.

These decisions are binding on sickness funds in the statutory health insurance (SHI) system and on providers. Given that 90% of Germans are enrolled in the SHI system, the recommendations of the IQWiG are extremely influential in determining standards of care in the German health care system (Nasser & Sawicki, 2009).

Effective treatments cannot be excluded from coverage on the basis of cost, but cost-effectiveness analysis can be used to set a maximum reimbursement for a given treatment. Thus the goal of IQWiG is to examine whether a treatment meets the criteria of necessity, considering impacts in relation to alternative treatments or no treatment at all, and it assesses benefit and harms in terms of patient-relevant medical outcomes.

Because the Joint Committee exerts control only in barring pharmaceuticals and hospital services, Germany has higher prices for drugs and more new drugs available than many other European countries.

The IQWiG is not charged with developing guidelines for medical practice.

The narrow focus of the IQWiG on reimbursement limits its role in promoting standards of high-quality care across the health system

Australia

The most prominent mechanism for the use of CER in Australia is the PBAC, which uses it to make decisions about the inclusion or exclusion of drugs in Australia's national formulary (the list of prescription drugs that a health plan will pay for). Australia's Pharmaceutical Benefits Scheme (PBS) was established in 1948 and subsidizes approximately 80% of all prescriptions dispensed there

The PBS was the first national pharmaceutical reimbursement program to use an explicit consideration of comparative effectiveness in coverage decisions. A drug that has received marketing approval based on its efficacy, safety, and quality can be dispensed with a private prescription; however, to be covered under the PBS, it must meet the additional criterion of cost-effectiveness.

The goal is rather to ensure that the national formulary reflects “value for money.”

Public Reaction to National Systems of Comparative Effectiveness

In general, the public CER systems described here have been extremely successful in winning stakeholder approval.

PRIVATE MODELS FOR COMPARATIVE EFFECTIVENESS RESEARCH

Academic Medical Centers

Academic medical centers (AMCs)— which are partnerships between medical (and often nursing and other health professions) schools and affiliated hospitals— currently perform most CER in the United States. Funding for this activity generally comes from the National Institutes of Health (NIH), private donations, and relationships with pharmaceutical companies.

AMCs’ scope of activities is generally confined to their local area and, as a result, they are not direct competitors with each other outside of their geographic region. Accordingly, sharing CER results across the country generally will not affect competition among hospitals.

Large Private Employers

In America, some large private employers, such as Pitney Bowes, have been motivated to leverage learning from CER in an attempt to reduce employee health costs. Large employers generally evaluate a medical procedure’s effectiveness by mining large databases containing their employees’ health care claims experience or by performing meta-analyses of existing CER findings

when it comes to cost reduction, these systems are better able to quantify efficiency gains compared to their public counterparts, given their more manageable scale.

Private Health Systems

A number of private health systems have also implemented comparative effectiveness-based guidelines in their own practices.

Data Aggregators

A few large private companies, such as Milliman and McKesson, aggregate clinical effectiveness research and prevailing clinical wisdom into clinical guidelines.

Although useful as an informational resource, such clinical guidelines are clearly not binding on decisions by providers or payers and thus have limited influence in the overall operation of the health system.

The U.S. Debate on Comparative Effectiveness Systems

the American population remains largely hostile to the implementation of any CER system.

THE AMERICAN RECOVERY AND REINVESTMENT ACT: NIH AND AHRQ

In 2009, President Obama signed the American Recovery and Reinvestment Act (ARRA), providing \$ 1.1 billion in funding for projects related to CER. The bill established the Federal Coordinating Council for Comparative Effectiveness Research (FCC-CER), which comprises representatives of 15 different federal agencies. ARRA required that at least half of the representatives be physicians or people with clinical expertise. The newly created FCC-CER was tasked with a number of priorities: reducing duplication of efforts, encouraging coordinated and complementary uses of resources, coordinating related health services research, and making recommendations to Congress and the administration on CER infrastructure requirements.

The goal of these pilot programs is to provide a foundation for CER in the United States and to begin to demonstrate its relevance and usefulness. The hope is that once the role and relevance of this type of research in improving health systems operations is more widely understood, a more comprehensive system can be developed.

INTERNATIONAL PROGRAMS

Comparative Effectiveness Systems: Guidelines for Design

Analysis of public and private CER systems suggests that the best model for placement and funding of such an organization would be through a semipublic agency. This agency could be an attached quasi-governmental entity that would promote objectivity while also preserving independence from formal governmental agency structures or political pressure (Wilensky, 2009). Although additional funding could be requested from governmental insurance and self-paying patients, the French model of using corporate taxes to provide supplementary funding is promising and would likely win public approval.

With regard to the focus of its recommendations, a new U.S. CER system would have the greatest impact by limiting its scope to a relatively narrow set of medical issues, rather than attempting to examine them all.

