Chapter 3

Financial Environment of Health Care Organizations

LEARNING OBJECTIVES

After studying this chapter, you should be able to do the following:

1. Describe factors that influence the financial viability of a health care organization.
2. Describe the financial environment of the largest segments of the health care industry.
3. Discuss the major reimbursement methods that are used in health care.
4. Discuss the major aspects of Medicare benefits.
5. Describe how Medicare reimburses the major types of providers, and be able to discuss the implications of these methods for an organization's resource management.

REAL-WORLD SCENARIO

Joshua Douglas, Chief Financial Officer at Marshall Regional Hospital, was exploring an option to convert his hospital to Critical Access Hospital (CAH) status under the Medicare program. The CEO of the hospital, Mikaela Grace, had directed Josh to investigate this possible option at the last hospital board meeting. The hospital has been losing money for the last four years and cash positions have been eroding to the point of possible default on a small debt issue.

Marshall Regional is a 20-bed acute-care hospital with a 120-bed skilled-nursing facility. It is located in a rural area of a western state and is 50 miles from the nearest hospital. The current economic climate in the region is not good and is not expected to improve in the near future. Because of its low volume, Marshall's cost per unit for acute inpatient and outpatient procedures is very high. As a result, the hospital has been losing large sums of money on its sizable Medicare volume. The situation has only worsened since Medicare shifted to prospective payment for outpatient services in August 2000. Josh estimates that his hospital loses 45 cents for every dollar of Medicare payment. Because a high percentage of the local population is elderly, Medicare is the hospital's largest source of business. Medicare represents 50 percent of all outpatient revenue and 65 percent of inpatient revenue. Most inpatient procedures are not complex, and severely ill patients are transferred to a larger hospital 50 miles up the interstate.

Mikaela Grace had been to a recent seminar and learned that her hospital might be eligible for Critical Access Hospital status. If the hospital was successful in its application for CAH

status, it would no longer be paid under prospective payment. Instead, Marshall Regional would receive the cost incurred in delivering services to Medicare patients plus one percent. Joshua Douglas estimated that this change in payment could result in a substantial improvement in operating margins and should help the hospital to secure its financial future.

Upon Josh's review of CAH materials, he learned that over 1100 hospitals in the U.S. were designated as CAH in June 2005. While there are a number of criteria that must be met, it seemed that the hospital would be eligible. It was under the 25-bed maximum and it was more than 35 miles from the nearest hospital. It also maintained an acute-care length of stay of less than 96 hours. While there were other criteria, Josh was very optimistic about Marshall's chances of achieving CAH status, and he prepared a memo to Mikaela Grace recommending that they move forward with an application.

Almost any measure of size would indicate that the health care industry is big business. Its proportion of the gross domestic product (GDP) has been steadily increasing for several decades and now represents nearly 16 percent of the GDP and approximately two trillion dollars in expenditures. Paralleling this growth, the pressures for cost control within the system have increased tremendously, especially at the federal and state levels for control of Medicare and Medicaid. Health care organizations (HCOs) that are not able to deal effectively with these pressures face an uncertain future. In short, as the expected demand for health services continues to increase during the next several decades as our population ages, successful HCOs must become increasingly cost efficient.

LEARNING OBJECTIVE 1

Describe factors that influence the financial viability of a health care organization.

FINANCIAL VIABILITY

An HCO is a basic provider of health services, but it is also a business. The environment HCOs viewed from a financial perspective could be schematically represented as depicted in Figure 3–1.

In the long run, the HCO must receive dollar payments from the community in an amount at least equal to the dollar payments it makes to its suppliers. In very simple terms, this is the essence of financial viability.

The community in Figure 3–1 is the provider of funds to the HCO. The flow of funds is either directly or indirectly related to the delivery of services by the HCO. For our purposes, the community may be categorized as follows:

- Patients
  1. Self-payer
  2. Third-party payer
     - –Blue Cross and Blue Shield
     - –Commercial insurance, including managed care
     - –Medicaid
     - –Medicare
     - –Self-insured employer
     - –Other
- Non-patients
  1. Grants
  2. Contributions
  3. Tax support
  4. Miscellaneous

In most HCOs, the greater proportion of funds is derived from patients who receive services directly. The largest percentage of these payments usually comes from third-party sources such as Blue Cross, Medicare, Medicaid, and managed-care organizations. In addition, some non-patient funds are derived from government sources in the form of grants for research purposes or direct payments to subsidized HCOs, such as county facilities. Some HCOs also receive significant sums of money from individuals, foundations, or corporations in the form of contributions. Although these sums may be small relative to the total amounts of money received from patient services, their importance in overall viability should not be understated. In many HCOs, these contributed dollars mean the difference between net income and loss.

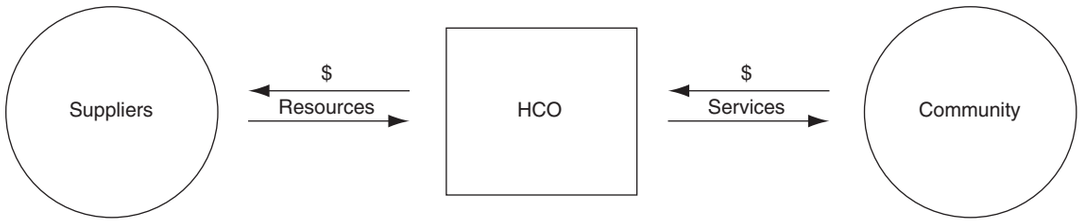

Figure 3–1 Financial Environment of Health Care Organizations

The suppliers in Figure 3–1 provide the HCO with resources that are necessary in the delivery of quality health care. The major categories of suppliers are the following:

- employees
- equipment suppliers
- service contractors
- vendors of consumable supplies
- lenders

Payments for employees usually represent the largest single category of expenditures. For example, in many hospitals, payments for employees represent about 60 percent of total expenditures. Table 3–1 is an example of a statement of operations (similar to an income statement for a for-profit firm) that shows percentages of revenues and expenses for a hospital. Payments for physicians' services also represent important financial requirements. In addition, lenders such as commercial banks or investment bankers supply dollars in the form of loans and receive from the HCO a promise to repay the loans with interest according to a defined repayment schedule. This financial requirement has grown steadily as HCOs have become more dependent on debt financing.

LEARNING OBJECTIVE 2

Describe the financial environment of the largest segments of the health care industry.

SOURCES OF OPERATING REVENUE

Table 3–2 provides a historical breakdown of the relative size of the health care industry and its individual industrial segments. The largest segment is the hospital industry, which absorbs about 33 percent of all health care expenditure dollars (in per capita terms). This percentage has been declining over the last few years and is expected to decline further as other industry segments grow more quickly. The physician segment absorbs approximately 20 percent of total health care expenditures; this has been steady in recent years, but still represents a modest increase over the prior decade when expressed as a percentage of total health care expenditures. Prescription drugs represent the third largest health care segment, reflecting the rapid rise in prescription drug use. Whereas in the past nursing homes represented the third largest health care segment, prescription drugs have overtaken nursing homes. Prescription drugs now constitute about 12 percent of all per capita health care expenditures and are projected to have one of the highest expenditure growth rates in the coming years. The once-rapid increases in Medicare spending for skilled nursing facilities (SNFs) have been tempered by the change to prospective payment (explained later in the chapter). Annual growth rates in spending for nursing home care have been cut almost in half in recent years, as providers reacted to the changes in reimbursement method. Demographic factors, however, will still tend to put upward pressure on national nursing home expenditures. Many people believe that the nursing home segment will grow faster as the population ages.

Table 3–3 depicts the sources of operating funds for the four largest health care segments: hospitals, physicians, prescription drugs and nursing homes. It is easy to see dramatic differences in financing among these four segments.

The hospital industry derives more than 50 percent of its total funding from public sources, largely from Medicare and Medicaid. Of the two, Medicare is by far the larger, representing about 30 percent of all hospital revenue. This gives the federal government enormous control over hospitals and their financial positions. Few hospitals can choose to ignore the Medicare program because of its sheer size. Another 34 percent of total hospital funding results from private insurance,

Table 3–1 Statement of Operations for Memorial Hospital, Year Ended 2007 (000s Omitted)

	2007	*%*
Unrestricted revenues, gains, and other support:		
Net patient service revenue	$85,502	85.84
Premium revenue	11,195	11.24
Other operating revenue	2,913	2.92
Total operating revenue	$99,610	100.0
Expenses		
Salaries and benefits	40,258	40.41
Medical supplies and drugs	27,542	27.65
Professional fees	16,857	16.92
Insurance	5,568	5.59
Depreciation and amortization	3,952	3.97
Interest	1,456	1.46
Provision for bad debts	1,152	1.16
Other	523	0.53
Total expenses	$97,308	97.69
Operating income	2,302	2.31
Investment income	1,846	1.86
Excess of revenues, gains, and other support over expenses	4,148	4.17
Net assets released from restrictions used for purchase of property and equipment	192	0.19
Increase in unrestricted net assets	$ 4,340	4.36

largely from Blue Cross, commercial insurance carriers, managed care organizations, and self-insured employers. Direct payments by patients to hospitals represent approximately three percent of total revenue. The implication of this distribution for hospitals is the creation of an oligopsonistic marketplace. The buying power for hospital services is concentrated in relatively few third-party purchasers, namely the federal government, the state government, Blue Cross, a few commercial insurance carriers, and some large self-insured employers.

The physician marketplace is somewhat different from the marketplace for hospital services. A much larger percentage of physician funding is derived from direct payments by patients (approximately ten percent). And compared with hospital funding, a slightly larger percentage of physician funding results from private insurance sources, largely from Blue Cross and commercial insurance carriers. Physicians derive approximately 51 percent of their total funds from this source; the hospital segment derives 34 percent of total funds from this source. Public programs, although still significant, are the smallest source of physician funding, representing 33 percent of total funds. This situation results because more physician services, such as routine physical examinations and many deductible and copayment services, are excluded from Medicare payment.

