Principles of Healthcare Reimbursement

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The authors wish to thank
Eleanor Ann Joseph, MPA, RHIA, CHP, CPHQ, CCS, CCS-P, CPC,
and Leona Thomas, MHS, RHIA,
who served as external reviewers of the text
and provided excellent suggestions for its improvement.
I have taught healthcare financial management to graduate students for thirty years and have always believed that the critical area of understanding was reimbursement. When I first started teaching, the primary—perhaps exclusive—focus was on hospitals, but that has changed. Financing and organizational patterns have shifted over time to create large healthcare firms in other sectors, such as medical groups, nursing facilities, imaging centers, surgery centers, home health firms, and many others. The primary focal point of difference between healthcare firms and businesses in other industries is still, however, payment. Healthcare firms are very unique in the manner in which they receive compensation for the services that they provide. I could not find any other industry that had as complex a revenue function as healthcare firms when I started teaching thirty years ago, and that statement is still true today. In fact, the level of complexity for healthcare firms has increased exponentially over the last thirty years.

Noting that the revenue function, or reimbursement, is complex for a healthcare firm does not explain why this is critical. Let’s examine the very basis of management in any business. Simply stated, management must control the difference between revenue and cost, which we define as profit. It makes little difference whether the firm is a taxable or tax-exempt entity. Viable businesses must manage that profit function. Although there are clearly differences in cost functions between healthcare firms and firms in other industrial sectors, the differences are not all that significant. Generic principles for cost management might apply equally in a software firm or a hospital. The revenue function is, however, a completely different manner.

Why is the revenue function so different for healthcare firms compared to other industries? I believe there are at least four reasons. First, the vast majority of payment is not actually paid by the client (patient), but rather by a third party on behalf of the patient. Second, the level of payment for a set of identical services may vary dramatically based upon the actual third party payer. Third, the actual determination of payment for a specific third party payer is often complex, based upon preestablished or negotiated rules of payment that are frequently related to the codes entered upon a patient’s bill or claim. Fourth, the government is often the largest single payer and does not negotiate payment but simply defines the rules for payment upon which it will render compensation for services provided to its beneficiaries.

To get a partial view of the complexity of reimbursement in the healthcare industry, let’s describe a typical managed care contract with a hospital. Let’s assume this payer pays for inpatient services on a per-diem basis, with separate rates for medical and surgical cases. In addition, carve-outs are present for cardiology DRGs. Finally, obstetrics and nursery care services are paid on case rates. To provide some additional risk protection to the hospital, a stop loss provision is also inserted after total

Foreword

by William O. Cleverley, Ph.D.
Professor Emeritus, Ohio State University
charges exceed a certain limit. Outpatient services are paid on a mix of fee schedules and discounted billed charges. Outpatient surgical cases are paid on a fee schedule based upon designated ambulatory surgical groups. Emergency visits are also on a fee schedule, based upon level of service. Other fee schedules exist for specific imaging procedures, and everything else is paid on a discounted, billed-charge basis. Multiply this one payer by 100 to recognize other payers and throw in Medicare and Medicaid payment rules, and you have a nightmare in administration. It may be a nightmare, but it is very real to most healthcare firms; their very financial viability is contingent upon successful management of this complex revenue function.

Coding and billing issues are central to most of the present reimbursement plans. In fact, many healthcare firms can lose substantial sums of money because they are not coding their patients’ claims in an accurate and complete manner. For example, failing to code an additional diagnosis can result in assignment of a lower DRG, and therefore lost revenue. While some healthcare executives may fail to understand the importance of the coding function, it would behoove them to acquire an appreciation of coding because so much of their revenue function is related to what is done by coders. Conversely, many people in health information management may understand the technical side of what they do, but they don’t appreciate their role in the overall financial success of the health firm in which they work.

This background explains why I am so excited about the publication of this book. Anne Casto and Elizabeth Layman have put together a much-needed text on reimbursement that fills a void. I believe that this text is a first. It provides a comprehensive review of the reimbursement world for healthcare firms of multiple types. It also provides very specific material on the actual completion of claims and the rules for final payment determination. Medicare payment provisions are covered in great detail, but the text also includes other payers. It covers payment provisions for hospitals, but it also covers payment for other payers including managed care plans.

I believe this book is a must-read reference for healthcare executives who need a comprehensive reference on payment in the healthcare industry. It will be a fine supplement for healthcare management students who need to know how the firms they will manage will be paid and how coding and billing functions can impact results. It is also a critical text for health information managers and students. It is often easy to lose sight of the forest when you are engaged in tree cutting. This text provides a clear, concise description of the payment landscape for healthcare firms, which will enable health information managers to better integrate their functions into the overall organizational strategic position of the healthcare firms where they work. A large number of specific examples are also provided to help cement conceptual frameworks with operational reality. Another great feature of this text is its explanation of the myriad acronyms and jargon used in the healthcare industry. Short, concise definitions are given for everything from APCs to RBRVS.

This text met and exceeded the three R’s that I use in evaluation. First, the text is very readable and easy to understand. Second, the text is especially relevant to all healthcare managers as they seek to improve financial performance. Third, the text is rich in detail and practical illustrations. This book will occupy a prominent position on my bookshelf and will be a great reference.