The UK system (NICE) has been highly effective in making and implementing recommendations on drugs and devices, and a U.S. system could emulate this focus, at least initially. More important, however, any CER agency should follow France's HAS model in funding its own clinical research, in order to ensure consistency of recommendations,

From the outset, a U.S. CER system should attempt to provide a better sense of how well various tests and treatments work across racial, ethnic, cultural, age, and other defined groups—

Knowledge distribution is widely cited as a significant challenge in creating an effective CER system. Government channels should be employed to disseminate information in a uniform and accessible way,

Finally, new CER systems should follow the French/ English model in which directives generated by the CER organization and approved by other relevant officials become part of reimbursement policy. This is clearly more challenging in a multipayer system, such as that in the United States,

potential implementation and operational hurdles.

First, a CER system may curb progress in technological innovation.

Second, cost savings are still unproven in public CER programs.

Conclusion

Health systems in England and France, countries that have taken the lead in CER implementation, have seen notable benefits in terms of:

- reduced treatment variations,
- increased diffusion speed for cost-effective treatments,
- improvements in public health,
- incremental cost reduction through the elimination of unproven treatments, and
- reductions in wasted effort.

These systems incorporate CER not only by performing trials and evaluating treatment options, but also by rapidly analyzing and dispersing the information gained from trials, revising national treatment standards, and generating timely buy-in from providers and other key health players.

The goal will be to establish a system that replicates the strongest elements of models successful in other countries while winning the widest possible public acceptability.

Any health system faces the same challenges of balancing the three core elements of U.S. health policy making: access, cost, and quality.

Part IV Support For Medical Care Delivery

Chapter 14 Governance, Management and Accountability

governance is the process organizations use to make important decisions, such as about mission, goals, budget, capital financing, mergers, and quality improvement.

The people who make up the organization's management are the agents of the governing board and are held accountable for achieving organizational objectives.

Accountability means being answerable— usually to important stakeholders— for decisions that affect organizational performance.

GOVERNANCE, OWNERSHIP, AND MANAGEMENT

Important governance decisions may be reserved to the owners.

HCO owners include physicians, cooperatives, governments, religious organizations, investors, employers, unions, and philanthropists. These different ownership groups have varying goals and, as a result, their governing boards' goals may vary, too— from finding jobs for their members (unions), to achieving a return on investment (financiers), to being reelected (government politicians).

WHAT BOARDS DO

Board members are not employees of the organization on whose board they serve and many may have limited experience in making important HCO decisions. Yet, as a whole, the board must exercise the duties of care (acting as prudent persons), obedience (to the mission of the organization), and loyalty (have no conflicts of interest), as they carry out their roles.

nonprofit boards should serve eight principal functions:

1. Select, encourage, advise, evaluate, compensate, and, if need be, replace the CEO.
2. Discuss, review, and approve strategic directions.
3. Monitor performance.
4. Ensure that the organization operates responsibly as well as effectively.
5. Act on specific policy recommendations and mobilize support for decisions taken.
6. Provide a buffer for the president or CEO—“ take some of the heat.”
7. Ensure that the necessary resources will be available to pursue strategies and achieve objectives.
8. Nominate suitable candidates for election to the board and establish and carry out an effective system of board governance.

Governance vs. Management

The board of directors selects the HCO's chief executive officer (CEO), who generally selects the other managers. The board delegates decision making to these managers, reserving the power to subsequently review or overturn management decisions.

LINKING BOARD ROLES TO ORGANIZATIONAL PERFORMANCE

Accountability cannot be achieved in the absence of measurable objectives,

Historically, many HCOs have not been accountable for organizational performance and have not regularly reported on performance to external stakeholders,

Measuring a nonprofit HCO's performance can be tricky.

Current Governance Issues

One of the most common complaints, backed up by a wealth of data, is that our nation's HCOs provide care that is uncoordinated, too often of poor quality, and uniformly too expensive, especially relative to HCOs in other developed countries.

Currently, some HCOs use their mission statement as a starting point for establishing measurable objectives. Most HCOs do not include improving health of a given population as part of their mission.

The board also should examine how its array, quality, and delivery of services are evaluated relative to those provided by other local organizations or as compared with the HCO's own best practice historically.

Finally, the board should evaluate the support its HCO gives to other community organizations,

One place boards clearly should focus is on developing and implementing new management data systems better aligned with their HCO's strategic priorities.

THE LOCUS OF GOVERNANCE

The difficulty in legislating national solutions to our health care delivery problems— that is, taking decision making power out of the hands of local owners— is that HCOs are so varied in size, mission, services offered, and market characteristics that the unintended consequences of such global interventions are impossible to accurately predict.

ACHIEVING COORDINATED CARE

Improving the coordination of care is often seen as one of the best ways to improve quality of care and, at the same time, reduce costs. But, even on the relatively narrow issue of improving care coordination, reasonable people differ as to what government— or even large HCOs— should do to achieve this.

Fundamentally, Americans are not interested in investments in coordinating care until they themselves need treatment or try to arrange care for a loved one with multiple complex chronic conditions.

The desirability of greater coordination is embodied through the policy initiatives encouraging a "medical home" and "accountable" HCOs.

MANAGEMENT

Managerial roles in HCOs differ from those in other sectors for several reasons.

First, the purpose of an HCO is more complex—

Second, measurable objectives associated with any of these purposes are more difficult to agree on than generating a return on investment or increasing a product's market share.