Similar to the market for physicians, most of the payments (46 percent) for prescription drugs come from private insurance sources. The impact of Medicare coverage can be clearly seen in Table 3–3. By 2010, projections show that Medicare will be funding 28 percent of all prescription drug costs. Many state Medicaid plans (which are more than 50 percent federally funded) do provide prescription drug benefits. Medicaid represents over 19 percent of the prescription drug payments.

The nursing home segment receives almost no funding from private insurance sources. The major public program for nursing homes is Medicaid, not Medicare. However, the federal government pays more than 50 percent of all Medicaid expenditures. Medicare payments to nursing homes are largely restricted to skilled nursing care, whereas the majority of Medicaid payments to nursing homes are for intermediate-level (custodial) care.

LEARNING OBJECTIVE 3

Discuss the major reimbursement methods that are used in health care.

HEALTH CARE PAYMENT SYSTEMS

One of the most important financial differences between health care firms and other businesses is the way in which their customers or patients make payment for the services they receive. Most businesses have only one basic type of payment: billed charges. Each cus-

Table 3–2 National Health Care Expenditures—2003 and Projected 2010.

	2003	*(Projected) 2010*	*Annual Growth Rate (%)*
National health care expenditures (billions)	$ 1,679	$ 2,754	7.3
Population (millions)	296	315	0.9
Per capita expenditures			
Personal health care			
Hospital care	$ 1,742	$ 2,529	5.5
Physician services & clinical services	1,249	1,904	6.2
Dental services	251	370	2.6
Other professional services	164	250	6.2
Home health care	135	234	8.2
Prescription drugs	605	1,172	9.9
Other nondurable medical products	110	144	3.9
Durable medical equipment	69	83	2.7
Nursing home care	374	500	4.2
Other personal health care	167	294	8.4
Total personal health care	$ 4,866	$7,480	6.3
Program administration and insurance cost	586	939	7.0
Government public health activities	99	160	7.1
Research and construction	119	175	5.7
Total national health care expenditures	$ 5,670	$ 8,754	6.2

Source: Centers for Medicare & Medicaid Services, Office of Financial and Actuarial Analysis, Division of National Cost Estimates.

tomer is presented with a bill that represents the product and the quantity of goods or services received and their appropriate prices. Some selective discounting of the price may take place to move slow inventory during slack periods or to encourage large volume orders. The basic payment system, however, remains the same: a fixed price per unit of service that is set by the business, not the customer.

In contrast, the typical health care firm may have several hundred different contractual relationships with payers, which specify different rates of payment for an identical basket of services. While different payers may negotiate different rates of payment, the critical distinction is the unit of payment. For example, some payers will pay physicians a discount from their charges, other payers will pay on fee schedule, Medicare will pay on a relative value scale referred to as RBRVS (Resource-Based Relative Value Scale), and some HMOs may pay on an enrolled or capitated basis. Similar scenarios would apply in other sectors of the health care industry. Alternative payment units have a different effect on the firm's financial position and might lead to different conclusions with respect to business strategy. Thus, it is extremely important to understand the financial implications of the various payment units used to pay health care firms. Four major payment units are discussed:

1. Historical cost reimbursement
2. Specific services (charge payment)
3. Bundled services
4. Capitated rates

Historical Cost Reimbursement

Until the early 1980s, cost reimbursement was the predominant form of payment by Medicare for most hospitals and other institutional providers. In addition

Table 3–3 Sources of Health Services Funding—2003 and Projected 2010

	Hospitals		*Physicians*		*Prescription Drugs*		*Nursing Homes*	
Source	*2003*	*2010*	*2003*	*2010*	*2003*	*2010*	*2003*	*2010*
Private payments (%)								
Out of pocket	3	3	10	10	30	20	28	28
Private insurance	34	34	50	51	46	37	8	7
Other private	4	4	7	6	0	0	4	3
Total private payments	41	41	67	67	76	57	40	38
Government payments (%)								
Medicare	30	32	20	19	2	28	12	12
Medicaid	17	18	7	8	19	11	46	48
Other	12	9	6	6	3	4	2	2
Total government payments	59	59	33	33	24	43	60	62
Total payments (%)	100	100	100	100	100	100	100	100

Source: Centers for Medicare & Medicaid Services, Office of Financial and Actuarial Analysis, Division of National Cost Estimates.

to Medicare, most state Medicaid plans and a large number of Blue Cross plans paid hospitals on the basis of "reasonable" historical costs. Today, the major payers have abandoned historical cost reimbursement and substituted other payment systems. We provide some discussion of cost reimbursement for two reasons. First, it is used in some limited settings for payment. For example, Medicare still pays on a cost basis for services performed in Comprehensive Cancer Centers and critical-access hospitals. Second, some policy analysts have suggested that "regulated cost reimbursement" might be a legitimate way to maintain the quality of patient care.

Two key elements in historical cost reimbursement are reasonable cost and apportionment. Reasonable cost is simply a qualification introduced by the payer to limit its total payment by excluding certain categories of cost or placing limits on costs that the payer deems reasonable. Examples of costs often defined as unreasonable and therefore not reimbursable are costs for charity care, patient telephones, and nursing education. Apportionment refers to the manner in which costs are assigned or allocated to a specific payer, such as Medicaid. For example, assume that a nursing home has total reasonable costs of $10 million, which represent the costs of servicing all patients. If Medicaid is a historical cost reimbursement payer, an allocation or apportionment of that $10 million is necessary to determine Medicaid's share of the total cost. Quite often, the apportionment is related to billed charges. For example, if charges for services to Medicaid patients were $3 million and total charges to all patients were $15 million, then, 3/15 or 20 percent of the $10 million cost would be apportioned to Medicaid.

Several important financial principles of cost reimbursement should be emphasized. First, cost reimbursement can insulate management somewhat from the financial results of poor financial planning. New clinical programs that do not achieve targeted volume or exceed projected costs may still be viable because of extensive cost reimbursement. This assumes that the payer does not regard the costs as unreasonable. Second, cost reimbursement can often be increased through careful planning, just as taxes can often be reduced through tax planning. The key objective is to maximize the amount of cost apportioned to cost payers subject to any tests for reasonableness.

Specific Services

Most health care firms have some master price list that identifies the appropriate charge for a defined unit of service. These master price lists are often referred to as Charge Description Masters or CDMs (See Chapter 2).

The charges that are applicable for specific services may bear no relationship to amounts actually paid. For example, a hospital may have charges for a patient categorized as Diagnosis Related Group #127 (Heart Failure and Shock) for $15,000, but Medicare could determine that the applicable rate of payment was $4,000. While the charges for specific services of $15,000 are recorded on the patient's bill, the actual charges for specific services are not the basis for payment.

Most institutional providers, such as hospitals and nursing homes, record their charges for specific services on a CMS–1450 or Uniform Bill 1992 (UB–92). Physician bills are often submitted on a CMS–1500. A sample of both the UB–92 and the CMS–1500 are presented in the appendix to Chapter 2. Both of these forms are designed by the Centers for Medicare & Medicaid Services and are standard for claims submission that are required by most payers.

Many medical and surgical procedures often have an assigned code that is either a CPT (Current Procedural Terminology developed and maintained by the American Medical Association) or a HCPCS (HCFA Common Procedure Coding System) developed and maintained by the Centers for Medicare & Medicaid Services. Supply and pharmaceutical items do not usually have CPT codes but may have specific HCPCS codes. However the vast majority of supply and pharmaceutical items do not have a HCPCS or CPT code. The sample UB–92 in the appendix to Chapter 2 consolidates individual charges for specific services by departmental or revenue code. Note that there is no listing of specific services in this bill because the services are consolidated to a revenue code level. If the patient or their insurance plan requested a detailed bill, then the specific services provided would be listed.

Payers who pay on a specific-service basis usually fall into three categories. First, they could be patients who do not have any insurance coverage or lack coverage for the procedures performed. These patients are usually responsible for the total billed charges represented on the claim. Second, the patients could have coverage from an insurance firm that does not have any formal contract with the provider. In the absence of a contract, the patient and/or his carrier would be responsible for the entire amount of billed charges. This often happens when a provider that is out of the carrier's network treats a patient. Third, some insurance firms negotiate contracts with providers on a discounted-charge basis. The carrier agrees to make payment based upon the total billed charges for the claim, but they will pay something less than 100 percent.

Payment for specific services has several important implications for financial management. First, revenue from specific services may represent the major source of profit for many health care firms. In these situations, pricing or rate setting becomes an important policy (rate setting is addressed in Chapter 5). Second, the firm's rate structure should be based on projected volume and cost. Any unexpected deviation from the projections may require pricing changes. If these changes are not made, there could be a significant effect on the firm's cash flow.

Capitated Rates

Capitated rates represent a new type of payment for many health care providers. In some respects, a capitated rate is a form of bundled service because the unit of payment is based on the individual enrollee. A medical group, hospital, or some association of providers may agree to provide some or all health care services for enrollees during a specified period of time. Most often the provider will agree to pay only for specific services that they perform. For example, a cardiology group might agree to provide all cardiology services to an employer or an HMO for a fixed fee per member per month (PMPM). It is rare that a single health care provider will agree to provide all medical services to an enrolled population. When this does occur, the term global capitation is used to describe the nature of the contractual relationship. Global capitation rates are very uncommon because most health care firms are not in a position to control all health care costs. Capitation arrangements were more common in the mid 1990s and have been declining since then.