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Health information management (HIM) professionals play a critical role in the delivery of healthcare services in the United States. To be fully effective in their roles, however, HIM professionals need an in-depth understanding of healthcare reimbursement systems, reimbursement methodologies, and payment processes throughout the healthcare industry.

*Principles of Healthcare Reimbursement* integrates information about all U.S. healthcare payment systems into one authoritative source. It examines the complex financial systems within today's healthcare environment and provides an understanding of the basics of health insurance and public funding programs, managed care contracting, and how services are paid. Not only does the text provide step-by-step detail about how each payment system functions, but the history behind each is provided. This gives the reader an appreciation for the complexity of reimbursement systems and an understanding of the profound impact they have had on providers and payers, consumers, public policy makers, and the development of classification and information technology systems over the years.

Healthcare leaders and administrators often have to learn about healthcare payment systems on-the-job and on-the-fly. Other texts feature healthcare finance and healthcare economics, but not the bottom-line and nitty-gritty of the healthcare payment systems themselves. This book fills that gap.

Chapter 1, Healthcare Reimbursement Methodologies, introduces and explains the basic concepts and principles of healthcare reimbursement in step-by-step, simple terms. This introduction provides the reader with the solid foundation needed to understand the more detailed and complex discussions that follow in later sections of the book.

Chapter 2, Clinical Coding and Coding Compliance, presents baseline information about today's approved code sets and their functionality and explains the complex interrelationships between reimbursement, coded data, and compliance with the rules and regulations of public and private third party payers.

Chapter 3, Voluntary Healthcare Insurance Plans, explains private or commercial healthcare insurance plans and Blue Cross/Blue Shield plans, and provides the reader with a detailed understanding of the sections of a healthcare insurance policy.

Chapter 4, Government-Sponsored Healthcare Programs, differentiates among the various government-sponsored healthcare programs in effect today, explains the impact that these programs have had on the American healthcare system, and presents the history of Medicare and Medicaid programs in America.

Chapter 5, Managed Care Plans, describes the origins, evolution, and principles of managed care and discusses the numerous types of plans that have emerged through the integration of administrative, financial, and clinical systems to both deliver and finance healthcare services.

Chapter 6, Medicare-Medicaid Prospective Payment Systems (PPSs) for Inpatients, explains common models and policies of payment for inpatient...
Medicare and Medicaid prospective payment systems and defines basic language associated with reimbursement under PPSs in acute care hospitals and inpatient skilled nursing, long-term care, rehabilitation, and psychiatric facilities.

Chapter 7, Ambulatory and Other Medicare-Medicaid Reimbursement Systems, explains common models and policies of payment for Medicare and Medicaid healthcare payment systems for physicians and outpatient settings, which include physician offices, ambulance services, ambulatory surgery centers, hospital outpatient services, and home health agencies.

Chapter 8, Revenue Cycle Management, explains the components of the revenue cycle, defines revenue cycle management, and describes the connection between effective revenue cycle management and providers’ fiscal stability.

A complete glossary of reimbursement terminology is included at the end of the book. Throughout the text chapters, boldface type is used to indicate the first substantial reference to key terms included in the glossary. A detailed content index is also included at the conclusion of the text.

**Notes to educators:**

Each chapter contains “Check Your Understanding” questions for discussion and/or to help the reader in focusing on important points within the text. The answers to these questions are included at the end of the book.

Review quizzes also follow each chapter. The answer key for the review quizzes is available to instructors in online format from the individual book pages in the AHIMA Bookstore or through the Assembly on Education (AOE) Community of Practice (CoP).

Instructors who are AHIMA members can sign up for this private community by clicking on the help icon with the CoP home page and requesting additional information on becoming an AOE CoP member. An instructor who is not an AHIMA member or a member who is not an instructor may contact the publisher at publications@ahima.org. The instructor materials are not available to students enrolled in college or university programs.
Chapter 1
Healthcare Reimbursement Methodologies

Objectives
• To use basic language associated with healthcare reimbursement methodologies
• To differentiate payment methods on unit of payment, timeframe, and risk
• To distinguish major payment methods in the United States

Key Terms
Allowable fee
Block grant
Capitation
Case-based payment
Cases
Charges
Claim
Copayments
CPR
Deductibles
Episode-of-care reimbursement
Fee
Fee schedule
Fee-for-service reimbursement
Global payment method
Guarantors
Insurance
Per-diem payment
Premium
Prospective payment method
Providers
Reimbursement
Resource-based relative value scale
Retrospective payment method
Risk pool
Self-insured plan
Third party payers
Third party payment
UCR
Introduction to Healthcare Reimbursement

The healthcare system of the United States (U.S.) is complex. New payment methods and rules contribute to the complexity. In 1999, this complexity was listed as one of five trends threatening the very future of medicine (Washburn 1999, 34). For example, a physician’s office might have “at least a dozen separate contracts for providing healthcare services” (Washburn 1999, 35). Surely, if “insiders” find the system confusing, “outsiders,” the patients, confront a veritable maze.

Health Insurance

Generally, reimbursement for healthcare services is dependent upon patients having health insurance. Insurance is a system of reducing a person’s exposure to risk of loss by having another party (insurance company or insurer) assume the risk. In healthcare, the risk the healthcare insurance company assumes is the unknown cost of healthcare for a person or group of persons.