Third, the HCO environment operates in too many "silos" with minimal cross-communication.

Basic Managerial Functions and Successful Managers

According to Longest (1990), basic managerial functions include:

- Planning: determination of goals and objectives
- Organizing: structuring resources— people, dollars, services, equipment— to accomplish the work required to meet the objectives
- Directing: the stimulation of members of the organization to meet the objectives
- Coordinating: the conscious effort of assembling and synchronizing diverse activities and participants so that they work toward the attainment of objectives
- Controlling: comparing actual results with objectives to enable mid-course corrections and provide a measure of success or failure

Goleman (1998) suggests that the most effective leaders have a high degree of what he calls “emotional intelligence,” which he believes is more important than technical skills and IQ for managerial jobs at all levels. The five components of emotional intelligence are: self-awareness, self-regulation (e.g. the ability to think before acting), motivation, empathy, and social skills.

Boyatzis (1995) has developed a model that describes three sets of managerial competencies:

- Primarily “people skills”: efficiency orientation, planning, initiative, attention to detail, self-control, flexibility, empathy, persuasiveness, networking, negotiating, self-confidence, group management, developing others, and oral communication.
- Use of concepts, systems thinking, pattern recognition, theory building, technology, quantitative analysis, and social objectivity
- Written communication and analytical reasoning

THE VALUE MANAGERS CONTRIBUTE TO HCO PERFORMANCE

Current Management Issues

Current challenges for improving management performance are:

- Focusing accountability for results and improving transparency of decision making
- Investing appropriately in management training and development
- Investing in research to improve management practice

FOCUSING ACCOUNTABILITY FOR RESULTS

Traditionally, in for-profit organizations, the mission is clear— it is to generate return on investment— and board members (who are often shareholders) measure performance in those terms.

A basic flaw with the not-for-profit form is the lack of accountability of governing boards to any outside body, such as legislatures or stockholders.

The potential problems this raises are compounded by the difficulty in specifying the outputs of HCOs in general, conflicting goals, and frequent lack of agreement among board members as to the HCO’s

mission— the driving force behind most nonprofit organizations’ existence— or even the purpose of the governing board.

All HCOs encounter accountability problems,

Little is known about how HCOs specify their goals and devise performance metrics related to the most important measure: health care outcome.

INVEST IN MANAGEMENT TRAINING AND DEVELOPMENT

Management training programs are needed both to prepare entry-level HCO managers and to develop managers in their initial positions.

As part of a well-designed performance appraisal system, managers and their supervisors should periodically review the skills and experiences required to perform the current job better or prepare for the next position.

INVESTING IN MANAGEMENT RESEARCH

Management decisions should be made based on the best evidence available, Hundreds of millions of dollars have been spent on evidence-based medical research in order to identify and promote medical treatments that result in positive, predictable, cost-effective outcomes for patients. There is a parallel research discipline in health care that supports evidence-based management (EBMgmt),

EBMgmt has been defined as “the systematic application of the best available evidence to the evaluation of management strategies for improving organizational performance”

Steps in the evidence-based management process include:

- translating a specific management challenge into research question(s),
- acquiring relevant research findings and other evidence,
- assessing the validity, quality and applicability of the evidence, and
- presenting evidence in a way that it will be useful in the decision making process.

HCOs would be held accountable for their contribution to improving the health of a population and to providing care of the highest quality, at a reasonable cost.

Chapter 15: Health Workforce

Figure 15.1 shows the classic market situation. The supply of doctors in this example is a direct function of wages or income. Higher income increases the supply of doctors in the long run. The demand for doctors declines as their income increases because the price of their services increases. This makes sense in a market situation. At point E (equilibrium), the market is in balance: the wage is at a level where the supply of health care workers equals the demand for workers.

But most health policy experts understand that the market for doctors does not function as described in the market model

Consumers and patients have much of their health care paid by insurers or the government. The price of a doctor's time has little or, in some cases, no effect on them and thus demand for services is not readily affected by changes in that price. On the supply side, doctors must complete many years of medical school and residency before they can practice, so supply cannot easily adjust in the short run. For these reasons, the classic market may not be a good way to judge when we have too many or too few physicians.

Another approach to estimating the requisite supply would be to base it on a population's needs—

WHAT IS AN "ADEQUATE" SUPPLY OF PHYSICIANS?

"An adequate physician supply could be defined as having the right number of physicians, with the right skills, in the right place, at the right time. The adequacy of supply, therefore, has specialty, geographic, and time dimensions."

A definition of the optimal supply of health workers that combines the concepts of need and the market would say it is the number needed to deliver the care necessary to maximize the health of a population, given the resources spent in the health care industry.

Health Care Reform and the Health Care Workforce

In order to ensure that the ACA is successful, costs must not be allowed to skyrocket, despite this pressure.

Physician Health Workforce

The shortage of primary care clinicians is as a major obstacle to providing adequate and cost-effective care to a greater number of Americans, as intended by health reform legislation.

SUPPLY OF PHYSICIANS

Clearly, growth in the total number of doctors is largely being affected by growth in specialties other than general primary care.

