CHAPTER 3

PAYING FOR HEALTH SERVICES

THEME SET-UP REVENUE SOURCES

Big Sky Dermatology Specialists is a small group practice in Jackson, Wyoming. The city is located in the scenic Jackson Hole valley and is a major gateway to the Grand Teton and Yellowstone National Parks. In addition, it is home to the world's largest ball of barbed wire. (It's amazing what you learn when studying healthcare finance!)

Jen Latimer, a recent graduate of Idaho State University's healthcare administration program, was just hired to be Big Sky's practice manager. One of her first tasks was to review the group's payer mix. After all, revenues are the first step (of many) needed to ensure the financial success of any business. (Payer mix is a listing of the individuals and organizations that pay for a provider's services, along with each payer's percentage of revenues.)

To better understand Big Sky's revenues, Jen focused on two questions. First, who are the payers? In other words, where does Big Sky's revenue come from? Second, what methods do the payers use to determine the payment amount? By gaining an appreciation of the group's rev-

enues, Jen believed she could better judge the financial riskiness of the practice. Furthermore, she would then be able to identify the steps that might be taken to increase the practice's revenues and reduce the riskiness associated with those revenues.

By the end of the chapter, you will have a better understanding of healthcare provider revenue sources and how the specific payment method influences provider behavior. Specifically, you, like Jen, will know more about how these issues affect Big Sky.

Learning Objectives

After studying this chapter, you will be able to

- List the key features of insurance.
- Describe the major types of third-party payers.
- Discuss, in general terms, the reimbursement methods used by third-party payers, and the incentives and risks that they create for providers.
- Explain how coding affects reimbursement.
- Define the specific reimbursement methods used by Medicare.

3.1 Introduction

In most industries, the consumer of the product or service (1) has a choice among many suppliers, (2) can distinguish the quality of competing goods or services, (3) makes a (presumably) rational decision regarding the purchase on the basis of quality and price, and (4) pays for the full cost of the purchase.

However, the provision of healthcare services typically takes place in unique circumstances. First, often there are only a few providers of a particular service. Second, judging the quality of competing providers is difficult, if not impossible. Third, the decision (or at least recommendation) on which provider to use typically is not made by the consumer but rather by a physician or some other clinician. Fourth, the bulk of the payment to the provider is not normally made by the user (the patient) but by an insurer. Finally, for most individuals, the purchase of health insurance is paid for (or heavily subsidized) by employers or government agencies, so patients are insulated from the true cost of healthcare services.

This highly unusual marketplace has a profound effect on the supply of, and demand for, healthcare services. To get a better understanding of the unique payment mechanisms involved, we must examine the healthcare reimbursement system.

3.2 Basic Insurance Concepts

Because insurance is the cornerstone of healthcare reimbursement, an appreciation of basic insurance concepts will help you better understand the marketplace for healthcare services.

A Simple Illustration

Assume that no health insurance exists, and that you face only two medical outcomes in the coming year:

Outcome	Probability	Cost
Stay healthy	0.99	$ 0
Get sick	0.01	50,000
	1.00	

What is your expected healthcare cost (in the statistical sense) for the coming year? To find the answer—$500—multiply the cost of each outcome by its probability of occurrence and then sum the products:

$$\begin{aligned}\text{Expected cost} &= (\text{Probability of outcome 1} \times \text{Cost of outcome 1}) \\ &\quad + (\text{Probability of outcome 2} \times \text{Cost of outcome 2}) \\ &= (0.99 \times \$0) + (0.01 \times \$50{,}000) \\ &= \$0 + \$500 = \$500.\end{aligned}$$

Now, assume that everyone else faces the same medical outcomes and hence "sees" the same odds and costs associated with healthcare. Furthermore, assume that you, and everyone else, make $60,000 a year. With this salary, you can easily afford the $500 expected healthcare cost. The problem is, however, that no one's actual cost will be $500. If you stay healthy, your cost will be zero. But if you get sick, your cost will be $50,000, and this amount could force you, and most people who get sick, into personal bankruptcy, which is a ruinous event. (Don't forget, you have to pay all of your living expenses out of your $60,000 annual income in addition to any healthcare costs.)

Now, suppose an insurance policy that pays all of your healthcare costs for the coming year is available for $600. Would you take the policy, even though it costs $100 more than your "expected" healthcare costs?

CRITICAL CONCEPT
Risk Aversion

Risk aversion is the tendency of individuals and businesses to dislike financial risk. In other words, "risk" is a four-letter word. Risk-averse individuals and businesses are motivated to use insurance and other techniques to protect against risk. For example, a favorite tool to control risk is diversification, which in the context of revenues means lowering risk by having different sources of income. By not depending on one source—say, Medicare patients—a provider can reduce the uncertainty (riskiness) of its revenue stream. Insurance is another way to limit risk. Individuals buy insurance on the houses they own to limit the consequences of calamitous events, such as fires or hurricanes.

Most people would. Because individuals are **risk averse**, they would be willing to pay a $100 premium over their expected benefit to eliminate the risk of financial ruin. In effect, policyholders are passing the costs associated with the risk of getting sick to the insurer who, as you will see, is spreading those costs over a large number of subscribers.

Would an insurer be willing to offer the policy for $600? If the insurer could sell enough policies, it would know its revenues and costs with some precision. For example, if the insurer sold 1 million policies, it would collect 1,000,000 × $600 = $600 million in health insurance premiums, pay out roughly 1,000,000 × $500 = $500 million in claims, and hence have about $100 million to cover administrative costs, provide a reserve in case claims are greater than predicted, and make a profit. By writing a large number of policies, the financial risk inherent in medical costs can be spread over a large number of people and hence reduce the risk for the insurance company (and for each individual).

Basic Characteristics of Insurance

The simple example we gave illustrates why individuals would seek health insurance and why insurance companies would be formed to provide such insurance. Let's dig a little deeper into insurance basics.

Insurance typically has four distinct characteristics:

Pooling
The spreading of losses over a large group of individuals (or organizations).

Random loss
An unpredictable loss, such as one that results from a fire or hurricane.

Risk transfer
The passing of risk from one individual or business to another (usually an insurer).

Indemnification
The agreement to pay for losses incurred by another party.

1. *Pooling of losses.* The *pooling* (sharing) of losses is the heart of insurance. Pooling means that losses are spread over a large group of individuals so that each individual realizes the average loss of the pool rather than the actual loss incurred. In addition, pooling involves the grouping of a large number of homogeneous exposure units (people or things having the same risk characteristics) so that the law of large numbers can apply. Thus, pooling implies (1) the sharing of losses by the entire group, and (2) the prediction of future losses with some accuracy based on the law of large numbers. (The law of large numbers implies that predicting losses is easier when many individuals are involved. For example, if a coin is flipped only once, you do not know whether the results will be a head or a tail. But if the coin is flipped 1,000 times, the result will be very close to 500 heads and 500 tails. Thus, you cannot predict the results of a single toss with any confidence, but you can predict the aggregate results if you have a large pool of tosses.)

2. *Payment only for random losses.* A *random loss* is unforeseen, is unexpected, and occurs as a result of chance. Insurance is based on the premise that payments are made only for losses that are random. We discuss the moral hazard problem, in which losses are not random, in a later section.

3. *Risk transfer.* An insurance plan almost always involves *risk transfer*. The sole exception to the element of risk transfer is self-insurance, which occurs when an individual or business does not buy insurance. (Self-insurance is discussed in a later section.) Risk transfer means that the risk is transferred from the insured to the insurer, which typically is in a better financial position to pay the loss than the insured because of the premiums collected. Also, because of the law of large numbers, the insurance company is better able to predict its losses.