However, the insurance company that assumes the risk reduces its own risk by distributing the risk among a larger group of persons (insureds). This group of persons has similar risks of loss and is known as a risk pool. In healthcare, the variability of health statuses across many people allows the healthcare insurance company to make a better estimate of the average costs of healthcare.

The insurance company, though, receives a premium payment in return for assuming the insureds’ exposure to risk of loss. The premium payments for all the insureds in the group are pooled. Insurers use actuarial data to calculate the premiums so that the pool is sufficiently large to pay losses of the entire group. Thus, specific to healthcare, the risk is the potential that a person will get sick or require health services and will incur bills (costs) associated with his or her treatment or services. The premium payments for health insurance are calculated to pay for all the potential covered healthcare costs for an entire group of patients.

Historical Perspectives

Health insurance in the U.S. has been made available to help offset the expenses of the treatment of illness and injury. The first “sickness” clause was inserted in an insurance document in 1847. However, health insurance did not become established until 1929, when Blue Cross first covered school teachers in Texas. In 1932, a city-wide plan was begun in Sacramento, California. As an industry, health insurance became widespread after World War II (Longest, Rakich, and Darr 2000, 89–90).

Health Insurance and Employment

In the U.S. health insurance is usually tied to employment. Many larger employers as part of a package of employment benefits pay a portion of the health insurance premium. Employees may be required to pay extra for health insurance for their spouse or children (dependent coverage). Medicare is also considered insurance because payroll taxes, through both employers’ and employees’ contributions, finance one portion of Medicare coverage. Premiums paid by eligible individuals and matched by the federal government also finance Medicare’s supplemental medical insurance program.

When people lose their jobs, they often lose their health insurance. Although people can continue their health insurance by paying for the insurance entirely by themselves, the payments are expensive, and people can only extend their health insurance for a limited period. Therefore, people without jobs are unlikely to have adequate health insurance.

For some employed people, the adequacy of the health insurance is an issue. Some health insurance plans require patients or their families to pay 20 percent or more of the costs of their healthcare. Healthcare costs can easily be in the thousands of dollars; 20 percent of $10,000 is $2,000—a sizable sum for many people. Other employees work for
employers that do not offer health benefits. These persons must purchase their own insurance, at an extremely high rate, or have no health insurance. Obtaining and retaining adequate health insurance are problems for many U.S. workers.

Compensation for Healthcare
Reimbursement is the healthcare term that refers to the compensation or repayment for healthcare services. Reimbursement is being repaid or compensated for expenses already incurred or, as in the case of healthcare, for services that have already been provided. In healthcare, services are often provided before payment is made. Unlike the car dealership, in which customers pay for a car or arrange a loan before driving the car off the lot, patients walk out of the hospital treated. Therefore, the physicians and clinics must seek to be paid back for services that have already provided and for expenses, such as supplies, that they have already incurred. These physicians, clinics, hospitals, and other healthcare organizations and practitioners are requesting reimbursement for health services.

Third Party Payment
Experts in healthcare finance refer to third party payment or third party payers. Who or what are these parties? The first party is the patient himself or herself or the person, such as a parent, responsible for the patient’s health bill. The second party is the physician, clinic, hospital, nursing home, or other healthcare entity rendering the care. These second parties are often called providers because they provide healthcare. The third party is the uninvolved insurance company or health agency that pays the physician, clinic, or other second party provider for the care or services to the first party (patient).

Characteristics of Reimbursement Methodologies
Three characteristics describe various methods of healthcare reimbursement. These characteristics are the unit of payment, the time orientation, and the degree of financial risk for the parties (Wouters, Bennett, and Leighton 1998, 3). The unit of payment can range from a payment for each service, such as a payment for each laboratory test, to a block payment for an entire population for a period of time, such as a governmental budget transfer to the state health department. The time orientation is retrospective versus prospective. In retrospective payment methods, the payer learns of the costs of the health services after the patient has already received the services. The provider also receives payment after the services have been provided. In a prospective payment method, the payments are preset before care is delivered. Financial risk refers back to the definition of health insurance. When the costs of health services are learned after the care is provided, the third party payer (health insurance entity) is at risk. When providers must project the costs of treating patients into the future and contract to provide all care for those estimated costs, the provider is at risk. Patients assume risk as they must pay higher and higher percentages of the costs as their share.

Types of Healthcare Reimbursement Methodologies
This chapter discusses the fundamental concepts in healthcare reimbursement methodologies. The chapter is organized by the two major types of unit of payment: fee-for-service reimbursement or episode-of-care reimbursement. Also briefly addressed are the other characteristics of healthcare payment methods—time frame and risk. The chapter concludes with a peek into the future of healthcare reimbursement.

Fee-for-Service Reimbursement
Fee-for-service reimbursement is a healthcare payment method in which providers receive payment for each service rendered. Fee-for-service is
a common method of calculating healthcare reimbursement.

A fee is a set amount or a set price. Fee-for-service means a specific payment is made for each specific service provided ("rendered"). In the fee-for-service method, the provider of the healthcare service (the second party) charges a fee for each type of service, and the health insurance company pays each fee for a covered service. These fees or prices are known as charges in healthcare. Sometimes, there is little relationship between the actual costs to provide a service and its charge.