In a capitated-payment environment, financial planning and control are critical—even more critical than in a bundled-services payment situation. In a capitated-payment arrangement, the provider is responsible not only for the costs of services provided, but also their utilization. Changes in either costs or utilization can have a dramatic effect on profitability. Unexpected increases in costs will not usually be a basis for contract renegotiation. Therefore, it is imperative that management know what it costs to provide a unit of service required in the contract. For example, if the negotiated rate is to provide all hospital services to subscribers of a health maintenance organization for a fixed fee per subscriber (or capitation), the hospital must know both

the utilization and the cost per unit of the required services. Sometimes management may assess the financial desirability of a capitation contract on an incremental basis. This simply means that management is interested in the change in costs and change in revenue that will result if the contract is signed. The firm's cost accounting system should be able to define the incremental costs likely to be incurred in a given contract so that they can be compared to the incremental revenue likely to result from the contract.

Bundled Services

Many of the payment plans used to pay health care providers in today's environment could be classified as bundled-services arrangements. A bundled-services payment plan has two key features. First, payments to the provider are not necessarily related to the list of specific services provided the patient and identified in the UB–92 or the CMS–1500. Instead payment is grouped into a mutually exclusive set of services categories. For example, hospitals are paid by some health care plans on a per-diem or per-case payment rate. Both are examples of bundled services payment. Second, bundled-services arrangements have a fixed fee specified per unit of service. For example, in the per diem arrangement, revenue from treating a patient would be equal to the length of stay times the negotiated per-diem rate.

Medicare has developed bundled-services payment plans for most health care providers. We will discuss some of these plans in detail later in this chapter. Medicare's payment methods have a profound impact on the rest of the industry because they tend to become the standard for payment by many health plans. For example, Medicare pays physicians on an RBRVS basis, which is often used as the payment basis by many health care plans with one slight wrinkle. Most often these plans will not pay 100 percent of Medicare's rates, but some greater or lesser percentage, such as 110% of RBRVS. The payment units used by Medicare in a variety of health care sectors are presented below in Table 3–4.

Health care providers who are paid under bundled-service arrangements need to understand and monitor their costs of production. A bundled-service unit is simply a set of specific services that may be grouped or classified into a bundled unit of some kind. Total cost of producing the bundled-services unit is therefore a product of two factors:

- Services provided
- Cost per unit of services provided

First, the set of specific services that comprise a bundled unit form the basis for the cost computation. It is important to recognize, however, that the set of services may not always be fixed. For example, home health firms are paid on a 60-day-episode-of-care basis. The number of specific visits per episode is not necessarily fixed. In some cases there may be 30 individual case visits to the patient in the 60-day episode, while in other cases 45 individual visits may be necessary. Second, the cost of producing each of the specific services that comprise the bundled unit is multiplied times the number of units required. Whether 30 or 45 visits of care are required, management must control the unit cost of individual visits by monitoring the productivity of nursing staff. Management's overall objective is to minimize the total cost of production, which means keeping total units of service provided at a minimum and producing each unit of service at an efficient level of cost. Naturally, all this must happen within a quality-of-care constraint.

Table 3–4 Medicare Payment Units for Health Care Sectors

Health Care Sector	*Payment Unit*
Hospital Inpatient	Diagnosis-Related Groups (DRGs)
Hospital Outpatient	Ambulatory Patient Classifications (APCs)
Physicians	Resource-Based Relative Value Scale (RBRVS)
Skilled Nursing Facilities	Resource Utilization Groups (RUGs)
Home Health Agencies	Home Health Resource Groups (HHRGs)

LEARNING OBJECTIVE 4

Discuss the major aspects of Medicare benefits.

MEDICARE BENEFITS

Medicare has three basic benefit programs for its beneficiaries: Part A, Part B, and a prescription-drug benefit, Part D. Part A, or Hospital Insurance, typically is provided free to all beneficiaries if they have 40 or more covered quarters of Medicare employment. Part B, or Medical Insurance, usually requires a monthly payment by the beneficiary. In 2006, this payment was $88.50 per month. Medicare benefits are provided to three categories of individuals. Far and away the largest single group is the aged, beneficiaries over 65 years of age. The second group consists of disabled individuals, and the third group includes people with end-stage renal disease.

There are two primary ways that Medicare beneficiaries receive care through the system. The most popular method is the so-called traditional or original plan. In this plan, Medicare beneficiaries can go to any hospital, doctor, or specialist that accepts Medicare to receive care. The second method is a Medicare Managed Care Plan (Medicare Advantage). Under this method, beneficiaries are enrolled in a private health care plan or HMO, and they are usually limited in terms of the providers that they can visit for care to those included in the plan's network. Usually, Medicare Managed Care Plans provide a wider range of benefits, such as routine physicals and prescription drugs, to offset their restricted networks.

Benefits under Part A include hospital stays, skilled nursing care, home health care, hospice care, and blood received during a hospital stay. Under Part A, there is a deductible, which means that the patient is responsible for this dollar amount prior to any payment by Medicare. In 2006, the hospital deductible was $952. Coinsurance arrangements also exist under Part A coverage. Patients who stay beyond 60 days in a hospital were required to pay $238 per day in 2006. Patients in Skilled Nursing Facilities had no deductible but were required to pay an additional $119 per day for lengths of stay between 21 to 100 days.

Benefits under Part B include a wide range of services, such as doctor's fees, hospital outpatient services, clinical laboratory tests, durable medical equipment, and a number of other preventive medical services. There was a $124 deductible for medical services received under Part B in 2006. Part B benefits also require a coinsurance payment in many cases. This coinsurance is 20 percent of approved amounts. This coinsurance amount can be no less than 20 percent of the total payment due to the provider of services, which includes Medicare's payment and the coinsurance. For example, Medicare may determine that total payment for APC #83 (Coronary Angioplasty) is $3,300. The required coinsurance on this claim may be $1,650 as set by Medicare, which represents 50 percent of the total payment.

Part D, the Medicare drug plan, was initiated on January 1, 2006. The basic plan provides drug coverage that will limit the maximum amount of personal expenditures to $3,600 per year. The minimum coverage plan has an initial $250 deductible, followed by a 25 percent co-pay from $250 to $2,250, followed by a 100% co-pay from $2,250 to $5,100. Expenditures beyond $5,100 are subject to a five percent co-pay.

Many Medicare beneficiaries purchase additional insurance from private insurance firms to pay for deductibles and coinsurance amounts that exist in the Medicare program. This coverage is often referred to as supplemental or Medigap coverage and may also provide limited coverage for other health care services.

For a more complete picture of specific benefits under the Medicare program, visit Medicare's web site, www.medicare.gov.

LEARNING OBJECTIVE 5

Describe how Medicare reimburses the major types of providers, and be able to discuss the implications of these methods for an organization's resource management.

MEDICARE PAYMENT: HOSPITAL INPATIENT

Medicare pays hospitals for inpatient care on a bundled-services unit basis referred to as PPS (Prospective Payment System). Medicare officially launched PPS on October 1, 1983. All hospitals

participating in the Medicare program are required to participate in PPS, except those excluded by statute. These include:

- children's hospitals.
- distinct psychiatric and rehabilitation units.
- hospitals outside the 50 states.
- hospitals in states with an approved waiver.
- critical-access hospitals.

PPS provides payment for all hospital non-physician services provided to hospital inpatients. This payment also covers services provided by outside suppliers, such as laboratory or radiology units. Medicare makes one comprehensive payment to the hospital, which is then responsible for paying outside suppliers or non-physician services.

The basis of PPS payment is the DRG system developed by Yale University. The DRG system takes all possible diagnoses from the *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD–9–CM) system and classifies them into 25 major diagnostic categories based on organ systems. These 25 categories are further broken down into 559 distinct medically meaningful groupings or DRGs (Appendix 3 in this chapter contains a list of the 559 DRGs). Medicare contends that the resources required to treat a given DRG entity should be similar for all patients within a DRG category.

Total payments to a hospital under Medicare can be split into the following elements (See Figure 3–2):

- Prospective payments
  1. DRG operating payment
  2. DRG capital payment
- Reasonable cost payments

The DRG operating payment results from the multiplication of the hospital dollar rate and the specific case weight of the DRG. Appendix 3 provides the most recent case weight for the 559 DRGs. The case weight for DRG 001, Craniotomy, Age > 17 with cc, is 3.4347. This measure indicates that in terms of expected cost, DRG 001 would cost about 3.4347 times more than the average case. A specific weight is assigned to each of the 559 DRGs.

The dollar rate is broken down into a labor and non-labor component. The labor component is adjusted for cost of living. Table 3–5 provides hypothetical rates which might be defined by Medicare.

Every hospital in the United States has a wage index value assigned to it. That wage index is multiplied by the labor component of the Medicare standardized payment to yield the DRG operating payment. If we assume that a hospital has a wage index of 1.2509, its DRG operating payment for DRG 001 would be calculated as follows:

Table 3–5 Hypothetical Medicare Rates According to Hospital Status

	Rate
Labor	*Non-labor*
$3,500	$1,600

$$\text{Payment} = \text{DRG weight} \times [(\text{labor amount} \times \text{wage index}) + \text{non-labor amount}]$$

$$\text{Payment} = 3.4347\ [(\$3{,}500 \times 1.2509) + \$1{,}600]$$
$$= \$20{,}533.15$$

This dollar payment may be further increased by additional payments to cover the following areas:

- Indirect medical education
- Disproportionate share
- Outlier payments

The add-on to a teaching hospital is referred to as an indirect medical education adjustment. This allowance is related to the numbers of interns and residents at the hospital and the number of beds. The allowance is over and above salaries paid to interns and residents, which are already covered as a reasonable cost. The additional payment is meant to cover the additional costs that the teaching hospital incurs in the treatment of patients.

A separate payment is also provided to a hospital that treats a large percentage of Medicaid and Medicaid-eligible patients. This payment is referred to as a disproportionate share payment.

Outlier payments are additional payments for patients who use an unusually large amount of resources. We will discuss their computation shortly.