4. *Indemnification*. *Indemnification* is the reimbursement of the insured if a loss occurs. Within the context of health insurance, indemnification occurs when the insurer pays, in whole or in part, the insured or the provider for the expenses related to an insured illness or injury.

In summary, we applied these four characteristics to our insurance example: (1) The losses are pooled over 1 million individuals, (2) the losses on each individual are random (unpredictable), (3) the risk of loss is passed to the insurance company, and (4) the insurance company pays for any losses.

Real-World Problems

Insurance works fine when the four basic characteristics are present. However, if any of these characteristics is violated, problems arise. Here are the two most common problems.

Adverse Selection

CRITICAL CONCEPT
Adverse Selection

Adverse selection, in its simplest form, means that individuals most likely to need healthcare services are most likely to buy health insurance. This creates a problem for insurers, because it drives the costs of healthcare for a defined population to higher-than-anticipated levels.

One of the major problems for insurers is **adverse selection**. Adverse selection occurs because those individuals and businesses likely to have losses are more inclined to purchase insurance than those less likely to incur losses. For example, an otherwise healthy individual without insurance who needs a costly surgical procedure is more apt to get health insurance if he or she can afford it, whereas an identical individual without the threat of surgery is less likely to purchase insurance. Similarly, consider the health insurance purchase likelihood of a 20-year-old versus that of a 65-year-old. All else the same, the older individual, with much greater health risk because of age, will probably buy insurance. (Individuals aged 65 or older consume more than three times as many healthcare services as younger individuals do.)

If the tendency toward adverse selection goes unchecked, a disproportionate number of sick people, or those most likely to become sick, will seek health insurance, causing the insurer to experience higher-than-expected claims. This increase in claims will trigger a premium increase, which worsens the problem, because healthier members of the plan will either pursue cheaper rates from another company (if available) or totally forgo insurance.

One way health insurers attempt to control the adverse selection problem is by *underwriting* provisions. Thus, smokers may be charged a higher premium than nonsmokers. Another way is by including preexisting condition clauses in contracts. (A preexisting condition is a physical or mental condition of the insured individual that existed before the issuance of the policy.) A typical clause states that preexisting conditions are not covered until the policy has been in force for some period of time—say, one or two years. Preexisting conditions present a true problem for the health insurance industry because an important characteristic of insurance is randomness. If an individual has a preexisting condition, the insurer no longer bears random risk but rather assumes the role of payer for the treatment of a known condition.

Underwriting
The selection and classification of candidates for insurance.

Because of the tendency of insurers to shy away from large predictable claims, Congress passed the Health Insurance Portability and Accountability Act (HIPAA) in 1996. Among other things, HIPAA sets national standards, which can be modified within limits by the states, regarding what provisions can be included in health insurance policies. For example, under a group health policy—say, one that covers employees of a furniture manufacturer—coverage to individuals cannot be denied or limited, nor can employees be required to pay more if they suffer from poor health.

Although preexisting condition clauses are not banned, there are limits on what counts as a preexisting condition and how long it takes for coverage to begin. Also, time

credit for preexisting conditions under one plan can be credited toward a second plan should the employee change jobs, provided there is no break in coverage.

Finally, health insurance cannot be canceled if the policyholder becomes sick, and if a policyholder leaves the company, he or she has the right to purchase insurance (for a limited time) from the insurer that provided the company's group policy. All in all, the provisions of HIPAA give individuals protection against arbitrary actions by insurers when their health status changes for the worse or when they leave the employer.

Moral Hazard

The fact that insurance is based on the premise that payments are made only for random (unforeseen) losses creates the problem of moral hazard. The most common illustration of **moral hazard** is the owner who deliberately sets a failing business on fire to collect the insurance.

Moral hazard is also present in health insurance, but its form typically is not so dramatic—not too many people are willing to voluntarily sustain injury or illness for the purpose of collecting health insurance benefits. However, undoubtedly some people do purposely use healthcare services that are not medically required. For example, some people who live alone might visit a physician or a walk-in clinic for the social value of human companionship rather than to address a medical necessity.

More importantly, when the full cost or most of the cost of healthcare services is covered by insurance, individuals are more inclined to agree to a $1,000 MRI (magnetic resonance imaging) scan or other high-cost procedure even when its need is questionable. If the same test required total out-of-pocket payment, an individual would probably think carefully before agreeing to such an expensive procedure, unless it is a true medical necessity. The fact that somebody else is paying leads to a greater consumption of healthcare services than would occur if patients bore the full costs.

CRITICAL CONCEPT
Moral Hazard

Moral hazard is the risk to an insurer that excess healthcare services are being consumed because individuals do not bear the full cost of the services provided. For example, a patient may be quick to agree to an expensive test, even though that test is not medically necessary, because most of the cost is covered by insurance. Another illustration is the increased willingness of individuals to take health risks, such as forgoing vaccinations, because they know that the financial cost of getting sick is borne mostly by others.

An even more insidious aspect of moral hazard is the impact of insurance on individual behavior. Individuals are less likely to take preventive actions when the costs of not taking those actions will be borne by insurers. Why worry about getting a flu shot if the monetary costs associated with the treatment are borne by the insurer, or why stop smoking if others will pay for the likely adverse health consequences? The fact that insurance exists causes individuals to forgo preventive actions

and embrace unhealthy behaviors, both of which might be approached differently in the absence of insurance.

Insurers attempt to protect themselves from moral hazard claims by paying less than the full amount of healthcare costs. Making insured individuals bear some of the cost lessens their tendency to consume unneeded services or engage in unhealthy behaviors. One way to do this is to require a *deductible*. Medical policies usually stipulate a dollar amount that must be satisfied before benefits are paid.

Deductible
The dollar amount that must be spent on healthcare services before any benefits are paid by the insurer. For example, $500 per year.

Although deductibles have some positive effect on the moral hazard problem, their primary purpose is to eliminate the payment of a small claim, if that is the only healthcare expense for the year. In such cases, the administrative cost of processing the claim may be larger than the claim itself. To illustrate, a policy may state that the first $500 (or more) of medical expenses incurred each year will be paid by the individual. Once the deductible is met, the insurer will pay all eligible medical expenses (less any copayments and coinsurance) for the remainder of the year.

The primary weapons that insurers have against the moral hazard problem are copays and coinsurance. *Copayment* (or copay) is a fixed amount paid by the patient each time a service is rendered, such as $20 per office visit or $75 for each emergency department visit. *Coinsurance* is the sharing of costs between the patient and insurer, typically on a percentage basis. For example, the patient bears 20 percent of the costs of a hospital stay.

Copayment
A fixed cost to the patient each time a service is rendered. For example, $20 per outpatient visit.

Coinsurance
A sharing of costs between the patient and the insurer. For example, the patient pays 20 percent of the costs of hospitalization.

Copays and coinsurance serve two primary purposes. First, these payments discourage overutilization of healthcare services and hence reduce insurance benefits. Additionally, by being forced to pay some of the costs, insured individuals will presumably seek fewer and more cost-effective treatments and embrace a healthier lifestyle. Second, because insured individuals pay part of the cost, premiums can be reduced. Health insurance premiums (costs) have almost doubled since 2000 and now exceed $12,000 annually for family coverage. Employers, on average, pay about 75 percent of the premium costs. Because of the alarming trend in health premiums, employers are seeking ways to reduce these costs, and one way is to pass more of the costs on to employees through copays and coinsurance.

Some health insurance policies contain out-of-pocket maximums, whereby the insurer pays all covered costs, including coinsurance, after the insured individual pays a certain amount of costs—say, $2,000. Finally, most insurance policies have policy limits; for example, $1 million in total lifetime coverage, $1,500 per year for mental health benefits, or $100 for eyeglasses. These limits are designed to control excessive use of certain services and protect the insurer against catastrophic losses. Of course, a lifetime coverage limit means that patients must bear the risk of catastrophic losses.