The Crucial Nature of Primary Care

WHY PRIMARY CARE IS IMPORTANT

There are three major reasons why primary care is so important.

1. First, primary care is ideally the first point of access to the health care system and, again ideally, the primary care physician or nurse practitioner coordinates the advice and treatment plans of various specialists. A primary care health professional also can work closely with the patient and the patient's family to engage them in activities to improve health.
2. Second, evidence suggests that increasing the number of primary care doctors will not only improve access to care and quality of care, but will also reduce its costs. Primary care can be

- a cost-reduction strategy because, if patients use primary care physicians, they (1) may avoid unnecessary and costly specialist services and (2) will avoid duplicate tests and procedures that better coordinated care enables.
3. Third, primary care physicians are vital in achieving better quality of care. Primary doctors coordinate patients' health care needs and, as a result, obtain better health outcomes. Lack of primary doctors can delay patients' access to appropriate services.

BARRIERS TO PRIMARY CARE

- One has to do with income.
- the primary care specialty has a fairly low status in medicine.
- there has been inadequate training support from the government or other organizations that might provide incentives for students to pursue primary care careers.

project_ : Reimbursement rates are established annually by the Center for Medicare and Medicaid Services (CMS) using the "resource-based relative value scale" methodology (RBRVS), which inherently gives more weight to specialists. The RBRVS method establishes the relative value of each service physicians provide based on three components: the amount of physician work that goes into the service, the practice expense associated with the service, and the professional liability expense associated with provision of the service.

Much of a primary care physician's time is spent in relatively low-cost (but vitally important to patients) activities like counseling, health education, and coordination of care. These activities have been consistently undervalued in the RBRVS system. Other payers are influenced by the payments and fees that CMS sets. The ACA emphasizes the need to shift care from specialists to primary care practitioners (PCPs), and has included several provisions to make primary practice more attractive.

INCREASING THE NUMBER OF PRIMARY CARE PHYSICIANS

1. A 10% bonus payment for primary care services provided by family physicians, general internists, geriatricians, and pediatricians
2. An increase in Medicaid payments for primary care services performed by PCPs to 100% of the Medicare rate in 2013 and 2014
3. Grants to develop or expand primary care residency programs
4. Seventy-five percent of Medicare graduate medical education (GME) positions must be reserved for primary care or general surgery

Another solution would be to increase our use of international medical graduates (IMGs).

The Supply of Nurses and Nurse Practitioners

HEALTH WORKFORCE ISSUES FOR NURSES AND NURSE PRACTITIONERS

Licensed nurses constitute the single largest occupation in the health care industry (U.S., DHHS, NCHS, 2010). Licensed nurses— registered nurses (RNs), licensed practical nurses (LPNs), licensed vocational nurses (LVNs), and nurses in advanced practice such as nurse practitioners (NPs)—

The shortage of primary care physicians has led health care leaders to consider whether other types of health professions can help close the gap.

Principally, leaders look to whether nurses with advanced education in the delivery of primary care services— especially nurse practitioners— can be deployed more effectively.

Physician assistants also can play a role in delivering primary care services, although their education and professional standards generally involve working under the direction of a physician, rather than as independent practitioners.

LICENSED NURSES, SHORTAGES, AND QUALITY OF CARE

NURSING SHORTAGES

QUALITY OF NURSING CARE

Although nurses are important to ensuring patient safety, it does not necessarily follow that health care organizations should always employ more nurses.

A central problem for hospitals and other health care providers is that they are not paid according to the quality of care they provide and thus they do not have an incentive to increase quality or to hire more nurses to achieve it.

In response, some federal and state policy makers have implemented programs designed to improve the quality of care, often through increased nurse staffing.

Two strategies can be used: strict regulations for nurse staffing and financial incentives.

NURSE PRACTITIONERS, PRIMARY CARE, AND THE ACA

the shortage of primary care physicians has raised concerns that there may not be enough providers to meet primary care needs. Researchers have found that up to 75% of primary care services could be provided by advanced practice registered nurses and physician assistants (PAs) (Sullivan-Marx, 2008), and numerous studies have demonstrated that nurse practitioners provide high-quality patient care with outcomes as good as for patients seen by physicians

BARRIERS TO FULL UTILIZATION OF NURSE PRACTITIONERS

The main factor limiting the ability of nurse practitioners to be fully engaged in the delivery of primary care is that the legal scope of practice of NPs is too restrictive in some states.

Only 11 states permit NPs to practice independently, without physician involvement (Figure 15.2). The majority of states— 27 in 2007— require NPs to practice in collaboration with a physician.

In addition, some physician and health care employer organizations restrict NP practice more than others, and thus the implementation of the collaboration requirements can be strict or liberal.

Rules regarding the reimbursement of NP services also can limit their utilization.

There are few studies on the impacts of these varying payment policies on the ability of NPs to provide health services, but it is likely that changes in reimbursement policies could provide incentives for more efficient use of these providers in the delivery of primary care.

Some nurse practitioners do not work in the field of primary care.