There is still a portion of the total Medicare payment that is related to reasonable cost, as shown in Figure 3–2. Costs that are still paid on this basis include:

- direct medical education costs.
- kidney acquisition costs.
- bad debts for copayments and deductibles (reimbursed at 60%).

There is a national standardized federal payment rate for capital costs that is similar to the national rates

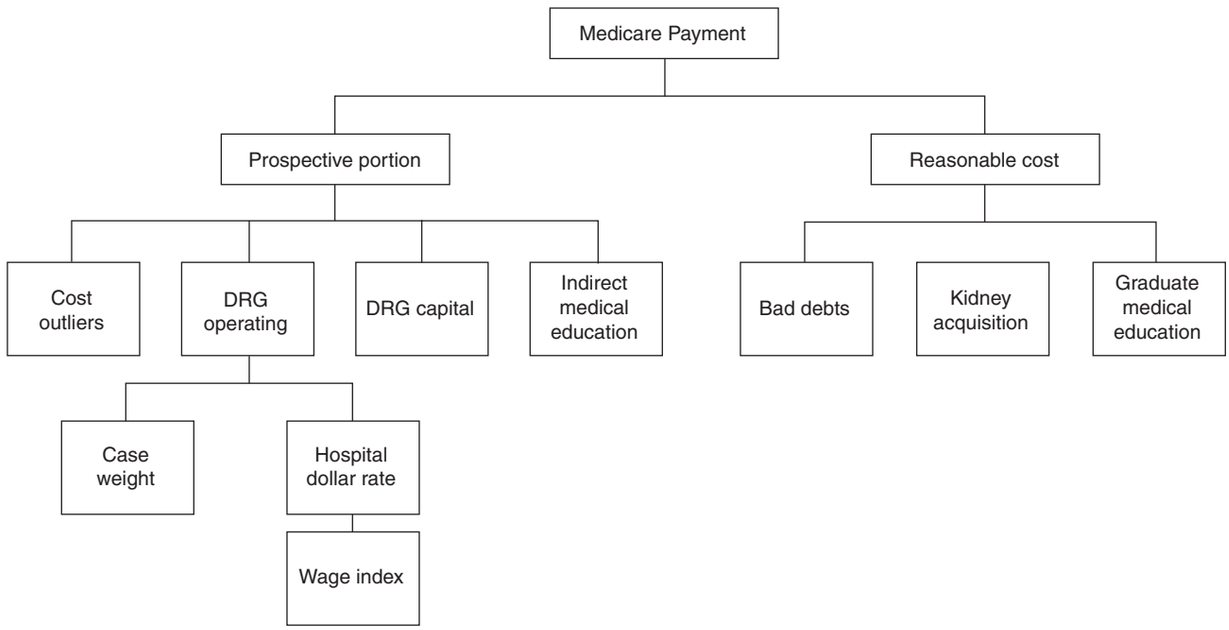

Figure 3–2 Breakdown of Medicare Inpatient Payments to a Hospital

for labor and non-labor costs discussed earlier. In 2006, the federal rate for capital costs was $421.00. This rate would be adjusted for the following factors:

- case mix, using the DRG relative weight
- indirect medical education
- outlier adjustments (the adjustment is much lower than before, to recognize the presumed fixed-cost nature of capital costs)
- disproportionate share adjustment
- geographic adjustment, using the wage index to impute higher costs to higher wage areas
- large urban adjustment of three percent, to reflect higher costs

As an illustration, assume that we wish to calculate capital payment for DRG 001 when the federal payment rate for capital was approximately $421.00. We will also assume that our hospital is in a large urban area with a geographical adjustment factor of 1.194. Please note that a hospital's geographical adjustment factor and its wage index are not usually the same. We will assume that no other adjustments are applicable. The amount of payment would be:

$$\text{Capital payment} = \text{DRG wt.} \times [\text{standard amount} \times \text{large urban adjustment} \times \text{geographical adjustment factor}]$$

$$\text{Capital payment} = 3.4347 \times [\$421 \times 1.03 \times 1.194] = \$1{,}778.33$$

We will now conclude our discussion of Medicare DRG payment with the incorporation of the outlier adjustment. An additional payment for a cost outlier is made when the actual cost of the case exceeds DRG payment by $23,600, the required amount. To determine if this threshold is met, one must define actual costs for the specific case under consideration. Costs are defined using the hospital's overall ratio of cost to charges. For example, a claim with $100,000 of charges in a hospital with a ratio of cost to charges of 0.75 would have a designated cost of $75,000. If this cost were above the threshold, Medicare would make payment at 80 percent of the difference. The reason that Medicare does not pay 100 percent of the difference relates to the concept of marginal cost. Medicare believes that additional costs incurred to treat outlier patients are not 100 percent of average cost.

To give the reader some idea of payment composition for an average U.S. hospital, Table 3–6 presents the median payment by category in 2004 for all U.S. hospitals for a DRG with a case weight of 1.00.

There are a number of ways that a hospital can try to increase its total payment under Medicare inpatient PPS payment rules. For example, it can try to get the

Table 3–6 Median Medicare Payment for U.S. Hospitals, DRG Case Weight of 1.00—2004

DRG Operating Payment	$ 4,488
DRG Capital Payment	471
Indirect Medical Education	275
Disproportionate Share	416
Coinsurance and Deductible	472
Outlier Payments	160
Other	115
Total	$ 6,397

hospital reclassified to a higher wage index, document bad debts better on Medicare patients, change its ratio of residents to beds to increase its indirect medical education payment, and change the DRG assignment. Far and away the most likely source of increased payment is DRG reclassification. DRGs are assigned by a software package referred to as a grouper. That grouper assigns a DRG based upon the patient's age, the principal diagnosis, procedures performed, and secondary diagnosis. In many cases, missed secondary diagnoses can cost the hospital significant amounts of reimbursement.

DRG 079 (Respiratory Infections) carries a DRG weight of 1.6238 while DRG 089 (Simple Pneumonia and Pleurisy) carries a weight of 1.0320. For a hospital with an average payment of $5,000 per case weight of 1.000, a patient erroneously assigned to DRG 089 instead of DRG 079 would cost the hospital $2,959 [$5,000 × (1.6238−1.0320)]. What would cause a patient with an assignment of DRG 089 to be moved to DRG 079? Very simply, is there a specified cause for the pneumonia? For example, if the physician identified salmonella as the bacterial cause, the patient could be legitimately coded as DRG 079. Medical record coders must be on the alert for this information in the physician's notes and other documents, and physicians must be educated about the importance of accurate documentation.

There are literally hundreds of situations like this within a hospital. The importance of accurate coding cannot be overstated in today's payment environment. On the other hand, hospitals should seek to accurately code and not to over code to maximize reimbursement. Hospital executives who intentionally upcode may fall under the government's fraud and abuse regulations, which can impose some severe civil and criminal penalties.

At the time of this writing, Medicare has proposed to modify its DRG system in Fiscal Years 2007 and 2008. In FY 2007, the DRG weights will be established based upon costs, not charges as has been previously done. This change will increase the relative weights for medical DRGs and reduce the weights for many surgical DRGs. In FY 2008, the DRGs will be adjusted to reflect severity levels. This change will increase the number of DRGs significantly and will provide a boost in payment to those hospitals who treat more severely ill patients.

MEDICARE PAYMENT: PHYSICIANS

Beginning in January 1992, Medicare began paying for physician services using a new resource-based relative value scale (RBRVS). This new payment system replaced the old reasonable-charge method that had been the basis for physician payment since the inception of the Medicare program in the 1960s. Medicare pays the lesser of the actual billed charge or the fee-schedule amount.

From Medicare's perspective, physicians are categorized as participating or non-participating physicians. A participating physician is a physician who agrees to accept Medicare's payment for a service as payment in full and will bill the patient for the copayment portion only. The copayment portion is usually 20 percent of the charge. For example, assume that a patient received a service from a physician that had an approved fee schedule of $100.00. The participating physician would receive $80.00 directly from Medicare and would bill the patient for $20.00, which would represent the copayment portion of the bill. If the physician's bill for the service was only $80.00, Medicare would pay 80 percent, or $64.00, and the patient would be billed 20 percent, or $16.00. A participating physician agrees to accept assignment on each and every Medicare patient that he or she treats.

A non-participating physician can choose to accept assignment on a case-by-case basis. While this arrangement initially might seem advantageous, there are several major drawbacks. First, a non-participating physician has a lower fee schedule. The limiting charge is equal to 95 percent of the approved fee schedule. If the physician in the illustration just discussed were non-participating, the amount of the Medicare payment would be $95.00, not $100.00. This difference may not seem all that important if the physician can recover any

of the difference from the patient. However, Medicare has placed some limits on the amount that a non-participating physician can recover from the patient. Medicare sets a maximum fee for a non-participating physician equal to 115 percent of the approved fee for non-participating physician, which is already only 95 percent of the approved fee schedule for a participating physician.

A simple illustration may better explain this narrative. Assume that a non-participating physician provides services to a patient resulting in charges of $200.00, but Medicare's approved schedule for a participating physician is only $100.00. How much can the physician collect? The answer depends on whether the physician accepts or rejects Medicare assignment. First, assume that the physician rejects assignment. The maximum amount that can be collected from this service is:

$$\$109.25 = [.95 \times \$100] \times 1.15$$

The entire amount will come from the patient directly. No check will be sent to the physician from Medicare. The final total payment could be allocated as follows:

Medicare payment to patient (.8 × $95.00)	$76.00
Patient's copayment (.2 × $95.00)	19.00
Additional patient payment	14.25
Total payment to physician	$109.25

The non-participating physician can also choose to accept assignment on a case-by-case basis. The advantage realized with assignment is that Medicare will now pay the physician directly for his or her portion of the bill. The disadvantage is that the physician must accept the fee schedule for non-participating physicians, which will only be 95 percent of the fee approved for participating physicians. In the example above, the non-participating physician who agreed to accept assignment on this patient would receive the following payments:

Medicare payment to physician (.8 × $95.00)	$76.00
Patient's copayment (.2 × $95.00)	19.00
Total payment to physician	$ 95.00

The participating physician would be able to receive $100.00 for this service because of the higher approved-fee schedule. Of the total $100.00 in payment, $80.00 would come directly from Medicare and $20.00 from the patient as the copayment portion.