High-deductible health plan (HDHP)
A type of health insurance that requires high deductibles but allows insured individuals to set up tax-advantaged savings accounts to pay those deductibles.

Before we move on, we should briefly mention a new type of health insurance that is gaining popularity: *high-deductible health plans (HDHPs)*. An HDHP has a higher annual deductible (more than $2,000 for family coverage) than traditional plans do. But it allows individuals to set up savings accounts for the sole purpose of paying healthcare costs. Furthermore, contributions to such accounts are tax deductible (up to a set limit) and can roll over from year to year. HDHPs are becoming popular with executives and other highly

paid workers because of the tax shelter benefit, but they have not been as widely accepted by blue-collar workers because of the high deductible amount.

Self-Test Questions

1. Briefly explain the concept of health insurance.
2. What is adverse selection, and how do insurers deal with the problem?
3. What is moral hazard, and how do insurers handle it?

3.3 Third-Party Payers

As mentioned earlier, a large proportion of provider revenues does not come directly from patients (the users of healthcare services) but from insurers known collectively as **third-party payers**. Because a healthcare organization's revenues are key to its financial viability, we first discuss the sources of most revenues in the healthcare industry. In the next section, we examine the types of reimbursement methods employed by these payers.

Health insurance originated in Europe in the early 1800s when mutual benefit societies were formed to reduce the financial burden associated with illness or injury. Today, health insurers fall into two broad categories: private insurers and public programs.

CRITICAL CONCEPT
Third-Party Payers

Third-party payers are the insurers that reimburse healthcare organizations and hence are the major source of revenues for most providers. Third-party payers include private insurers, such as Blue Cross and Blue Shield, and public (government) insurers, such as Medicare and Medicaid. Third-party payers use several methods to pay providers, depending on the specific payer (for example, Blue Cross versus Medicare) and the type of service rendered (for example, inpatient versus outpatient).

Private Insurers

In the United States, the concept of public, or government, health insurance is relatively new, while private health insurance has been in existence since the early twentieth century. In this section, we discuss the major private insurers.

Blue Cross and Blue Shield

Blue Cross and Blue Shield organizations trace their roots to the Great Depression, when both hospitals and physicians were concerned about their patients' abilities to pay healthcare bills.

Blue Cross originated as a number of separate insurance programs offered by individual hospitals. At that time, many patients were unable to

pay their hospital bills, but most people, except the poorest, could afford to pay small monthly premiums to purchase some type of hospitalization insurance. Thus, the programs were initially designed to benefit both patients and hospitals.

The programs were all similar in structure: Hospitals agreed to provide a certain number of services to program members who made periodic payments to the hospitals whether services were used or not. In a short time, these programs were expanded from single-hospital programs to community-wide, multihospital plans that were called hospital service plans. The American Hospital Association (AHA) recognized the benefits of such plans to hospitals, so a close relationship was formed between the AHA and the organizations that offered hospital service plans.

In the early years, several states ruled that the sale of hospital services by prepayment did not constitute insurance, so the plans were exempt from regulations governing insurance companies. However, the legal status of hospital service plans clearly would be subject to future scrutiny unless their status was formalized. Thus, the states, one by one, passed legislation that provided for the founding of not-for-profit hospital service corporations that were exempt both from taxes and from the capital requirements (reserves) mandated for other insurers. However, state insurance departments had (and continue to have) oversight over most aspects of the plans' operations. The Blue Cross name was officially adopted by most of these plans in 1939.

Blue Shield plans developed in a manner similar to that of the Blue Cross plans, except that the providers were physicians instead of hospitals and the professional organization was the American Medical Association (AMA) instead of the AHA. Today, 39 Blue Cross/Blue Shield (the Blues) organizations exist, some of which offer only one of the two plans, but most offer both plans. The Blues are organized as independent corporations, but all belong to a single national association that sets the required standards for using the Blue Cross/Blue Shield name. Collectively, the Blues provide healthcare coverage for more than 100 million people in all 50 states, the District of Columbia, and Puerto Rico.

Historically, the Blues have been not-for-profit corporations that enjoyed the full benefits accorded to that status, including freedom from taxes. But in 1986, Congress eliminated the Blues' tax exemption on the grounds that they engaged in commercial-type insurance activities. However, the plans were given special deductions, which resulted in taxes that are generally less than those paid by commercial insurers.

In spite of the 1986 change in tax status, the national association continued to require all Blues to operate entirely as not-for-profit corporations, although they could establish for-profit subsidiaries. In 1994, the national association lifted its traditional ban on member plans becoming investor-owned companies, and several Blues have since converted to for-profit status.

Commercial Insurers

Commercial health insurance traditionally was issued by life insurance and casualty insurance (home and auto) companies. Today, however, most health insurance is provided by companies that exclusively write health insurance. Examples of commercial insurers include

Group policy
A single insurance policy that covers a common group of individuals, such as a company's employees or a professional group's members.

Aetna, Humana, and UnitedHealth Group. Most commercial insurance companies are stockholder-owned, and all are taxable entities.

Commercial insurers moved strongly into health insurance following World War II. At that time, the United Auto Workers (UAW) negotiated the first contract with employers in which fringe benefits were a major part of the contract. Like the Blues, the majority of individuals with commercial health insurance are covered under *group policies* with employee groups, professional and other associations, and labor unions.

Self-Insurers

An argument can be made that all individuals who do not have some form of health insurance are self-insurers, but this is not correct. Self-insurers make a conscious decision to bear the risks associated with healthcare costs and then set aside (or have available) funds to pay for costs they may incur in the future. Individuals, except the very wealthy, are not good candidates for self-insurance because, as discussed earlier, individuals who do not pool risks face much uncertainty in future healthcare costs.

On the other hand, large organizations, especially employers, are good candidates for self-insurance. In fact, most large companies, and many midsized companies, are self-insured. The advantages of self-insurance include the potential to reduce costs (cut out the middleman) and the opportunity to offer plans tailored to meet the unique characteristics of the organization's employees. Organizations that self-insure typically pay an insurance company to administer the plan. For example, employees of the state of Florida are covered by health insurance whose costs are paid directly by the state, but the plan is administered by Blue Cross/Blue Shield of Florida.

Public Insurers

Government is a major insurer and a direct provider of healthcare services. For example, the government provides healthcare services directly to qualifying individuals through the Department of Veterans Affairs (VA), Department of Defense (DOD), and Public Health Service (PHS) medical facilities. In addition, the government either provides or mandates a variety of insurance programs, such as Worker's Compensation and TRICARE (health insurance for military members and families, formerly CHAMPUS). In this section, however, our focus is on the two major government insurance programs: Medicare and Medicaid, which fund roughly one-third of all healthcare services provided in the United States.

Medicare

Medicare was established by Congress in 1965 primarily to provide medical benefits to individuals aged 65 or older. About 50 million people have Medicare coverage, which

pays for about 17 percent of all U.S. healthcare services.

Over the decades, Medicare has evolved to include four major coverages: (1) Part A, which provides hospital and some skilled nursing home coverage; (2) Part B, which covers physician services, ambulatory surgical services, outpatient services, and certain other miscellaneous services; (3) Part C, which is managed care coverage that can be selected in lieu of Parts A and B; and (4) Part D, which covers prescription drugs. In addition, Medicare covers healthcare costs associated with selected disabilities and illnesses (such as kidney failure), regardless of age.

CRITICAL CONCEPT
Medicare

Medicare is a federal health insurance program that primarily covers elderly individuals (those aged 65 or older). It consists of four major parts: Part A covers inpatient services, Part B covers outpatient services, Part C is managed care coverage that replaces Parts A and B, and Part D covers prescription drugs. Medicare is administered by the Centers for Medicare and Medicaid Services, which falls under the U.S. Department of Health and Human Services.