IMPROVING NURSE PRACTITIONER UTILIZATION

Many analysts recommend that current trends toward expanded scope of practice of NPs— to the maximum level of their education and competence— should continue (Dower et al., 2007). Moreover, efforts should be made to reduce variations in scope of practice laws across states because these differences inhibit NPs from moving to locales where their care may be the most needed.

The reimbursement of NPs for their services needs to be examined carefully.

NP reimbursements should be sufficient to ensure that NPs can afford to work in primary care. Increasing reimbursement for primary care services would likely increase the supply of both primary care physicians and NPs.

Conclusion

Primary care is important to improving population health and improving the efficiency of the health care system.

At the same time, the supply of health care workers also does not clearly match a market model. Health worker supply is constrained by licensing requirements, limited education spaces, and scope of practice regulations.

The availability of primary care physicians is further limited because primary care is reimbursed less than other specialty medical services. In the midst of a primary care physician shortage, attention has turned to the potential for other highly skilled professionals, including nurse practitioners and physician assistants, to help meet primary care needs.

Changes to reimbursement policies, addressing scope of practice limitations, and ensuring adequate educational capacity are among the key policies that can ensure that the ACA is implemented effectively.

Chapter 16 Health Information Technology

Why Managing Information Is Important in Health Care

IMPROVING CLINICAL QUALITY

medical records stored in a computer appear as easy-to-read text or graphics. When information arrives that requires action, the nurse or physician can be automatically alerted. The information can be searched. Clinicians in different places can all view the information they need to see.

For the patient, it can mean shorter hospital stays and fewer physician visits, a faster recovery, and fewer complications due to errors. For the physician, the technology can save time and support better decisions. For the payer— the employer, the insurance company, or government— the result can be lower medical expenses.

IMPROVING PATIENT SATISFACTION AND ACCESS TO CARE

A patient who visits a physician's office and the radiology and laboratory departments of a hospital is very likely to be asked for the same information (name, Social Security number, etc.) three times.

The problem goes beyond patient satisfaction. Technology can make it much easier for patients to communicate with providers.

CONTROLLING COSTS

Information technology can help by facilitating the monitoring of patients and delivering information to them.

Personalized Web sites can provide access to tests and records that can help an emergency room physician diagnose a condition faster and avoid complications that lead to longer hospital stays.

E-mail can be used to send messages from clinicians and to forward health education materials that permit chronically ill patients to manage their diseases and avoid acute episodes that lead to expensive hospital stays.

Information technology can also be used to improve efficiency. Scheduling software can track the use of operating rooms and surgical equipment to assure that both are available when needed and neither is underutilized. Inventory management systems can control the use of drugs and other supplies.

How the Federal Government Is Involved in HIT Implementation

the 2009 American Recovery and Reinvestment Act (ARRA).

It included a \$ 19 billion program to promote the adoption and use of health information technology (HIT) and especially EHRs. The HIT components of the stimulus package, the Health Information Technology for Economic and Clinical Health (HITECH) Act offered payments for the "meaningful use" of a "certified" EHR.

The U.S. Department of Health and Human Services (DHHS) defined meaningful use carefully so as to further five health care goals:

1. **“improving the quality, safety, and efficiency of care while reducing disparities;**
2. **engaging patients and families in their care;**
3. **promoting public and population health;**
4. **improving care coordination; and**
5. **promoting the privacy and security of EHRs” (Blumenthal, 2010).**

“Meaningful use” includes more than the use of IT to record and retrieve information (potentially reducing errors from causes such as illegible handwriting). Hospitals and physicians would also have to be able to exchange information and report information on the quality of the services they provide.

To address the lack of infrastructure for the exchange of health information, the federal government is channeling more than \$ 560 million in HITECH Act monies to state governments to lead the development of exchange capabilities within and across their jurisdictions (Blumenthal, 2010). Health information exchanges (HIEs) at the regional and state levels would provide the infrastructure for exchanging information, including standards for how data should be created, agreements among participants, and the required computer resources.

HITECH offered a total of \$ 17 billion in payments to hospitals and physicians in the form of increases in Medicare payments. Hospitals and physicians would have to meet “stage one” standards for meaningful use and begin using a certified EHR, in order to receive these payments, starting in 2011.

Hospitals and physicians who do not have an EHR (or were using an outdated one) have to locate a certified EHR and implement it to meet the meaningful use criteria by 2011. They— and their vendors alike— are expected to face a shortage of trained staff,

To assist, the federal government offered contracts to community colleges that would create short-term certificate programs to train HIT workers.

The government has committed almost \$ 650 million under the HITECH Act to the creation of a network of up to 70 regional HIT extension centers. Focusing initially on primary care providers in small practices, these centers will offer advice on which EHR systems to purchase and then assist physicians and hospitals in becoming meaningful EHR users (Blumenthal, 2010).

A Beacon Communities program was established to designate communities capable of collecting evidence of the positive effects of the use of HIT.

Strategic Health IT Advanced Research Projects (SHARP) awards totaling \$ 60 million were provided to four advanced research institutions (\$ 15 million each) to focus on solving current and future challenges that represent barriers to adoption and meaningful use of HIT.