At the present time, there are Medicare payment rates for more than 10,000 physician services, which are usually broken out by CPT or HCPCS code. There are specific values for those codes that vary by region; presently there are distinct values for each of the Medicare carrier localities. These payment rates result from the multiplication of three relative values and regional cost indexes. For every procedure there are three components that together reflect the cost of a particular procedure:

1. Work (RVUw)—This factor represents not only physician time involved, but also skill levels, stress, and other factors.
2. Practice expense (RVUpe)—This factor represents non-physician costs, excluding malpractice costs.
3. Malpractice (RVUm)—This factor represents the cost of malpractice insurance.

Each of the individual relative values is then multiplied by a region-specific set of price indexes. To illustrate this adjustment, the weighted value for excision of neck cyst (CPT # 42810) for Los Angeles is presented in Table 3–7. To determine the payment rate for this procedure in Los Angeles, the index-adjusted relative value would be multiplied by a conversion factor. If we assume that the conversion factor is $40.00, the approved charge for excision of neck cyst in Los Angeles would be $309.20 (7.73 x $40.00).

Medicare also differentiates the payment by the setting in which the procedure was performed. If the procedure was performed in a facility setting (generally a hospital, SNF, or Ambulatory Surgery Center), the amount allowed for Practice expense is reduced compared to what it would be if the procedure were performed in a non-facility setting. For example, the allowed practice-expense weight for excision of neck cyst in a facility setting is 3.55, but if the procedure were performed in a non-facility setting, the allowed weight would be 5.73. The rationale for these differences is related to the additional payment that Medicare would make to the facility. A procedure performed in a hospital would involve a payment to the hospital, as well as to the physician.

Table 3–7 Components of Price Adjustment for Excision of Neck Cyst in Los Angeles

	RVU	*Geographical Cost Index for Los Angeles*	*Product*
Work	3.25	1.043	3.39
Practice expense	3.55	1.144	4.06
Malpractice	0.29	0.954	.28
Total			7.73

MEDICARE PAYMENT: HOSPITAL OUTPATIENT

The Balanced Budget Act of 1997 (BBA) directed CMS to implement a prospective payment system (PPS) under Medicare for hospital outpatient services. All services paid under the new PPS are classified into groups called Ambulatory Payment Classifications, or APCs. Services in each APC are similar clinically and in terms of the resources they require. A payment rate is established for each APC. Depending on the services provided, hospitals may be paid for more than one APC for an encounter. Not all hospital outpatient procedures have an assigned APC code; some procedures are paid on a fee-schedule basis, such as lab tests. Others may not be paid at all because they are considered incidental services, such as some drugs and medical supply items.

The BBA also changed the way beneficiary coinsurance is determined for the services included under the PPS. A coinsurance amount will initially be calculated for each APC based on 20 percent of the national median charge for services in the APC. The coinsurance amount for an APC will not change until the amount becomes 20 percent of the total APC payment. In addition, no coinsurance amount can be greater than the hospital inpatient deductible in a given year. This is a major change for Medicare and will mean that the total burden of payment will shift more to Medicare in the future. A similar change for physician payment was made in 1992.

Both the total APC payment and the portion paid as coinsurance will be adjusted to reflect geographic wage variations using the hospital wage index. It is assumed that 60 percent of the total payment is labor related and thus subject to the wage-index adjustment. Each APC is assigned a relative weight and then that weight is multiplied by the current conversion factor to determine total payment. This same methodology framework is used throughout most of Medicare's payment plans.

To illustrate the details discussed, assume that APC # 80 (Left Heart Catheterization) has a relative weight of 37.00 when the national conversion rate is $60.00. The total amount paid for this APC would be $2,220 (37 × $60.00). We will further assume that Medicare has set the national coinsurance for APC#80 at $840.00. To adjust actual payment for a hospital with a wage index of 1.200, the following computations would be made to adjust both the total and the coinsurance payments:

$$\text{Total Payment} = [.60 \times \$2{,}220 \times 1.200] + [.40 \times \$2{,}220] = \$2{,}486.40$$

$$\text{Coinsurance} = [.60 \times \$840.00 \times 1.200] + [.40 \times \$840] = \$940.80$$

Medicare payment for a specific outpatient claim is illustrated in the following example taken from a hospital-submitted UB–92. The claim relates to a patient who had a left heart cardiac catheterization (See Table 3–8).

The example claim shows that total payment for this claim would be $2,289.75 with $845.00 coming from the patient as coinsurance. A large number of the items have a status code of "N" or incidental services that are packaged into the APC rate. Many of these procedures are either imaging procedures or injections that are considered to be a part of CPT 93510 (Left Heart Catheterization). This procedure has a "T" status indicator code, which indicates that it would be discounted at 50 percent if another "T"-coded procedure were performed. In our example, there is no other "T"-coded procedure present in the claim, so the procedure would not be discounted. When multiple "T"-coded procedures are performed, the highest-value procedure is paid at 100 percent, but all other "T"-coded procedures would be paid at 50 percent. The lab procedures are all coded as "A," which in this case means they are clini-

Table 3–8 Example of Medicare Payment for Outpatient Left Heart Cardiac Catheterization

				APC Reimbursement APC # 80			
Revenue Code	*Description*	*HCPCS*	*Units*	*Total Charges*	*Status Code*	*APC Total Payment*	*Copayment*
300	Lab	80051	1	$27.42	A	$10.00	$0
301	Lab	82565	1	7.42	A	7.25	0
301	Lab	84520	1	6.46	A	10.00	0
305	Lab	85027	1	20.77	A	9.00	0
305	Lab	85730	1	14.21	A	8.50	0
460	Pulmonary	94760	1	16.46	N	0	0
481	Cath Lab	93510	1	1711.17	T	2,220.00	840.00
481	Cath Lab	93539	1	607.79	N	0	0
481	Cath Lab	93540	1	607.79	N	0	0
481	Cath Lab	93543	1	1288.48	N	0	0
481	Cath Lab	93545	1	607.79	N	0	0
481	Cath Lab	93555	1	718.29	N	0	0
481	Cath Lab	93556	1	718.29	N	0	0
636	Drugs	J7040	1	7.13	N	0	0
710	Recovery		6	373.13	N	0	0
730	EKG	93005	1	60.74	X	25.00	5.00
				$6,793.34		$2,289.75	$845.00

cally diagnostic laboratory services that are paid from a fee schedule with no coinsurance payments. There are other examples of "A"-coded procedures, which are described in Table 3–9. The EKG is coded as an "X" procedure, which implies that it is an ancillary service.

It is also important to note that Medicare provides additional payments to hospitals for outliers. Outlier payments are made on an APC basis and are equal to 50 percent of the cost of the APC that is above 175 percent of the actual APC payment. For example, if an APC had a total payment, including the coinsurance, of $1,000 and the estimated cost of the APC was $4,000, then Medicare would pay an additional $1,125 [.50 × ($4,000 − $1,750)]. Please recognize that the cost of the APC does include incidental services or "N"-status items, which makes it important to include these items and to charge for them, even if Medicare does not recognize them as APC or fee-schedule items.

Resource management under APC reimbursement is more difficult than it is under DRGs because payment is not fixed. In a DRG-payment environment, once the patient is classified, cost minimization is the optimal financial strategy because payment will not increase if additional services are provided. In an APC payment situation, payments may increase when more services are provided. Management must determine from a financial perspective if the marginal revenue of additional services is greater than the marginal cost of providing those services.

MEDICARE PAYMENT: SKILLED NURSING FACILITIES (SNFS)

As you can tell from our discussion of Medicare payments for hospital-inpatient, hospital-outpatient, and physician services, Medicare payment involves a complex set of rules. Medicare has paid Skilled Nursing Facilities (SNFs) on a prospective basis since July 1, 1998. The rate that is paid is a per-diem rate that is calculated to include the costs of all services, including routine, ancillary, and capital. Per-diem payments for each admission are case-mix adjusted using a resident classification system known as Resource Utilization Groups III (or RUG III). As with most CMS payments, the actual payment amounts are adjusted for differences

Table 3–9 Status Codes

Indicator	*Service*	*Status*
A	Clinical laboratory, ambulance, physical & occupational therapy	Fee schedule
B	Non-recognized codes	Not paid
C	Inpatient procedure	Not paid
D	Discontinued codes	Not paid
E	Non-allowed item or service	Not paid
F	Acquisition of corneal tissue	Reasonable cost
G	Current drug / biological pass-through	Additional payment
H	Device pass-through	Additional payment
K	Non-pass-through drug / biological	APC rate
L	Vaccine	Reasonable cost
N	Incidental service	Packaged
P	Partial hospitalization	Paid per diem
S	Significant procedure	APC rate
T	Significant procedure, reduced when multiple	APC rate
V	Clinic or ED visit	APC rate
X	Ancillary service	APC rate
Y	Non-implant DME	Not paid under OPPS

in cost of living by the hospital wage index on the labor portion of the payment.

There are seven major categories of patients under RUG III with 54 distinct payment categories, as follows (See Table 3–10):

Patients are assigned to one of the payment categories by a "RUGs III Grouper" based upon six key determinants:

- Number of minutes per week needed for rehabilitation services
- Number of different rehabilitation disciplines needed
- Specific treatments received
- Resident's ability to perform activities of daily living (ADL)
- ICD-9 diagnoses
- Resident's cognitive performance

To properly classify residents, SNFs must complete resident assessments on the 5th, 14th, 30th, 60th, and 90th days after admission. These forms are extensive and require another layer of administrative support to properly record information and report it to CMS.