Part A coverage is free to all individuals eligible for Social Security benefits. Elderly individuals who are not eligible for Social Security benefits can obtain Part A medical benefits by paying premiums of $423 per month (for 2008). Part B is optional to all individuals who have Part A coverage, and it requires a monthly premium for most enrollees of between $96.40 and $238.40 (for 2008), depending on income. About 97 percent of Part A participants purchase Part B coverage. Because of deductibles, copays, coinsurance, and coverage limits, Medicare Parts A and B coverage can still require beneficiaries to bear significant out-of-pocket costs. Thus, many Medicare participants purchase additional coverage from private insurers to help cover the "gaps" in Medicare coverage. Such coverage is called *Medigap insurance*.

Medigap insurance
Insurance taken out by Medicare beneficiaries that pays many of the costs not covered by Parts A and B. (It fills in the "gaps.")

Part C coverage is an alternative to coverage under Parts A and B that is offered by private insurance companies but paid for by Medicare. These plans, called *Medicare Advantage plans*, generally provide Parts A and B coverage along with many of the same benefits that a Medigap policy would include, so additional insurance is not required. (Also, some plans include prescription drug [Part D] coverage.) However, because the plans are essentially managed care plans (which we discuss shortly), they typically have more restrictions on access than in standard coverage under Parts A and B. Also, some Medicare Advantage plans charge members a small premium above the amount paid by Medicare.

Medicare Advantage plan
Managed care plan coverage offered to Medicare beneficiaries that replaces Parts A and B coverage.

Part D, which began in 2006, offers prescription drug coverage through plans offered by more than 70 private companies. Each plan may offer somewhat different coverage, so the benefits and costs of Part D coverage vary widely, depending on the plan chosen.

The Medicare program falls under the U.S. Department of Health and Human Services (HHS), which creates the specific rules of the program on the basis of federal legislation. Medicare is administered by an agency in HHS called the *Centers for Medicare and Medicaid Services (CMS)*.

Centers for Medicare and Medicaid Services (CMS)
The federal agency, within the U.S. Department of Health and Human Services, that administers the Medicare and Medicaid programs.

CMS has ten regional offices that oversee the Medicare program and ensure that regulations are followed. Medicare payments to providers are not made directly by CMS but by contractors at the state or local level called intermediaries for Part A payments and carriers for Part B payments.

Medicaid

Medicaid began in 1965 as a modest program jointly funded and operated by the individual states and the federal government. The idea was to provide a medical safety net for low-income mothers and children and for elderly, blind, and disabled individuals.

Congress mandated that state programs, at a minimum, cover hospital and physician care but encouraged states to provide additional benefits either by increasing the range of benefits or extending the program to cover more people. States with large tax bases were quick to expand coverage to many groups, while states with limited revenues were forced to establish more restrictive programs. In addition to state expansions, a mandatory nursing home benefit was added in 1972. As a consequence, Medicaid is now the largest payer of long-term-care benefits and the largest single budget item in many states. In total, Medicaid covers roughly 15 million individuals and pays for about 16 percent of healthcare services in the United States.

CRITICAL CONCEPT
Medicaid

Medicaid is a joint federal–state health insurance program that primarily covers low-income individuals and families. The federal government funds about half of the costs of the program, while the states fund the remainder. Although general guidelines are established by CMS, the program is administered by the individual states. Thus, each state, as long as it follows basic federal guidelines, can set its own rules regarding eligibility, benefits, and provider payments.

Over the years, Medicare and Medicaid have provided access to healthcare services for many low-income individuals who otherwise would have no health insurance coverage. Furthermore, these programs have become an important source of revenue for healthcare providers, especially for nursing homes and other providers that treat large numbers of low-income patients. However, both Medicare and Medicaid expenditures have been growing at an alarming rate, which has forced both federal and state policymakers to search for more cost-effective ways to provide healthcare services.

Self-Test Questions

1. What are the different types of private insurers?
2. Briefly, what are the origins and purpose of Medicare?
3. What is Medicaid, and how is it administered?

3.4 Managed Care Organizations

Managed care organizations (MCOs) strive to combine the provision of healthcare services and the insurance function into a single entity. Typically, MCOs are created by insurers who either directly own a provider network or create one through contractual arrangements with independent providers. Occasionally, however, MCOs are created by integrated delivery systems that establish their own insurance companies.

There are several types of MCOs. Historically, the most common type was the **health maintenance organization (HMO).** HMOs are based on the premise that the traditional insurer–provider relationship creates perverse incentives that reward providers for treating patients' illnesses but offers little incentive for providing prevention and rehabilitation services. By combining the financing and delivery of healthcare services into a single system, HMOs theoretically have as strong an incentive to prevent as to treat illnesses. However, because of their different types of organizational structures, ownership, and financial incentives, HMOs can vary widely in cost and quality.

HMOs use a variety of methods to control costs. These include limiting patients to particular providers, called the *provider panel*, and using *gatekeeper* physicians who must authorize all specialized and referral services. In general, services are not covered if beneficiaries bypass their gatekeeper physician or use providers that are not part of the HMO panel.

The federal Health Maintenance Act of 1973 encouraged the development of HMOs by providing federal funds for HMO-operating grants and loans. In addition, the act required larger employers that offer healthcare benefits to their employees to include an HMO as one alternative, if one was available, in addition to traditional insurance plans.

Although the number and sizes of HMOs grew rapidly during the 1980s and 1990s, since then they have lost some of their luster because healthcare consumers have been unwilling to accept access limitations, even though such limitations might reduce costs. To address consumer concerns and falling enrollments, another type of MCO—the **preferred provider organization (PPO)**—was developed. These organizations, which are not as "tightly" managed as HMOs, combine some of the cost-savings strategies of HMOs with features of traditional health insurance plans.

PPOs do not mandate that beneficiaries use specific providers, although financial incentives are created that encourage members to use providers that are part of the panel, which typically has discounted price contracts with the PPO. Furthermore,

Provider panel
The group of providers—say, doctors and hospitals—that is an integral part of a managed care plan. Services provided outside of the panel may be only partially covered by the plan or not covered at all.

Gatekeeper
A primary care physician who controls specialist and ancillary service referrals. Some managed care plans will only pay for those services approved by the gatekeeper.

CRITICAL CONCEPT
Managed Care Organizations: HMOs and PPOs

Managed care organizations (MCOs) combine insurer and provider functions into a single administrative organization. The idea here is not only to pay for care but also to manage the care provided. MCOs come in different types, and their primary difference is in how "tightly" the care is managed. Health maintenance organizations (HMOs) tend to exercise most control over the types and amount of care provided, while preferred provider organizations (PPOs) tend to be less controlling. In all managed care plans, the goal is to provide only services that are medically required in the lowest cost setting.

PPOs do not require plan members to use preselected gatekeeper physicians. Finally, PPOs are less likely than HMOs to provide preventive services, and they do not assume any responsibility for quality assurance because enrollees are not constrained to use only the PPO panel of providers.

In an effort to achieve the potential cost savings of MCOs, health insurers are now applying managed care strategies, such as preadmission certification, utilization review, and second surgical opinions, to their conventional plans. Thus, the term managed care now describes a continuum of plans, which can vary significantly in their approaches to providing combined insurance and healthcare services. The common feature in MCOs is that the insurer has a mechanism to control, or at least influence, patients' utilization of healthcare services. Today, most employer-sponsored health coverage is provided by some type of MCO.

Self-Test Questions

1. What is meant by the term "managed care organization (MCO)"?
2. What are two different types of MCOs?

3.5 Alternative Reimbursement Methods

Regardless of the payer for a particular healthcare service, only a limited number of payment methods are used to reimburse providers. Payment methods fall into two broad classifications: fee-for-service and capitation. In this section, we discuss the most used reimbursement methods.