HITECH strengthens protections for the confidentiality of health care information as well. It extends the privacy and security regulations of the Health Insurance Portability and Accountability Act (HIPAA) to health information vendors not previously covered by the law, including businesses such as Google and Microsoft, when they partner with health care providers to create personal health records for patients.

It requires health care organizations to notify patients promptly when personal health data have been compromised, and it limits the commercial use of such information (Blumenthal, 2009).

Improving Clinical Quality Through HIT

WHERE ARE WE? CURRENT ISSUES AND PROBLEMS

In Using Information Technology the IOM stated that “much of the potential of IT to improve quality is predicated on the automation of at least some types of clinical data.” They discussed four of the barriers to this automation: privacy concerns, the need for standards, financial requirements, and human factor issues.

TECHNOLOGIES FOR CLINICAL QUALITY IMPROVEMENT

Shortliffe and Perreault (1990) have categorized the role of computers in clinical decision support as tools for information management, tools for focusing attention, and tools for patient-specific consultation.

Reducing Medication Errors

computerized physician order entry (CPOE) systems allow for interaction between the clinician and information stored in the computer.

CPOE systems have been shown to reduce the incidence of serious medication errors by as much as 55%

The creation of a data repository for an entire system of hospitals and physicians, or the sharing of information among providers in a community, would help resolve this problem.

Adherence to Clinical Guidelines and Protocols

Clinical guidelines and protocols can be offered to physicians as part of a CPOE system. When an order is entered, the physician can be reminded that a particular test or procedure is suggested by a guideline.

Availability and Accuracy of Patient Records

Storing patient records in a computer opens up a number of possibilities for improving their availability and accuracy. Whereas a paper record is available in only one location, computerized patient records can be accessed from multiple locations in the same building or another state. Clinicians can consult with each other on the care of the patient.

Increasing awareness of the importance of having access to all the medical records for a patient has led to substantial federal support under the HITECH act for the development of HIEs and regional health information organizations (RHIOs).

Access to Knowledge

Presenting information when it is needed is one type of “decision support,” and information technology is available that can assist the clinician.

Guidelines or protocols for specific institutions nevertheless can be made available using computer systems in a hospital or physician practice.

Computer systems can therefore greatly improve access to knowledge by presenting knowledge at the point of care and using data stored in clinical systems.

Improving Health Care Service Quality Through HIT

If the health system used the technology now commonly available for other services (e.g., database access via the Internet), information would be available to consumers and providers at any time.

There are a number of explanations for why health care providers have not implemented technologies

Often cited is the lack of money. HIT competes with technologies for diagnosis and treatment—technologies that are both expensive and constantly emerging.

Philosophical differences concerning access to information may also inhibit adoption.

Patient expectations may be another barrier.

TECHNOLOGIES FOR IMPROVING SERVICE QUALITY

Improving Access to Information and Services

Web sites are the most obvious way to provide online information. But personalization and two-way interaction can also be provided that allows patients to customize the information they receive and actually carry out transactions, such as appointment scheduling.

Both Microsoft HealthVault ([http:// www.healthvault.com/](http://www.healthvault.com/)) and Google Health ([https://www.google.com/ health](https://www.google.com/health)) have been developed as similar personal health records (PHRs). A problem with previous efforts was the need for patients to enter all of the data. Both companies have sought agreements with prominent health care organization that would allow updating of the PHR by the health care organization.

Online Communication With Clinicians

E-mail offers the same advantages in health care as in business and personal communication. It allows each party to communicate when they are available in legible text. It avoids inconvenient interruptions and provides better documentation. It also has disadvantages, some of which are specific to health care.

a process can be developed that routes appropriate messages to the appropriate person based on physician preferences. The practice support staff plays a greater role in triaging incoming requests, routing them to the appropriate staff member or physician and tracking all messages to be sure they are attended to in a reasonable time.

Managing Waiting Time

Opportunities for Controlling Health Care Costs

WHERE ARE WE? CURRENT ISSUES AND PROBLEMS

The lack of money to invest in information technology is often cited by providers as the reason for their slow adoption, despite the potential for improving clinical and service quality. The return on investment (ROI) is said to be low or nonexistent.

There is evidence that some information technologies do lower costs, but those savings are not always delivered to the organization that has to incur the expense of purchasing, implementing, and maintaining them.

Many of the technologies we've discussed have obvious soft savings (e.g., improvements in patient satisfaction), but the hard savings are difficult to document. And, again, the savings may not accrue to the provider who bears the cost of HIT implementation.

DISEASE MANAGEMENT

There are three categories of disease management tools.

- Predictive modeling applies sophisticated mathematical models and analysis to identify patients whose medical conditions or health status are most likely to lead to significant medical costs
- Patient registries are primarily database tools used to track and manage patients with certain diseases so that clinical interventions are completed as required and patients are kept healthier through preventive care.
- Patient-focused disease management tools can include a wide range of devices that patients use to help monitor and manage their own health remotely, by connecting them from home to the physician's office

EFFICIENT USE OF RESOURCES

There is a significant cost when expensive resources are not used.