To see how the payment system would operate, let us assume that a rehabilitation patient has been categorized as "Ultra high with treatment minimum of 720 minutes per week." Payment per day for this patient would be computed as shown in Table 3–11.

The rates used in the example will be updated over time as most Medicare rates are adjusted to reflect inflation.

Table 3–10 Number of Payment Categories for Major Resource Utilization Groups III

Major RUG III Group	*Number of Payment Categories*
Rehabilitation	23
Extensive Services	3
Special Care	3
Clinically Complex	6
Impaired Cognition	4
Behavioral Problems	4
Reduced Physical Function	11

MEDICARE PAYMENT: HOME HEALTH AGENCIES (HHAS)

The Balanced Budget Act of 1997 called for the development and implementation of a prospective payment system (PPS) for Medicare home health services to be implemented starting October 1, 2000. Under prospective payment, Medicare will pay HHAs a predetermined base payment. The payment will be adjusted for the health condition and care needs of the beneficiary. The payment will also be adjusted for the geographic differences in wages for HHAs across

Table 3–11 Components of Payment Under RUG III Categorization of "Ultra High plus Extensive Services, High (RUX)"

Category	*Dollar Amount*
Nursing Care	$261.42
Occupational, Physical, and Speech Therapies	233.19
Capital and General and Administrative	70.22
Total Allowed per Diem	$564.83
x Labor %	.75922
Labor per Diem	$428.83
x Wage Index	.9907
Labor Adjusted per Diem	$424.84
Non-labor per Diem	136.00
Case-Mix Adjusted per Diem	$560.84

the country. The adjustment for the health condition, or clinical characteristics, and service needs of the beneficiary is referred to as the case-mix adjustment. The home health PPS will provide HHAs with payments for each 60-day episode of care for each beneficiary. If a beneficiary is still eligible for care after the end of the first episode, a second episode can begin; there are no limits to the number of episodes a beneficiary who remains eligible for the home health benefit can receive. While payment for each episode is adjusted to reflect the beneficiary's health condition and needs, a special outlier provision exists to ensure appropriate payment for those beneficiaries who need the most expensive care. Adjusting payment to reflect the HHA's cost in caring for each beneficiary, including the sickest, should ensure that all beneficiaries have access to home health services for which they are eligible.

The home health PPS is composed of six main features:

1) 60-Day episode

The unit of payment under HHA PPS will be for a 60-day episode of care. An agency will receive half of the estimated base payment for the full 60 days, as soon as the fiscal intermediary receives the initial claim. This estimate is based upon the patient's condition and care needs (case-mix assignment). The agency will receive the residual half of the payment at the close of the 60-day episode unless there is an applicable adjustment to that amount. The full payment is the sum of the initial and residual percentage payments, unless there is an applicable adjustment. This split-percentage-payment approach provides reasonable and balanced cash flow for HHAs. Another 60-day episode can be initiated for longer-stay patients.

2) Case-mix adjustment

After a physician prescribes a home health plan of care, the HHA assesses the patient's condition and likely needs for skilled nursing care, therapy, medical, social services, and home health aide service needs. The assessment must be done for each subsequent episode of care a patient receives. A nurse or therapist from the HHA uses the Outcome and Assessment Information Set (OASIS) instrument to assess the patient's condition. (All HHAs have been using OASIS since July 19, 1999.) OASIS items describing the patient's condition, as well as the expected therapy needs (physical, speech-language pathology, or occupational) are used to determine the case-mix adjustment to the standard payment rate. Eighty case-mix groups, or Home Health Resource Groups (HHRGs), are available for patient classification using three classification criteria.

Classification Categories	*Severity Levels*
Clinical Severity	4 Levels (0–3)
Functional Severity	5 Levels (0–4)
Service Utilization Severity	4 Levels (0–3)

The HHRG system in the proposed rule uses data from a large-scale case-mix research project conducted between 1997 and 1999.

3) Outlier payments

Additional payments will be made to the 60-day case-mix-adjusted episode payments for beneficiaries who incur unusually large costs. These outlier payments will be made for episodes whose imputed cost exceeds a threshold amount for each case-mix group. The amount of the outlier payment will be a proportion of the amount of imputed costs beyond the threshold. Outlier costs will be imputed for each episode by applying standard per-visit amounts to the number of visits by discipline (skilled nursing visits, or physical, speech-language pathology, occupational therapy, or home health aide services) reported on the claims. Total national outlier payments for home health

services annually will be no more than five percent of estimated total payments under home health PPS.

4) Adjustments for beneficiaries who require only a few visits during the 60-day episode

The proposed home health PPS has a low-utilization payment adjustment for beneficiaries whose episodes consist of four or fewer visits. These episodes will be paid the standardized, service-specific per-visit amount multiplied by the number of visits actually provided during the episode. For 2006, the national payments unadjusted for wage index were as follows:

Discipline	*Per-Visit Rate*
Home Health Aide	$45.88
Medical Social Service	162.41
Occupational Therapy	111.53
Physical Therapy	110.78
Skilled Nursing	101.32
Speech Pathology	120.38

5) Adjustments for beneficiaries who experience a significant change in their condition

When a beneficiary experiences a significant change in condition during the 60-day episode not envisioned in the original physician's plan of care and original case-mix assignment, a Significant Change in Condition (SCIC) adjustment can occur. This requires that a new payment amount be determined. The SCIC payment adjustment occurs within a given 60-day episode.

6) Adjustments for beneficiaries who change HHAs

The home health PPS will include a partial episode payment adjustment. A new episode clock will be triggered when a beneficiary elects to transfer to another HHA or when a beneficiary is discharged and readmitted to the same HHA during the 60-day episode. The partial episode payment will provide a simplified approach to the episode definition that takes into account key intervening health events in a patient's care. The partial episode payment allows the 60-day episode clock to end and a new clock to begin if a beneficiary transfers to another HHA or is discharged, but returns to the same HHA because of a decline in his condition within the 60-day episode. When a new 60-day episode begins, a new plan of care and a new assessment are necessary. The original 60-day episode payment is proportionally adjusted to reflect the length of time the beneficiary remained under the agency's care before the intervening event. An initial episode payment of one half of the new case mix group is paid at the start of the new episode, and the 60-day clock is restarted.

To illustrate the actual payment determination for an episode of care under the HHA PPS program, assume that a patient has been classified as 0 severity for clinical, 1 severity for functional, and 2 severity for services utilization (C0F1S2). Payment for this patient under the PPS program would be calculated as follows:

National Standardized Payment Rate	$2,320.89
Case Weight	× 1.5769
Case-Mix Adjusted Payment	$3,659.81

This amount would then be adjusted for the actual wage index of the provider. Under the HHA PPS program, 77.7 percent of the payment is assumed to be labor-related, while the remaining 22.3 percent is assumed to be non-labor-related. Actual payment for a provider with a wage index of 1.2000 would be $4,228.54:

$$[\$3{,}659.81 \times .777 \times 1.2000] + [\$3{,}659.81 \times .223] = \$4{,}228.54$$

SUMMARY

Compared with most businesses, health care organizations are financially complex. Not only do they provide a large number of specific services, but also their individual services often have different effective price structures. Services may be bundled in different ways to determine prices, according to the agreements in place with each specific payer. One customer may choose to pay on the basis of cost while another may pay full charges. Prices may be determined prospectively or may be capitated for broad scopes of care. This variation in payment patterns creates problems in the establishment of prices for products and services. Indeed, the revenue function of a typical health care entity is usually much more complex than that of a comparably sized non-health care business. Further, organizations

within different segments of the health care industry are affected by changes in payment arrangements in different ways.

Health care entities also depend quite heavily on a very limited number of key clients for most of their operating funding. Their largest client is often the federal government or the state government. Doing business with the government involves a significant amount of reporting to ensure compliance and adherence to governmental regulations. Moreover, since the federal government is such a large purchaser of services, a thorough understanding of the nature and implications of the Medicare payment system's rules and regulations is a must for effective management of a health care organization. Important differences exist in setting rates and bundling services between hospital inpatient and outpatient care, physician services, skilled nursing facilities, and home health care. Each system has differing implications for the management of resources by the HCO.

The revenue function of a typical health care entity is usually much more complex than that of a comparably sized non-health care business. Organizations can have vastly different revenue structures, depending on the segments of the health care industry in which they are active. Government commands enormous influence as a purchaser of health care services and maintains complex payment systems. Because payment arrangements are determined primarily by the payer, an effective health care administrator must have a firm understanding of the various systems that exist, both public and private. Although health care organizations may be complex from a financial perspective, they are still businesses. Their financial viability requires the receipt of funds in amounts sufficient to meet their financial requirements.

ASSIGNMENTS

1. From the following data, determine the amount of revenue that needs to be generated to meet hospital financial requirements.

Volume

Medicare cases	1,000
Cost-paying cases	400
Charity care and bad-debt cases	100
Charge-paying cases	500
Total cases	2,000

Financial data

Budgeted expenses	$6,000,000
Debt principal payment	200,000
Working capital increase	250,000
Capital expenditures	400,000

Present payment structure

- ☐ Medicare pays only $2,800 per case, or a total of $2,800,000.
- ☐ All other cost payers pay their share of existing expenses.

2. Why is the accumulation of funded reserves for capital replacement more critical for non-profit health care entities than for investor-owned health care facilities?

3. Teaching hospitals receive an additional payment to recognize the indirect costs of medical education. What rationale might be used to justify this extra payment?

4. Depreciation expense is recognized as a reimbursable cost by a number of payers who pay prospective rates for operating costs. Would you prefer accelerated depreciation (sum of the year's digits) or price-level depreciation for a five-year life asset with a $150,000 cost? Assume that inflation is projected to be six percent per year.

5. Non-profit organizations should not make profits; instead, either their rates should be reduced or their services expanded. Evaluate the choices.