Typically, the physician, healthcare organization, or other practitioner bills for each service provided on a claim that lists the fees or charges for each service. The claim is sent to the third party payer (health insurance company or health agency). In healthcare, sending the claim to the third party payer is known as submitting a claim. Within the stipulations of the health insurance policy (contract) or the governmental regulations, the third party pays the claim. The majority of U.S. physicians use this method of billing.

People who have health insurance that reimburses on the basis of fee-for-service have the advantage of great independence. Their health insurance plans allow them to make almost all health decisions about which physician to see and about which conditions to have treated. The patient or the provider submits a claim to the health insurance company, and, if the service is covered in the health insurance policy, the patient or provider receives reimbursement. For the patient, the disadvantage of fee-for-service is that fee-for-service plans often have higher deductibles or copayments than other types of health insurance, such as managed care plans.

For health insurance plans, fee-for-service has the disadvantage of uncertainty. The costs of reimbursing the providers are unknown because the services that patients will receive are unknown. Moreover, costs will increase if the providers increase the fees for each service, if patients receive more services than expected, and if more expensive services are substituted for less expensive services. Examples of fee-for-service reimbursement are self-pay, retrospective payment, and managed care.

**Self-Pay**

Self-pay is a type of fee-for-service because the patients or their guarantors (responsible persons, such as parents for children) pay a specific amount for each service received. The patients or guarantors make such payments themselves to the providers, such as physicians, clinics, or hospitals, that rendered each service. The patients or guarantors then seek reimbursement from their private health insurance or the governmental agency that covers their health benefits.

As previously discussed, some patients and guarantors do not have health insurance. These patients have not made advanced payments via an insurance premium. For these individuals, self-pay results because they lack health insurance or benefits under governmental health programs.

In self-pay, patients pay for all the costs of their healthcare themselves. Some may seek recompense from a third party payer and others may bear the burden of the costs of their healthcare themselves.

A related concept is the **self-insured plan**. A self-insured plan is one in which the employer eliminates the “middle-man.” The employer administers its own health insurance benefits. Rather than shift the risk to a health insurance entity, the employer (or other entity, such as a professional association) assumes the costs of healthcare for its employees or members and their dependents.

**Traditional Retrospective Payment**

The retrospective payment method of reimbursement pays providers after the services have been rendered. Retrospective reimbursement is a type of fee-for-service because the providers are reimbursed for each service rendered. Third party payers reimburse providers for costs or charges previously incurred. The reimbursement payments are based on the charges for the services provided.
This method has historically been the traditional method of reimbursement.

**Fee Schedules**
In a fee-for-service environment, third party payers establish a fee schedule. A fee schedule is a predetermined list of fees that the third party payer allows for payment for all healthcare services. The allowable fee represents the average or maximum amount the third party payer will reimburse providers for the service.

**Discounted Fee-for-Service Payments**
To begin to control costs, the third party payers negotiated reduced fees for their members or insureds. The payment method using these reduced fees is known as discounted fee-for-service. Versions of the discounted fee-for-service payment method are the UCR, the CPR, and the resource-based relative value scale (RBRVS) (Blount and Waters 2001, 6).

UCR stands for usual, customary, and reasonable. “Usual” is for usual in the provider’s practice; “customary” is for customary in the community; and “reasonable” is for reasonable for the situation. CPR stands for customary, prevailing, and reasonable. The UCR and the CPR were methods of payment within the type of traditional retrospective payment. Both methods were based on data from past claims. Private insurance companies used the UCR method. Medicare prior to the implementation of its current payment methods employed CPR.

Established in 1992, the resource-based relative value scale (RBRVS) is a discounted fee schedule that Medicare uses to reimburse physicians. The RBRVS is a payment method that classifies health services based on the cost of providing physician services in terms of effort, practice expenses (overhead), and malpractice insurance.

**Uncertainty for Third Party Payers**
For third party payers, the retrospective fee-for-service payment method has the disadvantage of great uncertainty. The payers have no way of knowing the total charges that will be incurred and for which they must reimburse the providers.

**Managed Care Methods**
In managed care reimbursement methods (discussed fully in Chapter 5), third party payers “manage” both the costs of healthcare and the outcomes of care. In managed care plans, the third party payer has implemented some provisions to control the costs of healthcare while maintaining quality care.

**Features of Managed Care**
Common features of managed care include:
- Comprehensiveness
- Coordination and planning
- Education of patients and providers
- Assessment of quality
- Control of costs

**Purposes of Managed Care**
The two purposes of the management or control are to (1) reduce the costs of healthcare for which the third party payer must reimburse the providers and (2) ensure continuing quality of care.

Managed care payers have instituted many means to control the costs and quality of healthcare. One example of a provision is the requirement that patients obtain prior approvals for surgeries. Another example is a hybrid of the discounted fee-based system in which the payer reimburses the provider up to a percentage of the allowable fee and the insured must pay the remaining percentage (Koch 2002, 109). Finally, having one primary care provider to coordinate all aspects of healthcare supports the quality of healthcare by reducing fragmentation and enhancing integration.

**Forms of Managed Care**
There are numerous forms of managed care. These forms include health maintenance organizations (HMOs), exclusive provider organizations (EPOs),
point-of-service plans (POSs), and preferred provider organizations (PPOs). One can imagine these forms as a continuum of control with the HMOs representing the most controlled and the PPOs representing the least controlled.