All of these problems can be handled by scheduling systems that not only record the day and time of a procedure, but can verify that the needed resources are available. They can also prompt staff to call patients in advance to remind them of the visit.

Current Issues

COST OF TECHNOLOGY

IT competes with technology for diagnosis and treatment,

The low level of IT investment to date has worsened the problem for hospitals and physicians.

The cost of hardware and software does not reflect the full cost of implementing information technology.

WINNING CLINICIAN ACCEPTANCE AND SUPPORT

Indifference or hostility on the part of physicians and nurses to clinical information systems is often attributed to age, prior training, or organizational culture.

A physician or nurse “champion” helps an IT project gain credibility with the clinical staff (Poon et al., 2004). A person who is an influential (but not necessarily the most knowledgeable) clinician who could offer support after learning about IT’s benefits. Champions would be included on committees involved in product selection and implementation. Or, hospitals can create a full-or part-time paid position for a physician and nurse who would provide advice to managers and a voice for clinicians within the IT team. They could be recruited from clinicians who have a strong interest in the technology, and they would be offered opportunities for learning.

Fine-tuning the process of implementation is also advocated.

Careful training is advocated, as well as constant personal support. The systems themselves need to be customized to the needs of clinicians (Poon et al., 2004).

ASSURING THE CONFIDENTIALITY OF PATIENT INFORMATION

the privacy and security of digitized medical information depends as much on people as on technology.

Clearly stated procedures, training on those procedures, and monitoring and enforcement are critically important.

Equally important is the use of specific technology for assuring privacy and security. This includes technology for “**authorization**”— that is, determining who has access. Unlike paper files, access to specific elements of the medical record in a computer can be restricted on a “need to know” basis.

Technology is also available for “**authentication**”— that is verifying the identity of people who attempt to access information.

Computer systems with “audit trails” record the identity of each person who looks at a medical record.

Protecting the confidentiality of patient information, therefore, requires a combination of people and technology.

Part V: The Future of Health Care Delivery

Chapter 17: The Future of health Care Delivery in the United States

Managing the change process is a key part of most high-level careers in the health sector.

Strategic decisions about change can have very long-lasting impacts.

Definitions and Approaches to Forecasting

Forecasting requires us to look at history.

Studying historical events and trends is what helps us create new solutions to current problems.

Finally, forecasting gives us a reference point that we can use in the future to assess our past logic. Reexamining earlier forecasts allows us to sharpen our analytic abilities, to make forecasts more accurate, and to link causes to effects.

Imagine the future: competition in health care is based primarily on quality of service— that is, the results a set of providers obtain for patients with a specific medical condition, such as heart attack, hip or spine operation, or diabetes. The price of their services is known in advance, and patients receive a single bill for all services related to their medical condition. Everyone has basic insurance. All Americans have their own health record on a wallet-sized card, and all providers can access this record when the patient shows up for care. To graduate from high school, children must demonstrate that they understand how their body works and how to keep it healthy, and all prospective parents are paid to attend child-rearing classes.

In 2012, a scenario such as the following may seem as unlikely as our 2008 scenario: Virtually all physicians in 2012 work on salary within organized health systems, rather than in small private practices. The focus of the entire health system is on population health: a set of providers, including physicians, nurse practitioners, physician assistants, and hospitals receive a fixed sum to maintain the health of a defined population that generally includes between 50,000 and 100,000 people. The number of hospitals has shrunk significantly, but well-run clinics offer wide ranges of prevention services and primary care. Technology makes it possible for people to have most procedures, such as surgeries and diagnostic tests, performed right in the clinics. Sometimes they involve telehealth approaches that involve medical experts many miles away. The changes in incentives and the organization of care have lowered expenditure increases in health care from about 2 or 3 percentage points more than the annual increase in the overall economy to the same rate as general economic growth.

FORECASTING METHODS

Economists have developed highly quantitative forecasting approaches. They analyze past data to predict future economic events. Often they collect time-series data on a set of economic variables, then develop theories about how each variable influences the others, then test these theories with data from the past, and finally estimate how the variables will change events in the future, based on the estimated relationships established. This approach works only when extensive empirical data are available, and it most useful for short-term forecasts.

The Delphi method, a more qualitative approach to forecasting, systematically obtains expert opinions, with an end goal of achieving consensus. Delphi administrators poll experts about their forecasts in three or four rounds of questionnaires. After each round, results are tabulated and disseminated to the group. The group completes a Delphi when it reaches a convergence of opinion.

A third, less scientific approach to forecasting is to rely on nationally recognized leaders in a field to apply their experience about the past and dynamics of the present to make predictions about the future.

Key Drivers of Change

Our prediction is that four key forces will shape change in the health system over this decade:

1. The circumstances of health reform implementation
2. The path of the current economic challenges
3. The ability of the health system to improve quality and slow expenditure growth
4. The obesity epidemic and other behavior-related health conditions

The dynamics of implementation—should preoccupy government, insurers, and other payers (employers and individuals) over the next decade.

Designing a system of subsidized private insurance where the subsidy varies depending on a family's current income is a difficult task.