6. Using the data from Assignment 1 above, calculate the impact of a ten percent reduction in operating expenses, that is, down to $5,400,000, on the required revenue and rate structure. Discuss the implications of your findings.

7. Calculate the RBRVS rate for CPT 33426, repair of mitral valve for a physician in Chicago, Illinois. Assume the conversion factor is 40.7986. The following table provides relevant values to complete this calculation:

Repair of Mitral Valve (33426)

RVU	*Chicago Index*	*Product*	
Work	26.07	1.028	26.80
Practice expense	31.96	1.080	34.52
Malpractice	5.80	1.382	8.02
			69.34

8. Medicare currently reimburses hospitals for 70 percent of bad debts written-off on Medicare patients, copayments, and deductibles. If a hospital had $1,000,000 in Medicare deductibles and copayments, what amount might Medicare pay for its bad debts?

9. Discussions with a group of physicians regarding employment status of your hospital are taking place. If the physicians were employed by your hospital, they would be performing all surgical procedures at your hospital instead of their current offices. This could mean a sizable change in total revenue, especially from Medicare patients. To see the effect of this change, assume the example in Table 3-7 for CPT # 42810, excision of a neck cyst. If Medicare would pay the hospital $1,600 for the facility fee and the physicians would receive $309.10, calculate the amount the physicians would lose if the procedure were paid in a non-facility setting. Assume the non-facility practice expense weight is 5.73.

10. Your hospital is reviewing its DRG coding patterns for Medicare. It has focused on two DRGS: 296 (Nutritional and Misc Metabolic Disorders w/ cc) and 297 (Nutritional and Metabolic Disorders w/o cc). There were 100 patients assigned to these two DRGs: 50 to 296 and 50 to 297. National averages suggest that 85 should have been assigned to DRG 296 and 15 to DRG 297. Assuming an average payment of $6,000 per DRG with a case weight of 1.0, how much lost payment from Medicare may be resulting from poor coding and documentation? Use case weight values from the Appendix in this chapter.

SOLUTIONS AND ANSWERS

1. The relevant calculation is as follows:

$$\text{Revenue} = \frac{\text{Budgeted expense} + \text{Desired net income} - \text{Noncharge-paying payments}}{\text{Proportion of charge-paying patients}}$$

$$\text{Revenue} = \frac{\$6{,}000{,}000 + \$850{,}000 - \$4{,}000{,}000}{.25} = \$11{,}4000{,}000 \text{ or } \$5{,}700 \text{ per case}$$

$$\text{Desired net income} = \$850{,}000 = \$200{,}000 + \$250{,}000 + \$400{,}000$$

$$\text{Non-charge-paying patient payments} = \text{Medicare payments} + \text{Cost-paying patient payments}$$

$$\$2{,}800{,}000 + \left(\frac{400}{2{,}000} \times \$6{,}000.00\right) = \$4{,}000{,}000$$

$$\text{Proportion of charge-paying patients} = \frac{500}{2{,}000} = .25$$

2. A non-profit entity does not have the same opportunities for capital formation that an investor-owned organization does. Specifically, the non-profit entity cannot sell new shares or ownership interests. Its sources of capital are limited to its accumulated funded reserves and to new debt. In some special situations, non-profit organizations may receive contributions, but these amounts are usually not significant.

3. Part of the rationale used is related to severity of patients. It is widely believed that teaching hospitals treat more severely ill patients. The currently used DRG classification system does not incorporate severity adjustments. The proposed changes to the DRG classification system by Medicare in Fiscal Year 2008 incorporate severity in the DRG assignments and could result in lower payments for indirect medical education.

4. The relevant comparative data would be as follows:

	*Price Level Depreciation**	*Sum-of-the-Years Digits Depreciation***
Year 1	$ 31,800	$ 50,000
Year 2	33,708	40,000
Year 3	35,730	30,000
Year 4	37,874	20,000
Year 5	40,147	10,000
	$179,259	$150,000

*Depreciation in year t = 150,000/5 $(1.06)^t$. This term reflects compounding of straight-line depreciation at 6 percent per year.

**Depreciation in year t of an N-year life asset is equal to the historical cost times $2(N + 1 - t)/N(N + 1)$.

In year 1, the depreciation would be: $150,000 × 10 ÷ 30, or $50,000.

In most cases, price-level-adjusted depreciation would be better. However, for short-lived assets, accelerated depreciation may provide greater levels of reimbursement in earlier years to offset lower returns in later years. The lower the rate of asset inflation, the more desirable accelerated depreciation becomes.

5. Profit is essential to most business organizations because accounting expenses do not equal cash requirements. Additional funds or profits must be available to meet the financial requirements of debt principal payments, increases in working capital, and capital expenditures.

6. The relevant calculation would be as follows:

$$\text{Revenue} = \frac{\$5{,}400{,}000 + \$850{,}000 - \$3{,}880{,}000}{.25} = \$9{,}480{,}000, \text{ or } \$4{,}740 \text{ per case}$$

A ten percent reduction in operating expenses permitted a 17 percent reduction in rates ($5,700 to $4,740 per case). Cost control is critical in health care entities, especially in those with relatively low levels of cost payers. A reduction in rates is especially important when competing for major contracts in which price is a predominant determinant.

7. The RBRVS rate for this procedure would be:

$$\$2{,}829 = \$40.7986 \times 69.34$$

8. While the total Medicare deductible and copayment amount is $1,000,000, a small percentage will most likely remain unpaid. Many Medicare beneficiaries have supplemental insurance that pays for deductibles and copayments. In addition, many Medicare patients do pay for their deductibles and copayments. In 2004, the average reported Medicare bad debt was approximately 15 percent of deductibles and copayments. In our example, this would mean $150,000 of reported bad debts. Medicare would then pay 70 percent ($105,000).

9. The current practice expense weight in a facility setting is 3.55 per Table 3–7. The weight in a non-facility setting is 5.73 per discussion in the text. The lost payment that the doctors would experience would be:

$$(5.73 - 3.55) \times 1.144 \times \$40 = \$99.76$$

The net difference in payment would be $1,500.24 ($1,600.00 − $99.76). The dilemma is the distribution of payments. The hospital would gain $1,600, but the physicians would lose $99.76.

10. If the hospital had the same coding percentages as the national average, it would have had 35 more cases coded as 296 and 35 fewer cases coded as 297. Using the case weights in Appendix 3 and the $6,000 payment per case weight of 1.0, the additional payment would be:

$$35 \text{ cases} \times (0.8187 - 0.4879) \times \$6{,}000 = \$69{,}468$$

Appendix 3

List of Diagnosis-Related Groups (DRGs) and Relative Weights for Fiscal Year 2006

Drg	*Mdc*	*Type*	*Drg Title*	*Weights*	*Mean LOS*	*Arithmetic Mean LOS*
001	01	Surg	Craniotomy Age >17 W CC	3.4347	7.6	10.1
002	01	Surg	Craniotomy Age >17 W/O CC	1.9587	3.5	4.6
003	01	Surg *	Craniotomy Age 0–17	1.9860	12.7	12.7
004	01	Surg	No Longer Valid	0.0000	0.0	0.0
005	01	Surg	No Longer Valid	0.0000	0.0	0.0
006	01	Surg	Carpal Tunnel Release	0.7878	2.2	3.0
007	01	Surg	Periph & Cranial Nerve & Other Nerv Syst Proc W CC	2.6978	6.7	9.7
008	01	Surg	Periph & Cranial Nerve & Other Nerv Syst Proc W/O CC	1.5635	2.0	3.0
009	01	Med	Spinal Disorders & Injuries	1.4045	4.5	6.4
010	01	Med	Nervous System Neoplasms W CC	1.2222	4.6	6.2
011	01	Med	Nervous System Neoplasms W/O CC	0.8736	2.9	3.8
012	01	Med	Degenerative Nervous System Disorders	0.8998	4.3	5.5
013	01	Med	Multiple Sclerosis & Cerebellar Ataxia	0.8575	4.0	5.0
014	01	Med	Intracranial Hemorrhage Or Cerebral Infarction	1.2456	4.5	5.8
015	01	Med	Nonspecific Cva & Precerebral Occlusion W/O Infarct	0.9421	3.7	4.6
016	01	Med	Nonspecific Cerebrovascular Disorders W CC	1.3351	5.0	6.5
017	01	Med	Nonspecific Cerebrovascular Disorders W/O CC	0.7229	2.5	3.2
018	01	Med	Cranial & Peripheral Nerve Disorders W CC	0.9903	4.1	5.3
019	01	Med	Cranial & Peripheral Nerve Disorders W/O CC	0.7077	2.7	3.5
020	01	Med	Nervous System Infection Except Viral Meningitis	2.7865	8.0	10.4
021	01	Med	Viral Meningitis	1.4451	4.9	6.3
022	01	Med	Hypertensive Encephalopathy	1.1304	4.0	5.2
023	01	Med	Nontraumatic Stupor & Coma	0.7712	3.0	3.9
024	01	Med	Seizure & Headache Age >17 W CC	0.9970	3.6	4.8
025	01	Med	Seizure & Headache Age >17 W/O CC	0.6180	2.5	3.1
026	01	Med	Seizure & Headache Age 0–17	1.8191	3.4	6.3
027	01	Med	Traumatic Stupor & Coma, Coma >1 Hr	1.3531	3.2	5.2
028	01	Med	Traumatic Stupor & Coma, Coma <1 Hr Age >17 W CC	1.3353	4.4	5.9

Source: Reprinted from Centers for Medicare & Medicaid Services.