Fee-for-Service

In fee-for-service payment methods, of which many variations exist, the more services provided, the higher the reimbursement. The three primary **fee-for-service** methods of reimbursement are cost based, charge based, and prospective payment.

Cost-Based

Under cost-based reimbursement, the payer agrees to reimburse the provider for the costs incurred in providing services to the insured population. Cost-based reimbursement is retrospective in the sense that reimbursement is based on what has happened in the past. Cost-based reimbursement is limited to allowable costs, usually defined as costs directly related

to the provision of healthcare services. For all practical purposes, cost-based reimbursement guarantees that a provider's costs will be covered by revenues.

CRITICAL CONCEPT
Fee-for-Service Reimbursement

Under fee-for-service reimbursement, healthcare organizations are paid on the basis of the amount of services provided. A "service" can be defined several ways. For example, a physician may be paid for each procedure performed, such as an office visit or the reading of CT scan. A hospital may be reimbursed for costs incurred, for each admission, or perhaps for each patient day. A clinical laboratory may be paid for each test performed. Regardless of the specific definition of a service, in fee-for-service reimbursement the greater the amount of services provided, the greater the revenues. Thus, the risk of utilization uncertainty is borne by the insurer rather than by the provider.

Charge-Based

When payers pay billed charges, they pay according to a rate schedule, called a *chargemaster*, established by the provider. To a certain extent, this reimbursement system places payers at the mercy of providers, especially in markets where competition is limited. In the very early days of health insurance, all payers reimbursed providers on the basis of charges. Now, the trend is toward other, less-generous reimbursement methods, and the only payers that are expected to pay the full amount of charges are self-pay (private-pay) patients. Even then, low-income uninsured patients often are given discounts from charges.

Most insurers that still base reimbursement on charges now pay negotiated, or discounted, charges. Insurers with managed care plans, as well as conventional insurers, often have bargaining power because of the large number of patients they bring to a provider, so they can negotiate discounts that generally range from 20 percent to 50 percent (or more) of charges. The effect of these discounts is to create a system similar to hotel or airline pricing, where few people pay the listed rates (rack rates or full fares). Many people argue that chargemaster prices have become meaningless, and hence the entire concept should be abandoned. But old habits die hard, and chargemaster prices still play a role in some reimbursement methods, so we expect that they will be around for some time.

Chargemaster
A provider's official list of charges (prices) for supplies and services rendered.

Prospective Payment

In a *prospective payment* system, the rates paid by payers are determined by the payer before the services are provided. Furthermore, payments are not directly related to either costs or charges. Here are the common units of payment used in prospective payment systems:

- *Per procedure.* Under per procedure reimbursement, a separate payment is made for each procedure performed on a patient. Because of the high administrative costs associated with this method when applied to complex diagnoses, per procedure reimbursement is primarily used in outpatient settings.

Prospective payment
A reimbursement system meant to cover expected costs as opposed to historical (retrospective) costs.

- *Per diagnosis.* In the per diagnosis reimbursement method, the provider is paid a rate that depends on the patient's diagnosis. Diagnoses that require higher resource utilization, and hence are more costly to treat, have higher reimbursement rates. Medicare pioneered this basis of payment in its diagnosis-related group system, which it first used for hospital inpatient reimbursement in 1983. (See the Industry Practice box for examples of per procedure and per diagnosis reimbursement.)

- *Per day (per diem).* Some insurers reimburse institutional providers, such as hospitals and nursing homes, on a per day (per diem) basis. Here, the provider is paid a fixed amount for each day that service is provided. Often, per diem rates are stratified, which means that different rates are applied to different services. For example, a hospital may be paid one rate for a medical/surgical day, a higher rate for a critical care unit day, and yet a different rate for an obstetric day. Stratified per diems recognize that providers incur widely varied daily costs for providing different types of inpatient care.

- *Global reimbursement.* Under global reimbursement, payers pay a single prospective payment that covers all services delivered in a single episode, whether the services are rendered by a single or by multiple providers. For example, a global fee may be set for all obstetric services associated with a pregnancy provided by a single physician, including all prenatal and postnatal visits, as well as the delivery. For another example, a global price may be paid for all physician and hospital services associated with a cardiac bypass operation.

CRITICAL CONCEPT
Capitation

With capitation, providers are paid a set amount on the basis of the number of members (patients) assigned to that provider. Thus, the reimbursement amount is fixed on the basis of the population served, regardless of the amount of services provided to that population. In effect, the provider, rather than the insurer, now faces utilization risk, because higher per member utilization means higher provider costs with no additional revenues. Critics of capitation contend that it creates the incentive to withhold needed services, while proponents argue that it discourages unneeded services and hence reduces costs.

Capitation

As compared to fee-for-service, **capitation** is an entirely different approach to reimbursement. Under capitated reimbursement, the provider is paid a fixed amount per covered life per period (usually a month), regardless of the amount of services provided. For example, a primary care physician might be paid $15 per member per month for handling 100 members of a managed care plan.

Capitation payment, which is used mostly by managed care organizations to reimburse primary care physicians, dramatically changes the financial environment of healthcare providers. Its implications are addressed in the

next section and as needed in the remainder of this book. (For additional information about capitation, see Chapter 17, which is available online at ache.org/books/Finance-Fundamentals.)

Pay for Performance

Pay for performance
A reimbursement system that rewards providers for meeting specific goals—for example, patient satisfaction.

Before closing our discussion of reimbursement, we should note that many insurers are now creating reimbursement systems that explicitly reward providers for doing certain things. These reimbursement systems, which are really modified fee-for-service or capitation systems, are called *pay-for-performance (P4P)* systems.

In most P4P reimbursement, insurers pay providers an "extra" amount if certain standards, usually related to quality of care, are met. For example, a primary care practice may receive additional reimbursement if it meets goals, such as 85 percent of female patients older than 50 receiving mammograms or 90 percent of diabetic patients being on medication and having quarterly blood tests. A hospital may also receive additional reimbursement if it falls in the lower 10 percent of hospitals experiencing medical errors and hospital-acquired infections.

The idea here is to create incentives for better quality care, which may cost insurers in the short run but will lead to lower medical costs in the long run. In some pay-for-performance plans, insurers make providers bear the cost of the plan by reducing payments to poor performers and using the savings to make enhanced payments to good performers.

Self-Test Questions

1. What is the major difference between fee-for-service reimbursement and capitation?

2. Briefly explain the following fee-for-service payment methods:
   - Cost-based
   - Charge-based and discounted charges
   - Per procedure
   - Per diagnosis
   - Per diem
   - Global

3. What is pay-for-performance reimbursement?

INDUSTRY PRACTICE How Medicare Pays Providers

Medicare uses different reimbursement methods to pay for hospital services and physician services. In this section, we briefly describe the two methods. Understanding the basics of Medicare reimbursement is critical because many other third-party payers have adopted these or similar systems.

Hospitals

From its inception in 1965 until 1983, Medicare hospital payments for inpatients were based on a retrospective system that reimbursed hospitals for all reasonable costs. However, in an attempt to curb Medicare spending, Congress established a new reimbursement system for hospitals in 1983 called the inpatient prospective payment system (inpatient PPS or IPPS). Under the IPPS, a single payment for each inpatient stay covers the cost of routine inpatient care, special care, and ancillary services. The amount of the prospective payment is based on the patient's diagnosis-related group (DRG) assigned at discharge.

The starting point in determining the amount of reimbursement is the DRG itself. Potential patient diagnoses have been divided into 334 base DRGs (base diagnoses). Then, these base diagnoses are split into subgroups on the basis of complications or comorbidities. (A comorbidity is the presence of one or more diseases or disorders in addition to the primary diagnosis.) In all, there are 745 total MS-DRGs, where MS stands for Medicare Severity.