Criticisms of Managed Care
Some critics of managed care argue that managed care too severely limits the following capabilities:

- Patients’ access to care and their freedom to choose healthcare providers
- Providers’ ability to order diagnostic tests and therapeutic procedures

These critics contend that administrators rather than medical and health personnel are making decisions about patients’ health futures.

In general, in a fee-for-service environment, providers are reimbursed for each service they provide. In a fee-for-service environment, the more services a provider renders, the more reimbursement the provider receives. Some experts contend that fee-for-service reimbursement inappropriately inflates the costs of health care because the payment method rewards providers for more services, whether or not these services are warranted.

**Episode-of-Care Reimbursement**
Episode-of-care reimbursement is a healthcare payment method in which providers receive one lump sum for all the services they provide related to a condition or disease. In the episode-of-care payment method, the unit of payment is the episode, not each individual health service. Therefore, the episode-of-care payment method eliminates individual fees or charges. The episode-of-care payment method is an attempt to correct perceived faults in the fee-for-service reimbursement method. Thus, the episode-of-care reimbursement method controls costs on a grand or systematic scale.

An episode of care is the health services that a patient receives:

- For a particular health condition or illness
- During a period of relatively continuous care from a provider

In the episode of care, one amount is set for all the care associated with the condition or illness. Forms of episode-of-care reimbursement are capitation, global payment, and prospective payment.

Occasionally, an episode of care is defined as a specific number of days. The federal government’s payment method for home care services is an example. The per-episode home health payment covers all home care services and nonroutine medical supplies delivered to the patient during a 60-day period.

**Capitated Payment Method**
Capitation is a method of payment for health services in which the third party payer reimburses providers a fixed, per capita amount for a period. “Per capita” means “per head” or “per person.” A common phrase in capitated contracts is “per member per month” (PMPM). The PMPM is the amount of money paid each month for each individual enrolled in the health insurance plan. Capitation is characteristic of health maintenance organizations.

In capitation, the actual volume or intensity of services provided to each patient has no effect on the payment. More services do not increase the payment, nor do fewer services decrease the payment. If the provider contracts with a third party payer to provide services to a group of workers for a capitated rate, the provider receives the payments for each member of the group regardless of whether all the members receive the provider’s services. There are no adjustments for the complexity or extent of the health services.

**Example:**
Z Company has a health insurance plan for its workers and their families through Wellness Health Maintenance Organization (HMO). Wellness HMO has contracted with Dr. T to provide health services (care) to
members of the Z Company group for the capitated rate of $15 per month ($15 PMPM).

Dr. T is under contract to receive $15 per month for every member of the Z group. The members of the Z group total 100. Each month Dr. T receives $1,500 ($15 × 100 members) from Wellness HMO for the Z group. Dr. T receives $1,500 whether no members of the group see him in clinic or all the members of the group see him in clinic. Dr. T receives $1,500 whether all the members receive complex care for cancer or all the members receive simple care for preventive flu shots.

The advantages of capitated payment are that (1) the third party payer has no uncertainty and (2) the provider has a guaranteed customer base. The third party payer knows exactly what the costs of healthcare for the group will be and the providers know that they will have a certain group of customers. However, for the provider, there is also great uncertainty because the patients’ usage of provider services is unknown and the complexity and cost of the services are unknowns.

Global Payment Method

In the global payment method, the third party payer makes one combined payment to cover the services of multiple providers who are treating a single episode of care. Thus, this payment method consolidates payments. A block grant is a fixed amount of money given or allocated for a specific purpose. For example, in a block grant there is a transfer of governmental funds to cover health services. In the global payment method, there is no additional payment for higher volumes of services or more expensive or complex services.

Medicare’s payment system for home health services is an example of a global payment method. Various types of home health services are consolidated into the single payment. These services include all speech therapy, physical therapy, and occupational therapy; skilled nursing visits; home health aide visits; medical social services, and nonroutine medical supplies.

The most comprehensive version of the global payment system is the total-episode-of-care. For an episode of care, the total-episode-of-care payment rate is a single price that covers costs across the continuum of care, which could include all of the following:

- Facility costs across the continuum of care, such as hospital, nursing home, clinic, and outpatient rehabilitation
- Technical and professional components of procedures in radiology, pathology, and the laboratory
- Physician professional fees for anesthesia, surgery, and consultation
- Home care costs

Less comprehensive versions of the global payment method exist. For example, some global payment methods include only ambulatory costs or only inpatient costs. These methods are termed ambulatory-episode-of-care and inpatient-episode-of-care, respectively. Another less comprehensive version is a global surgical package. The global surgical package encompasses the operation, local or topical anesthesia, a preoperative clinic visit, immediate postoperative care, and usual postoperative follow-up. In the special-procedure package, all the costs associated with a diagnostic or therapeutic procedure are included in the payment. Examples include extracorporeal shock wave lithotripsy and vasectomy. An ambulatory-visit package includes all ambulatory services, including the physicians’ charges, laboratory tests, x-rays, and other ambulatory services associated with one clinic visit. The per-episode home health payment is also a less comprehensive global payment rate. The single payment covers all home care services and nonroutine medical supplies that a patient receives during a 60-day period.