To be successful, state governments need to learn from one another and actively engage consumers and insurance companies in the design and implementation of the exchanges.

Ever-expanding health care expenditures would make the subsidies and Medicaid expansions that are the core of the reform law unsustainable.

THE PATH OF THE CURRENT ECONOMIC CHALLENGES

A constrained economy will particularly affect federal government policy toward the Medicare program.

A slow economy would decrease the likelihood that Congress ever will fund tests of some system reform options. A slow economy also may strengthen the influence of the legislators who oppose the current law, who may push for less ambitious coverage expansions.

THE ABILITY OF THE HEALTH SYSTEM TO IMPROVE QUALITY AND SLOW EXPENDITURE GROWTH

Electronic medical records are perhaps the most obvious example of a management tool that has come of age (see Chapter 16). Affordable, easy-to-use systems are available for almost every type of provider.

New approaches to primary care, such as the medical or health home and the chronic care model, also could drive quality of care if they are widely implemented. Both approaches emphasize continuity of care and the availability of a team of health care providers (doctors, nurse practitioners, case managers, community health workers, and others) to make sure that people receive the care they need efficiently

and consistently (see Chapters 8 and 9). Both models also emphasize the importance of patient “self management” by working to make patients part of their own care team.

Finally, quality might improve under an array of new attempts to change the way providers are reimbursed.

The general push for these new payment approaches is the recognition that somebody needs to be responsible for a population’s “health” rather than just having responsibility for treating illnesses once somebody becomes “unhealthy.”

THE OBESITY EPIDEMIC AND OTHER BEHAVIOR-RELATED HEALTH CONDITIONS

Perhaps no single change would have more impact on health costs and the well-being of individuals than coming up with an effective strategy to reduce weight across the population.

MAJOR TRENDS OVER THE NEXT FIVE YEARS

New Five-Year Trend Forecast

1. The 2010 health care reform law will evolve considerably over the next 5 years
2. Growth in health care costs will slow
3. A two-or three-tier health system will continue to develop
4. Electronic medical records will finally be implemented widely
5. More resources will finally move into primary care, public health, and prevention
6. The number of hospital beds will shrink

THE HEALTH CARE REFORM LAW WILL CHANGE CONTINUALLY OVER THE NEXT FIVE YEARS

The political process will react to what Americans like about the law and what they find overdone. The entire idea of an individual mandate and of the modest employer mandates will surely be debated, as people grow to understand that even subsidized insurance will require substantial financial burdens for American families. And, the effort to make health system changes to improve quality and slow expenditure growth will generate additional amendments.

GROWTH IN HEALTH CARE COSTS WILL SLOW

Slowed growth in health care expenditures will happen either directly— through a range of payment and systems reforms— or it will happen indirectly, by pushing higher and higher insurance premium shares, as well as larger and larger consumer-paid co-payments, leading people to use less health care.

1. Efficiency of the system could improve through better management and better reimbursement approaches
2. Capitation may return, which, in effect, asks providers to ration care
3. Deductibles, coinsurance, and exclusions could increase, which, in effect, asks consumers to self-ration

A TWO-OR THREE-TIER HEALTH SYSTEM WILL CONTINUE TO DEVELOP

The downside of successful efforts to reduce health care expenditures may be that we will begin to have two or three tiers of health care service delivery. The wealthy can buy their way out of any approaches that limit choice or restrict access to what is judged more convenient and perhaps higher quality care. A second tier could develop that serves the rest of the population that has health insurance, and perhaps yet a third tier could act as a bare bones safety net for the uninsured.

ELECTRONIC MEDICAL RECORDS WILL FINALLY BE IMPLEMENTED WIDELY

Electronic records could have an impact on health care costs. But, more likely, they will drive improvements in the quality of care.

The full promise of electronic medical records, however, will emerge only when they become “interoperable” or easily shared across providers that touch a given patient.

MORE RESOURCES WILL MOVE INTO PRIMARY CARE AND PREVENTION

Emerging delivery models such as medical homes and accountable care organizations could change the flow of resources from inpatient care to primary, community-based care and to the public health activities focused on prevention.

Accountable care organizations take responsibility for the health of a defined population and receive some form of capitated payments or partially capitated payments for this responsibility. The new models of primary care use teams of health professionals, with highly skilled nurse practitioners and physician assistants playing much more extensive roles in managing health and engaging patients in self-management of their chronic diseases.

The movement toward more extensive primary care capacity must be accompanied by changes in the health care workforce

THE NUMBER OF HOSPITAL BEDS WILL SHRINK

Two key approaches can help hospitals survive in the coming years.

First, we need to reimburse hospitals so that each type of patient care can result in payments that closely approximate actual costs.

Better approaches for measuring the relative costs of hospital care across types of patients need to be put in place.

A second key approach to helping hospitals in a shrinking industry is to close or merge some hospitals.

In the past, when hospital beds were in oversupply, hospitals rarely closed, because government usually would intervene to help them survive. The current economic environment makes such interventions less and less likely. Closings— always controversial in a local area— likely will happen, but they can be done

responsibly, so that the closure does not threaten the capacity of a community's health system to meet residents' inpatient needs.

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