To illustrate, consider the MS-DRGs for heart failure. DRG 293 is the base DRG (no complications or comorbidities [CC]), while DRG 292 is with CC and DRG 291 is with major CC. Each MS-DRG is assigned a relative weight that represents the average resources consumed in treating that particular diagnosis relative to resources consumed in treating an average diagnosis, and the greater the weight, the greater the reimbursement amount. The weights and sample payment amounts for the three heart failure DRGs are as follows:

MS-DRG	Weight	Payment
293	0.8765	$4,351
292	1.0134	5,030
291	1.2585	6,247

INDUSTRY PRACTICE How Medicare Pays Providers

As can be seen from the data, the DRG with no CC (293) has a lower weight than the one with CC (292), which has a lower weight than the one with major CC (291). In fact, the amount of hospital resources consumed to treat a patient with DRG 293 (basic heart failure) is less than that required to treat an average inpatient because the weight is less than 1.0. An inpatient diagnosed with heart failure with CC (DRG 292) is about average in resource consumption, while a heart failure patient with major CC (DRG 291) uses roughly 25 percent more resources than the average inpatient.

The translation from DRG weight to payment amount (the actual reimbursement) depends on several factors, such as hospital location and teaching status, and hence is somewhat complex. In essence, the DRG weight is multiplied by an adjusted base rate (dollar amount) that incorporates several factors unique to the hospital and its geographic location. In the table above, we show representative payment amounts calculated using an adjusted base rate of $4,964. For example, the reimbursement for a typical hospital for DRG 292 would be 1.0134 x $4,964 = $5,030. The bottom line is that the greater the amount of resources needed to treat the diagnosis, the greater the DRG weight and reimbursement amount.

Note that the single DRG payment reimburses the hospital for all inpatient costs. To provide some cushion for the high costs associated with severely ill patients within each diagnosis, Medicare includes a provision for outlier payments. Outliers are classified into two categories: (1) length of stay (LOS) outliers and (2) cost outliers. Medicare will make additional payments when a patient's LOS or cost exceeds established cutoff points. Such payments are designed to compensate hospitals for treating patients that consume resources that fall outside of normal bounds.

Also, note that hospital outpatient visits are reimbursed on a prospective payment system that is similar in concept, but different in structure, to the inpatient MS-DRG system. The outpatient prospective payment system (OPPS) categorizes outpatient visits into groups called Ambulatory Payment Classifications (APCs), which are similar clinically and in the amount of resources consumed. Like MS-DRGs, each APC has a weight that is multiplied by a hospital-specific payment rate to obtain the reimbursement amount.

(Continued)

INDUSTRY PRACTICE How Medicare Pays Providers

Physicians

Through 1991, Medicare reimbursement for physicians was based on the concept of reasonable charges. In essence, Medicare defined a reasonable charge as the lowest of (1) the actual charge for the service performed, (2) the physician's customary charge, or (3) the prevailing charge for that service in the community.

However, Medicare changed its physician payment system in 1992 to a resource-based relative value scale (RBRVS) system. Under RBRVS, reimbursement is based on three resource components: (1) physician work, (2) practice (overhead) expense, and (3) malpractice insurance expense. Each of roughly 8,000 procedure codes have relative value units (RVUs) assigned for the three resource components, which, after adjustment for geographic cost differentials, are summed to get the total number of RVUs per procedure performed. The total RVUs are then multiplied by a conversion factor that equals the dollar value of one unit to get the dollar reimbursement amount.

For example, consider code 99213, which is one category of office visit. The physician work RVU is 0.92, the practice expense RVU is 0.72, and the malpractice insurance RVU is 0.03. For a physician practicing in Marco Island, Florida, the adjusted RVU values are 0.92, 0.67, and 0.04, respectively. (The overhead costs associated with a practice in Marco Island are slightly less than the national average, but malpractice insurance is slightly more.) The 2008 Medicare conversion factor is $38.09, so the Medicare reimbursement amount would be (0.92 + 0.67 + 0.04) x $38.09 = 1.63 x $38.09 = $62.09.

Like Medicare's MS-DRG system for inpatients, the more complicated the patient treatment, the greater the reimbursement amount. However, because the codes used for physician reimbursement are specific to the services rendered, no provisions for outlier payments are given to physicians. Later in this chapter, we explain medical coding, which is the starting point for most reimbursement methods.

3.6 The Impact of Reimbursement on Financial Incentives and Risks

Different methods of reimbursement create different incentives and risks for providers. In this section, we briefly discuss these issues.

Provider Incentives

Providers, like individuals or other businesses, react to the incentives created by the financial environment. For example, individuals can deduct mortgage interest from income for tax purposes, but they cannot deduct interest payments on personal loans. Loan companies have responded by offering home equity loans that are a type of second mortgage. The intent is not that such loans would be used to finance home ownership, as the tax laws assumed, but that the funds would be used for other purposes, including paying for vacations and purchasing cars or appliances. In this situation, tax laws created incentives for consumers to have mortgage debt rather than personal debt, and the mortgage loan industry responded accordingly.

In the same vein, alternative reimbursement methods have an impact on provider behavior. Under cost-based reimbursement, providers are issued a "blank check" to acquire facilities and equipment and incur operating costs. If payers reimburse providers for all service-related costs, the incentive is to incur such costs. Facilities will be lavish and conveniently located, and staff will be available to ensure that patients are given red-carpet treatment. Furthermore, services that are not required will be provided because more services lead to higher costs, which lead to higher revenues.

Under charge-based reimbursement, providers have the incentive to set high prices and offer more services. However, in competitive markets, there will be a constraint on prices. Still, to the extent that insurers, rather than patients, are footing the bill, considerable leeway exists. Also, because reimbursement based on charges is a fee-for-service type of reimbursement, a strong incentive exists to provide the highest possible amount of services. In essence, providers can increase utilization, and hence revenues, by creating more visits, ordering more tests, extending inpatient stays, and so on. Although charge-based reimbursement does encourage providers to contain costs, the incentive is weak because charges can be more easily increased than costs can be decreased. In recent years, the ability of providers to increase revenues by raising charges has been greatly offset by insurers through negotiated discounts, which place additional pressure on profitability and hence sweeten the incentive for providers to reduce costs.

Under prospective payment reimbursement, provider incentives are altered. First, under per procedure reimbursement, the profitability of individual procedures will vary depending on the relationship between the actual costs incurred and the payment for that procedure. In other words, because of inconsistencies in reimbursement, some procedures are more profitable than others. Providers, typically physicians, have the incentive to perform procedures that have the highest profit potential. Furthermore, the more procedures performed the better because each procedure typically generates additional profit.

The incentives under per diagnosis reimbursement are similar. Providers, usually hospitals, will seek patients with diagnoses that have the greatest profit potential and discourage (or even discontinue) services that have the least potential. (Why, in recent years, have so many hospitals created cardiac care centers?)

Bundling
The payment of a single amount for several procedures. When reimbursement is unbundled, separate amounts are paid for each procedure.

In all prospective payment methods, providers have the incentive to reduce costs because the amount of reimbursement is fixed and independent of the costs actually incurred. For example, when hospitals are paid under per diagnosis reimbursement, they have the incentive to reduce length of stay and hence costs. Note, however, when per diem reimbursement is used, hospitals have an incentive to increase length of stay. Because the early days of a hospitalization typically are more costly than the later days, the later days are more profitable. However, as mentioned previously, hospitals have the incentive to reduce costs during each day of a patient stay.

Under global reimbursement, providers do not have the opportunity to be reimbursed for a series of separate services. For example, a physician's treatment of a fracture could be *bundled*, and hence billed as one episode, or it could be unbundled with separate bills submitted for making the diagnosis, taking the x-rays, setting the fracture, removing the cast, and so on. The rationale for unbundling is usually to provide more detailed records of treatments rendered, but often the result is higher total charges for the parts than would be charged for the entire package under global payment.