As can be seen, third party payers and providers have created multiple variations of the global
payment method. The multiple variations, however, have added to the complexity of healthcare reimbursement.

**Prospective Payment Methods**

In the **prospective payment method**, payment rates for healthcare services are established in advance for a specific time period. The predetermined rates are based on average levels of resource use for certain types of healthcare. It is important to note that prospective payment methods are based upon averages. On individual patients, providers can lose money or make money, but, over time, providers should come out even. Payment is determined by the resource needs of the average patient for a (a) set period of time or (b) given set of conditions or diseases. Prospective payment methods representing these two situations are **per-diem payment** and **case-based payment**, respectively.

Providers are paid the pre-established rates regardless of the costs they actually incur. Therefore, prospective payment is another method in which the actual number or intensity of the services does not affect a pre-established compensation. The intent of prospective payment methods is to reduce the likelihood that charges or costs will increase because limits on payments are pre-set for the future time period.

**Per-Diem Payment**

Per diem or per day (daily rate) is a limited type of prospective payment method. The third party payer reimburses the provider a fixed rate for each day a covered member is hospitalized. The Indian Health Service and some supplemental health insurance plans use per-diem methods. Traditionally, the per-diem payment method has been used to reimburse providers for inpatient hospital services.

Third party payers set the per-diem rates using historical data. For example, to establish an inpatient per diem, the total costs for all inpatient services for a population during a period are divided by the sum of the lengths of stay in the period. To determine the payment, the per-diem rate is multiplied by the number of days of hospitalization. In the absence of historical data, third party payers and providers must consider several factors to establish per-diem rates. These factors include costs, lengths of stay, volumes of service, and patients’ severity of illness.

Critics of the per-diem payment method contend that the method encourages providers to increase the number of inpatient admissions, to extend the lengths of stay, or both. These strategies would result in increased reimbursements. Another prospective payment method, case-based reimbursement, corrects the flaws perceived in the per-diem payment method.

**Case-Based Payment**

In the case-based payment method, providers receive a fixed, preestablished payment for each case. **Cases** are patients, residents, or clients who receive health services for a condition or disease. Third party payers reimburse providers for each case rather than for each service (fee-for-service) or per diem.

**Example:**

Two patients were hospitalized with pneumonia. One patient was hospitalized for three days and the other patient was hospitalized for thirty days. Each patient is a case. The third party payer has established a payment rate for cases with pneumonia. The hospital would receive two payments, exactly the same, for the two cases.

The payment is determined by the historical resource needs of the average patient for a given set of conditions or diseases. Case-based payment can be one flat rate per case or can be multiple rates that represent categories of cases (sets of conditions or diseases).

An example of the case-based payment system built on categories of cases is Medicare’s method of payment for inpatient hospital services (prospective payment system; PPS). This method of payment is based on categories of payment called “diagnosis related groups” (DRGs). Each DRG categorizes patients who are homogeneous in terms of clinical profiles and requisite resources. Thus, patients classified to the same group have
similar diagnoses and treatments, consumption of resources, and lengths of stay. Each DRG has a payment rate called a “weight.” Weights are relative to one another. Higher weights are associated with groups in which patients require more resources for care and treatment. Higher resource consumption is related to higher intensity of services due to the severity of illness or the types of services needed for care and treatment, such as expensive equipment or medications. Higher weights translate into higher payments.

Several U.S. federal payment methods are case-based prospective payment methods. (See table 1.1 for a comparison of federal prospective payment systems.)

In summary, the relatively weighted group is the basic unit of payment. Higher relative weights link to higher payment rates.

**Criticisms of Episode-of-Care Reimbursement**

The impact of the case-based payment method is that it rewards effective and efficient delivery of health services and penalizes ineffective and inefficient delivery. The case-based payment rates are based on averages of costs for patients within the group. Generally, costs for providers that treat patients efficiently and effectively are beneath the average costs. The providers make money in this situation. On the other hand, providers that typically exceed average costs lose money. Inefficiencies include duplicate laboratory work, scheduling delays, and lost reports. Many healthcare organizations have implemented procedures to streamline the delivery of health services to offset inefficiencies. Poor clinical diagnostic skills are an example of ineffectiveness. Thus, the more efficiently and effectively a provider delivers care, the greater its operating margin will be.

Some consumer advocates have voiced concerns about episode-of-care reimbursement. These advocates have noted that the payment method creates incentives to substitute less expensive diagnostic and therapeutic procedures and laboratory and radiologic tests and to delay or deny proce-

<table>
<thead>
<tr>
<th>Site</th>
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<th>Relative Weighted Group</th>
<th>Abbreviation</th>
<th>Effective Date</th>
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<td>Ambulatory surgery center payment method</td>
<td>Ambulatory surgery center group</td>
<td>ASC group</td>
<td>1980</td>
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<tr>
<td>Inpatient Acute Care Hospital</td>
<td>Prospective payment system (PPS)</td>
<td>Diagnosis related group</td>
<td>DRG</td>
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<td>Skilled Nursing Facility</td>
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</tr>
</tbody>
</table>
Check Your Understanding 1.1