Also, global reimbursement, when applied to multiple providers for a single episode of care, forces involved providers (physicians and hospitals) to jointly offer the most cost-effective treatment. Such a joint view of cost containment may be more effective than each provider separately attempting to minimize its treatment costs because the actions of one provider to lower costs could increase the costs of the other provider.

Finally, capitation reimbursement totally changes the playing field by completely reversing the actions that providers must take to ensure financial success. Under all fee-for-service methods, the key to provider success is to work harder, increase the amount of services provided (utilization) and hence maximize profits. Under capitation, the key to profitability is to work smarter and decrease utilization.

As with prospective payment, capitated providers have the incentive to lower the cost of the services provided, but now they also have the incentive to reduce the amount of services provided. Thus, only those procedures that are truly medically necessary should be performed, and treatment should take place in the lowest cost setting that can provide the appropriate quality of care. Furthermore, providers have the incentive to promote health, rather than just treat illness and injury, because a healthier population consumes fewer healthcare services.

Provider Risks

One key issue providers contend with is the impact of various reimbursement methods on financial risk. We can think of financial risk in terms of the effect that the reimbursement methods have on profit uncertainty—the greater the uncertainty in profitability (and hence the greater the chance of losing money), the higher the risk.

Cost- and charge-based reimbursements are the least risky for providers because payers more or less ensure that provider costs are covered, and hence profits will be earned.

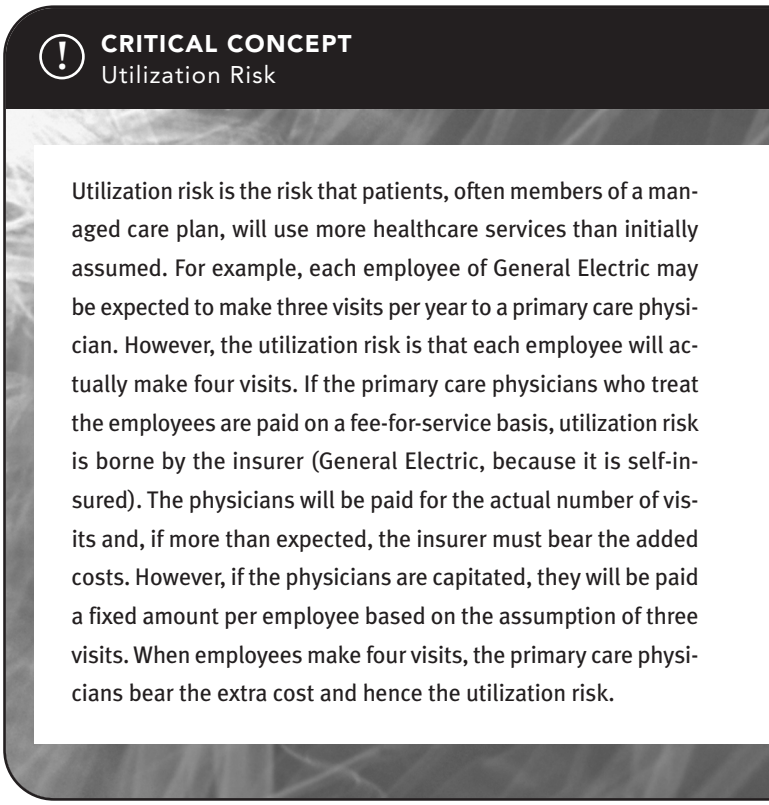
In cost-based systems, costs are automatically covered. In charge-based systems, providers typically can set charges high enough to ensure that costs are covered, although discounts introduce some uncertainty into the reimbursement process.

In all reimbursement methods, except cost-based, providers bear the cost-of-service risk in the sense that costs can exceed revenues. However, a primary difference among the reimbursement types is the ability of the provider to influence the revenue–cost relationship. If providers set charge rates for each type of service provided, they can most easily ensure that revenues exceed costs. Furthermore, if providers have the power to set rates above those that would exist in a truly competitive market, charge-based reimbursement could result in higher profits than cost-based reimbursement can realize.

Prospective payment creates additional risk for providers. In essence, payers are setting reimbursement rates on the basis of what they believe to be sufficient. If the payments are set too low, providers cannot make money on their services without sacrificing quality. Today, many hospitals and physicians believe that Medicare and Medicaid reimbursement rates are too low. Thus, the only way to survive is to recoup these losses from privately insured patients or stop treating government-insured patients, which for many providers would take away more than half of their revenues. Whether or not government reimbursement is too low is open to debate. Still, prospective payment can place significant risk on providers.

Under capitation, providers assume **utilization risk** along with the risks assumed under the other reimbursement methods. The assumption of utilization risk has traditionally been an insurance, rather than a provider, function. In the traditional fee-for-service system, the financial risk of providing healthcare services is shared between providers and insurers: If costs are too high, providers suffer; if too many services are consumed, insurers suffer. Capitation, however, places both cost and utilization risk on providers.

When provider risk under different reimbursement methods is discussed in this descriptive fashion, an easy conclusion to make is that capitation is by far the riskiest to providers, while cost- and charge-based reimbursement are by far the least risky. Although this conclusion is not a bad starting point for analysis, financial risk is a complex subject, and we have just scratched its surface. For now, keep in mind that different payers use



CRITICAL CONCEPT
Utilization Risk

Utilization risk is the risk that patients, often members of a managed care plan, will use more healthcare services than initially assumed. For example, each employee of General Electric may be expected to make three visits per year to a primary care physician. However, the utilization risk is that each employee will actually make four visits. If the primary care physicians who treat the employees are paid on a fee-for-service basis, utilization risk is borne by the insurer (General Electric, because it is self-insured). The physicians will be paid for the actual number of visits and, if more than expected, the insurer must bear the added costs. However, if the physicians are capitated, they will be paid a fixed amount per employee based on the assumption of three visits. When employees make four visits, the primary care physicians bear the extra cost and hence the utilization risk.

differing reimbursement methods. Thus, providers can face conflicting incentives and differing risk, depending on the predominant method of reimbursement.

In closing, note that all prospective payment methods create financial risk for providers. This assumption of risk does not mean that providers should avoid such reimbursement methods; indeed, refusing to accept contracts with prospective payment provisions would be organizational suicide for most providers. However, providers must understand the risks involved in prospective payment arrangements, especially the effect on profitability, and make every effort to negotiate a level of payment that is consistent with the risk incurred.

Self-Test Questions

1. What provider incentives are created under (a) cost-based reimbursement, (b) prospective payment, and (c) capitation?
2. Which of the three payment methods listed in Question 1 carries the least risk for providers? The most risk? Explain your answer.

3.7 Coding: The Foundation of Fee-for-Service Reimbursement

In practice, the basis for most fee-for-service reimbursement is the patient's diagnosis (in the case of hospitals) or the procedures performed on the patient (in the case of physicians). Clinicians indicate diagnoses and procedures by codes, so a brief background on clinical coding will help your understanding of reimbursement. (See the Industry Practice box for a description of Medicare reimbursement methods for hospitals and physicians.)

ICD codes
International Classification of Diseases (ICD) codes are used by hospitals and other organizations to specify patient diagnoses.

Diagnosis Codes

The International Classification of Diseases (most commonly known by the abbreviation ICD) has become the standard for designating diseases and a wide variety of signs, symptoms, and external causes of injury. Published by the World Health Organization, *ICD codes* are used internationally to record many types of health events, including hospital inpatient stays and death certificates. (The first use of ICD codes, in 1893, was to report death statistics.)