1. Insurers pool premium payments for all the insureds in a group, then use actuarial data to calculate the group’s premiums so that:
   a. Premium payments are lowered for insurance plan payers
   b. The pool is large enough to pay losses of the entire group
   c. Accounting for the group’s plan is simplified
   d. All of the above are reasons for using the data

2. Where and when did health insurance become established in the U.S.?

3. All of the following are types of episode-of-care reimbursement except:
   a. Global payment
   b. Prospective payment
   c. Capitation
   d. Self-insured plan

4. What discounted fee schedule does Medicare use to reimburse physicians?

5. Name and describe some versions of the global payment method.

Future of Healthcare Reimbursement Methodologies

The prospective payment system (PPS) for inpatient hospital services that Medicare implemented in 1983 proved to be very successful. Based on that success, many future healthcare reimbursement methodologies are refinements and derivations of the PPS. This section addresses three of these future payment methods: physician care groups, refinements in case-based payment methods, and clinical risk groups.

Physician Care Groups

Physician care groups (PCGs) is a prospective payment method for physician services in ambulatory settings. This method classifies patients into similar, homogenous categories (groups). PCGs are visit-based and classify services according to clinical similarity and setting (Averill et al. 1999). Proponents of the PCG payment method emphasize that the basis of payment is the purpose of the visit, necessitating clear definition of the patient’s problem (Averill et al. 1999). The various ambulatory settings included in this payment method are “physician offices, hospital outpatient departments, hospital emergency rooms, ambulatory surgical centers, community mental health centers, comprehensive outpatient rehabilitation facilities, state or local public health facilities, and rural health clinics” (Averill et al. 1999, 4).

The payment method accounts for resource use in terms of (1) physician’s (professional) services, (2) technical services (equipment and technicians), (3) interpretation (by the same physician or another physician), (4) facility overhead, and (5) ancillary services (laboratory tests) (Averill et al. 1999, 4–5). It is important to note the payment method also accounts for differences in resource use across ambulatory settings. Averill and colleagues explain that settings vary in terms of consuming the five components (1999, 4–5).

Example:

Patient A is seen in a hospital outpatient department for pneumonia. The hospital bills the third party payer for the facility overhead, technical services, interpretation, and ancillary services. The PCG for the physician’s services include only the physician’s professional services. However, if the same physician sees Patient A in her clinic instead of the hospital outpatient department, the PCG needs to account for resources for all five components (physician’s services, technical services, interpretation, facility overhead, and ancillary services; Averill et al. 1999, 4–5).
The PCGs simplify payments to physicians for ambulatory services because there are about 400 PCGs compared to the more than 4,000 types of health services in the RBRVS payment method (Averill et al. 1999, 12). Each PCG has a predetermined relative weight. For ambulatory services, it is envisioned that PCG payment method could replace the federal government’s RBRVS payment method.

**Refined Case-Based Payment**

Refined case-based payment methods enhance case-based payment methods to include patients from all age groups and from regions of the world with varying mixes of diseases and differing patterns of healthcare delivery. In the U.S., projects investigated means to enhance the inpatient PPS, the diagnosis related groups (DRGs). In its enhanced versions, the payment system is applicable to all types of patients, not the mostly elderly patients as covered by the DRGs. For international use, researchers created a classification method that, independent of coding system, measured patients’ severity of illness and consumption of resources (Mullin et al. 2002).

**Pediatric Modified Diagnosis Related Groups**

In the mid-1980s, the National Association of Children’s Hospitals and Related Institutions developed pediatric modified diagnosis related groups (PM-DRGs). This classification had classifications for neonates and pediatric patients (Averill et al. 2002, 46).

**All-Patient Diagnosis Related Groups**

In the late 1980s, the New York State Health Department contracted with researchers at 3M Health Information Systems (3M HIS) to develop a DRG payment method for non-Medicare patients. Including the PM-DRGs, the researchers developed the all-patient DRGs (AP-DRGs; Averill et al. 2002). AP-DRGs included classifications for neonatal patients, pediatric patients, high-risk obstetrical patients, multiple trauma patients, organ transplant patients, and ventilator-dependent patients. In addition, groups were created for patients with the following conditions or diseases: human immunodeficiency virus (HIV), cystic fibrosis, nutritional disorders, acute leukemia, hemophilia, and sickle cell anemia. Some Medicaid programs and Blue Cross plans adopted AP-DRGs. The Centers for Medicare and Medicaid Services (CMS) also later modified and adopted some of these refinements (Averill et al. 2002) for the inpatient PPS.

**All-Patient Refined Diagnosis Related Groups**

In the mid-1990s, continuing research and refinement by the 3M HIS team resulted in all-patient refined DRGs (APR-DRGs). The refinement is the inclusion of adjustments for severity of illness and risk of mortality. These adjustments result in 1,422 APR-DRGs. The classification method allows accurate comparisons of patients in terms of length of stay, resource consumption, and outcomes. “Through APR-DRGs, hospitals, consumers, payers, and regulators can gain an understanding of the patients being treated, the costs incurred, and within reasonable limits, the outcomes expected” (Averill et al. 2002, 50). Developers of the classification system suggest that, through APR-DRGs, organizational leaders can increase organizational efficiency and effectiveness as well as quality of care.