The codes are periodically revised, with the most recent version being ICD-10. However, U.S. hospitals are still using a modified version of the 9th revision, called ICD-9-CM, where CM stands for Clinical Modification. (It is expected that conversion to ICD-10 codes will occur in 2013.) The ICD-9 codes consist of 3, 4, or 5 digits, with the first 3 digits being the disease category and the 4th and 5th digits providing additional information. For example, code 410 describes an acute myocardial infarction (heart attack), while code 410.1 is an attack involving the anterior wall of the heart.

In practice, the application of ICD codes to diagnoses is complicated and technical. Hospital coders have to understand both the coding system and the medical terminology and abbreviations used by clinicians. Because of its complexity, and the fact that proper coding can mean higher reimbursement from third-party payers, ICD coders require a great deal of training and experience to be most effective.

Procedure Codes

CPT codes
Current procedural terminology (CPT) codes are used by clinicians to specify procedures performed on patients.

While ICD codes are used to specify diseases, Current Procedural Terminology (CPT) codes are used to specify medical procedures (treatments). *CPT codes* were developed and are copyrighted by the American Medical Association. The purpose of CPT is to create a uniform language (set of descriptive terms and codes) that accurately describes medical, surgical, and diagnostic procedures. CPT terminology and codes are revised periodically to reflect current trends in clinical treatments. The Health Insurance Portability and Accountability Act (HIPAA) of 1996, in an attempt to increase standardization and the use of electronic medical records, requires that CPT be used for the coding and transfer of healthcare information by physicians and other clinical providers, including laboratory and diagnostic services. (HIPAA also requires that ICD-9-CM codes be used for hospital inpatient services.)

To illustrate CPT codes, there are ten codes for physician office visits. Five of the codes apply to new patients, and the other five apply to established patients (repeat visits). The differences among the five codes in each category are based on the level of complexity of the visit as indicated by three components: (1) extent of patient history review, (2) extent of examination, and (3) difficulty of medical decision making. For repeat patients, the least complex (typically shortest) office visit has the code 99211, while the most complex (typically longest) has the code 99215.

Although not as complex as the ICD codes, CPT codes still require coders to have a high level of training and experience to do the job correctly. As in ICD coding, correct CPT coding ensures correct reimbursement. Coding is so important that many businesses offer services, such as books, software, education, and consulting, to hospitals and medical practices to improve coding efficiency.

Self-Test Questions

1. Briefly describe the coding system used at hospitals (ICD codes) and medical practices (CPT codes).
2. What is the link between coding and reimbursement?

Theme Wrap-Up Revenue Sources

Just hired to be Big Sky's practice manager and now learning the workings of the practice, Jen decided to first focus on the practice's revenues. Specifically, she wanted to answer two questions to better identify what steps might be taken to increase revenues and reduce the riskiness associated with those revenues: (1) where does Big Sky's revenue come from? (2) what methods do the payers use to determine the payment amount?

After reviewing Big Sky's revenue records, Jen found the following payer mix:

Commercial:	
Fee-for-service	37%
Managed care	15
Total	52%
Government:	
Medicare	29%
Medicaid	8
Total	37%
Miscellaneous:	
Self-pay	6%
Other	5
Total	11%
Total	100%

The largest category of payer for the practice is commercial insurance, with a total of 52 percent of revenues. (Note that commercial revenues include Blue Shield.) Of the commercial patients, 37 percent are enrolled in fee-for-service plans, while 15 percent are enrolled in managed care plans. Next largest is government programs (Medicare and Medicaid) with 37 percent, followed by self-pay with 6 percent and other sources at 5 percent. (Other sources consist of Workers' Compensation and other government programs, a small amount of charity care, and about 2 percent bad debt losses. Bad debt losses arise when patients who have the ability to pay fail to do so.) Although not shown in the table, 5 percent of Big Sky's revenues come from capitated contracts, while the remaining 95 percent are on a fee-for-service basis.

This payer mix should present few problems for Big Sky. In general, commercial insurers are considered to be more generous than government programs, so the revenue stream should be adequate and not overly dependent on payments influenced by political decisions. Also, bad debt losses appear not to be a major concern for the practice.

Because Big Sky's revenue stream is mostly fee-for-service, the physicians have an overall incentive to increase production—that is, to perform more procedures and hence increase revenues. However, the incentive for capitated patients (which make up 5 percent of revenues) is to provide only the services that are absolutely needed. Do the physicians know which patients are fee-for-service and which are capitated? You bet! Although capitated revenues provide a steady stream of monthly payments to the practice, they bring with them utilization risk. However, with only a small percentage of capitated revenues, this risk is minimal.

All in all, Big Sky's revenue stream appears sound, with no significant negatives. That's the good news for Jen. The bad news is that now she must tackle an issue that is potentially more difficult to deal with: examining Big Sky's costs and balancing them against the revenue stream.

Key Concepts

This chapter explores the insurance function, the third-party-payer system, and reimbursement methods. Here are the key concepts:

- Health insurance is widely used in the United States because individuals are *risk averse* and insurers can spread the financial risk over a large population.
- *Adverse selection* occurs when individuals most likely to have claims purchase insurance, while those least likely to have claims do not.
- *Moral hazard* occurs when an insured individual purposely sustains a loss, as opposed to a random loss. In a health insurance setting, moral hazard is more subtle, producing such behaviors as seeking more services than needed and engaging in unhealthy behavior because the potential costs are borne by someone else.
- Insurers are classified as either private or public (governmental). The major private insurers are *Blue Cross and Blue Shield*, *commercial insurers*, and *self-insurers*.
- The government is a major insurer and direct provider of healthcare services. The two major forms of government health insurance are *Medicare* and *Medicaid*.

- When payers pay *billed charges*, they pay according to the schedule of charge rates established by the provider in its *chargemaster*.

- *Negotiated charges*, which are *discounted* from billed (chargemaster) charges, are often used by insurers in conjunction with managed care plans.

- Under a *retrospective cost* system, the payer agrees to pay the provider certain allowable costs that are incurred in providing services to the payer's enrollees.

- In a *prospective payment system*, the rates are determined in advance and are not tied directly to either reimbursable costs or billed charges. Typically, prospective payments are made on the basis of the following service definitions: (1) *per procedure*, (2) *per diagnosis*, (3) *per diem* (per day), or (4) *global reimbursement*.

- In 1983, the federal government adopted the *inpatient prospective payment system (IPPS)* for Medicare hospital inpatient reimbursement. Under this system, the amount of payment is fixed by the patient's diagnosis, as indicated by the *diagnosis-related group (DRG)*.

- Physicians are reimbursed by Medicare using the *resource-based relative value scale (RBRVS)* system. Under RBRVS, reimbursement is based on three resource components: (1) *physician work*, (2) *practice (overhead) expenses*, and (3) *malpractice insurance*.

- *International Classification of Diseases* (most commonly known by the abbreviation *ICD*) codes are used for designating diseases plus a wide variety of signs, symptoms, and external causes of injury.

- *Current Procedural Terminology (CPT)* codes are used to specify medical procedures (treatments).

The information in this chapter plays a vital role in financial decision making in heathcare organizations. Thus, we will use it over and over in future chapters.

End-of-Chapter Questions

3.1 Briefly describe the major third-party payers.

3.2 a. What are the primary characteristics of managed care organizations (MCOs)?
b. Describe two different types of MCOs.

3.3 What is the difference between fee-for-service reimbursement and capitation?

3.4 What is pay for performance?

3.5 Describe provider incentives and risks under each of the following reimbursement methods:
a. Cost-based
b. Charge-based, including discounted charges
c. Prospective payment
d. Capitation

3.6 Briefly describe the coding systems for diseases (diagnoses) and procedures.

3.7 How does Medicare reimburse hospitals for inpatient stays?

3.8 How does Medicare reimburse physician services?