**International Refined Diagnosis Related Groups**

At the global level, the 3M HIS researchers developed a classification system that could be used within countries to describe patients’ resource use and around the world to compare patients from one country to another (Mullin et al. 2002, 1). The international refined DRGs (IR-DRGs) are an inpatient classification system designed specifically to become the basis for payment, “budgeting, outcomes analysis, benchmarking, profiling, and utilization assessment” of international healthcare (Mullin et al. 2002, 3). There are 939 IR-DRGs reflecting severity of illness and resource consumption. The classification system provides healthcare decision makers with “a means of making relative comparisons of
the resources patients consume and their associated clinical courses” (Mullin et al. 2002, 2).

**Clinical Risk Groups**

The methodology of clinical risk groups (CRGs) is a prospective payment system that predicts future healthcare expenditures. It is a capitated payment system for healthcare services for populations (Averill et al. 2001, 8). Its developers state that the methodology is a means to administer clinical pathways, product line management, and case management (Averill et al. 2001).

The payment method adjusts for risk and supports the clinical management of patients (Averill et al. 2001). CRGs classify patients into categories that account for the severity of the patient’s illness or condition and that predict the costs of future medical care, debility, or death (Averill et al. 2001). To predict future healthcare expenditures, CRGs are assigned prior to health services being rendered. Moreover, CRGs predict costs for “an extended period of time” (Averill et al. 2001, 2).

CRGs include all age groups and cover the continuum of care. There are 1,075 CRGs (Averill et al. 2001, 8). These 1,075 CRGs are organized into the following nine statuses:

- Catastrophic conditions
- Dominant and metastatic malignancies
- Dominant chronic disease in three or more organ systems
- Significant chronic disease in multiple organ systems
- Single dominant or moderate chronic disease
- Minor chronic disease in multiple organ systems
- Single minor chronic disease
- History of significant acute disease
- Healthy

The 1,075 CRGs are not distributed evenly across the nine statuses. The status with the fewest CRGs is “Healthy” with one; the status with the most CRGs is “Single dominant or moderate chronic disease” with 398. Within these statuses, the severity-of-illness level can range from none (healthy) to 6 (catastrophically ill) (Averill et al. 2001, table 1.1). According to Averill, “The severity level describes the extent and progression of the disease. A high level of severity is indicative of a high degree of treatment difficulty and a need for substantial future medical care” (Averill et al. 2001, 6).

Research has supported the ability of CRGs to identify patients who will require interaction with the healthcare system (Neff et al., 2002; 2004). Neff et al. found that CRGs were a useful tool to identify, classify, and stratify children with chronic health conditions. Thus, CRGs were found to support patient tracking, case management, utilization, and cost prediction (Neff et al., 2002; 2004).

To facilitate decision making, the CRGs can be collapsed into three hierarchical tiers of aggregate groups. Each tier of aggregate clinical risk groups (ACRGs) has fewer groups and less clinical precision. Thus, ACRG1 has the greatest number of CRGs, with 413, and ACRG3 the fewest, with 37 (Averill et al. 2001, 8). However, each tier of aggregation maintains clinical meaningfulness and severity levels. Thus, the classification system supports the various levels of detail needed by payers and providers (Averill et al. 2001).

The payment weights are calculated based on two years of historical data. The first year’s data serves to classify the patient into a CRG. Averages of the second year’s data are computed to set the weights of the CRGs. The second year’s data predicts healthcare expenditures for patients in the CRG (Averill et al. 2001, 9). Higher weights correspond to higher severity levels. As a payment method, CRGs predict future consumption of healthcare resources. Their clinical precision and meaningfulness enable them to be used to manage care and their categorical nature serves as a means...
of reporting and communication. Finally, research has demonstrated that CRGs are able to predict payments comparable to other risk adjustment systems (Hughes et al. 2004).

**Summary**

The U.S. healthcare system is complex, partially because health insurance and employment are closely linked. Multiple methods exist to reimburse hospitals, physicians, and other health providers for the healthcare they render patients. Because recompense occurs after the healthcare has been provided, the term used is reimbursement. Two major types of payment methodologies—fee-for-service reimbursement and episode-of-care reimbursement—are based upon the unit of payment. Other descriptive characteristics of healthcare payment methods are time frame and bearer of risk. Important contemporary reimbursement methods are retrospective fee-for-service, managed care, capitation, global payments, and prospective payment systems. Researchers and government health agencies continue to develop and advance payment methods, both in the U.S. and internationally. Healthcare professionals need to monitor the continuing evolution of healthcare reimbursement methodologies.

**Chapter 1 Review Quiz**

1. Who are the first, second, and third parties in healthcare situations?
2. Compare the UCR and CPR payment systems.
3. Describe the two purposes of managed care.
4. Why have many insurers replaced retrospective health insurance plans with group plans such as HMOs and PPOs?
5. What are advantages of capitated payments for providers and payers?
6. How do third party payers set per-diem payment rates?
7. Describe the major benefits of episode-of-care reimbursement according to its advocates and the major concerns about episode-of-care reimbursement expressed by its critics.
8. How does the payment method used by physician care groups (PCGs) account for resources used in patient care?
9. In the episode-of-care reimbursement approach, providers are reimbursed a lump sum for all provided services related to a patient’s condition or disease. True or false?
10. How do clinical risk groups (CRGs) manage healthcare costs?

**References and Bibliography**