Drg	*Mdc*	*Type*	*Drg Title*	*Weights*	*Mean LOS*	*Arithmetic Mean LOS*
029	01	Med	Traumatic Stupor & Coma, Coma <1 Hr Age >17 W/O CC	0.7212	2.6	3.4
030	01	Med *	Traumatic Stupor & Coma, Coma <1 Hr Age 0–17	0.3359	2.0	2.0
031	01	Med	Concussion Age >17 W CC	0.9567	3.0	4.0
032	01	Med	Concussion Age >17 W/O CC	0.6194	1.9	2.4
033	01	Med *	Concussion Age 0–17	0.2109	1.6	1.6
034	01	Med	Other Disorders Of Nervous System W CC	1.0062	3.7	4.8
035	01	Med	Other Disorders Of Nervous System W/O CC	0.6241	2.4	3.0
036	02	Surg	Retinal Procedures	0.7288	1.3	1.6
037	02	Surg	Orbital Procedures	1.1858	2.7	4.2
038	02	Surg	Primary Iris Procedures	0.6975	2.5	3.5
039	02	Surg	Lens Procedures With Or Without Vitrectomy	0.7108	1.7	2.4
040	02	Surg	Extraocular Procedures Except Orbit Age >17	0.9627	3.0	4.1
041	02	Surg *	Extraocular Procedures Except Orbit Age 0–17	0.3419	1.6	1.6
042	02	Surg	Intraocular Procedures Except Retina, Iris & Lens	0.7852	2.0	2.8
043	02	Med	Hyphema	0.6141	2.4	3.1
044	02	Med	Acute Major Eye Infections	0.6874	3.9	4.8
045	02	Med	Neurological Eye Disorders	0.7474	2.5	3.1
046	02	Med	Other Disorders Of The Eye Age >17 W CC	0.7524	3.2	4.2
047	02	Med	Other Disorders Of The Eye Age >17 W/O CC	0.5203	2.3	2.9
048	02	Med *	Other Disorders Of The Eye Age 0–17	0.3012	2.9	2.9
049	03	Surg	Major Head & Neck Procedures	1.6361	3.1	4.4
050	03	Surg	Sialoadenectomy	0.8690	1.5	1.8
051	03	Surg	Salivary Gland Procedures Except Sialoadenectomy	0.8809	1.9	2.8
052	03	Surg	Cleft Lip & Palate Repair	0.8348	1.5	1.9
053	03	Surg	Sinus & Mastoid Procedures Age >17	1.3269	2.4	3.9
054	03	Surg *	Sinus & Mastoid Procedures Age 0–17	0.4882	3.2	3.2
055	03	Surg	Miscellaneous Ear, Nose, Mouth & Throat Procedures	0.9597	2.0	3.1
056	03	Surg	Rhinoplasty	0.8711	1.8	2.6
057	03	Surg	T&A Proc, Except Tonsillectomy &/Or Adenoidectomy Only, Age >17	1.0428	2.3	3.6
058	03	Surg *	T&A Proc, Except Tonsillectomy &/Or Adenoidectomy Only, Age 0–17	0.2772	1.5	1.5
059	03	Surg	Tonsillectomy &/Or Adenoidectomy Only, Age >17	0.8082	1.8	2.6
060	03	Surg *	Tonsillectomy &/Or Adenoidectomy Only, Age 0–17	0.2110	1.5	1.5
061	03	Surg	Myringotomy W Tube Insertion Age >17	1.2867	3.3	5.4
062	03	Surg *	Myringotomy W Tube Insertion Age 0–17	0.2989	1.3	1.3
063	03	Surg	Other Ear, Nose, Mouth, & Throat O.R. Procedures	1.3983	3.0	4.5
064	03	Med	Ear, Nose, Mouth, & Throat Malignancy	1.1663	4.1	6.1
065	03	Med	Dysequilibrium	0.5991	2.3	2.8
066	03	Med	Epistaxis	0.5958	2.4	3.1
067	03	Med	Epiglottitis	0.7725	2.9	3.7
068	03	Med	Otitis Media & Uri Age >17 W CC	0.6611	3.2	4.0
069	03	Med	Otitis Media & Uri Age >17 W/O CC	0.4850	2.5	3.0
070	03	Med	Otitis Media & Uri Age 0–17	0.4210	2.1	2.3
071	03	Med	Laryngotracheitis	0.7524	3.2	4.0
072	03	Med	Nasal Trauma & Deformity	0.7449	2.6	3.4
073	03	Med	Other Ear, Nose, Mouth, & Throat Diagnoses Age >17	0.8527	3.3	4.4

Drg	*Mdc*	*Type*	*Drg Title*	*Weights*	*Mean LOS*	*Arithmetic Mean LOS*
074	03	Med *	Other Ear, Nose, Mouth, & Throat Diagnoses Age 0–17	0.3398	2.1	2.1
075	04	Surg	Major Chest Procedures	3.0732	7.6	9.9
076	04	Surg	Other Resp System O.R. Procedures W CC	2.8830	8.4	11.1
077	04	Surg	Other Resp System O.R. Procedures W/O CC	1.1857	3.3	4.7
078	04	Med	Pulmonary Embolism	1.2427	5.4	6.4
079	04	Med	Respiratory Infections & Inflammations Age >17 W CC	1.6238	6.7	8.5
080	04	Med	Respiratory Infections & Inflammations Age >17 W/O CC	0.8947	4.4	5.5
081	04	Med *	Respiratory Infections & Inflammations Age 0–17	1.5383	6.1	6.1
082	04	Med	Respiratory Neoplasms	1.3936	5.1	6.8
083	04	Med	Major Chest Trauma W CC	0.9828	4.2	5.3
084	04	Med	Major Chest Trauma W/O CC	0.5799	2.6	3.2
085	04	Med	Pleural Effusion W CC	1.2405	4.8	6.3
086	04	Med	Pleural Effusion W/O CC	0.6974	2.8	3.6
087	04	Med	Pulmonary Edema & Respiratory Failure	1.3654	4.9	6.4
088	04	Med	Chronic Obstructive Pulmonary Disease	0.8778	4.0	4.9
089	04	Med	Simple Pneumonia & Pleurisy Age >17 W CC	1.0320	4.7	5.7
090	04	Med	Simple Pneumonia & Pleurisy Age >17 W/O CC	0.6104	3.2	3.8
091	04	Med	Simple Pneumonia & Pleurisy Age 0–17	0.8124	3.4	4.4
092	04	Med	Interstitial Lung Disease W CC	1.1853	4.8	6.1
093	04	Med	Interstitial Lung Disease W/O CC	0.7150	3.1	3.9
094	04	Med	Pneumothorax W CC	1.1354	4.6	6.2
095	04	Med	Pneumothorax W/O CC	0.6035	2.9	3.6
096	04	Med	Bronchitis & Asthma Age >17 W CC	0.7303	3.6	4.4
097	04	Med	Bronchitis & Asthma Age >17 W/O CC	0.5364	2.8	3.4
098	04	Med *	Bronchitis & Asthma Age 0–17	0.5560	3.7	3.7
099	04	Med	Respiratory Signs & Symptoms W CC	0.7094	2.4	3.1
100	04	Med	Respiratory Signs & Symptoms W/O CC	0.5382	1.7	2.1
101	04	Med	Other Respiratory System Diagnoses W CC	0.8733	3.3	4.3
102	04	Med	Other Respiratory System Diagnoses W/O CC	0.5402	2.0	2.5
103	Pre	Surg	Heart Transplant Or Implant Of Heart Assist System	18.5617	23.7	37.7
104	05	Surg	Cardiac Valve & Oth Major Cardiothoracic Proc W Card Cath	8.2201	12.7	14.9
105	05	Surg	Cardiac Valve & Oth Major Cardiothoracic Proc W/O Card Cath	6.0192	8.4	10.2
106	05	Surg	Coronary Bypass W Ptca	7.0346	9.5	11.2
107	05	Surg	No Longer Valid	0.0000	13.5	13.5
108	05	Surg	Other Cardiothoracic Procedures	5.8789	8.6	11.0
109	05	Surg	No Longer Valid	0.0000	12.1	12.1
110	05	Surg	Major Cardiovascular Procedures W CC	3.8417	5.7	8.4
111	05	Surg	Major Cardiovascular Procedures W/O CC	2.4840	2.6	3.4
112	05	Surg	No Longer Valid	0.0000	0.0	0.0
113	05	Surg	Amputation For Circ System Disorders Except Upper Limb & Toe	3.1682	10.8	13.7
114	05	Surg	Upper Limb & Toe Amputation For Circ System Disorders	1.7354	6.7	8.9
115	05	Surg	No Longer Valid	0.0000	15.8	15.8

Drg	*Mdc*	*Type*	*Drg Title*	*Weights*	*Mean LOS*	*Arithmetic Mean LOS*
116	05	Surg	No Longer Valid	0.0000	9.3	9.3
117	05	Surg	Cardiac Pacemaker Revision Except Device Replacement	1.3223	2.6	4.2
118	05	Surg	Cardiac Pacemaker Device Replacement	1.6380	2.1	3.0
119	05	Surg	Vein Ligation & Stripping	1.3456	3.3	5.5
120	05	Surg	Other Circulatory System O.R. Procedures	2.3853	5.9	9.2
121	05	Med	Circulatory Disorders W Ami & Major Comp, Discharged Alive	1.6136	5.3	6.6
122	05	Med	Circulatory Disorders W Ami W/O Major Comp, Discharged Alive	0.9847	2.8	3.5
123	05	Med	Circulatory Disorders W Ami, Expired	1.5407	2.9	4.8
124	05	Med	Circulatory Disorders Except Ami, W Card Cath & Complex Diag	1.4425	3.3	4.4
125	05	Med	Circulatory Disorders Except Ami, W Card Cath W/O Complex Diag	1.0948	2.1	2.7
126	05	Med	Acute & Subacute Endocarditis	2.7440	9.4	12.0
127	05	Med	Heart Failure & Shock	1.0345	4.1	5.2
128	05	Med	Deep Vein Thrombophlebitis	0.6949	4.4	5.2
129	05	Med	Cardiac Arrest, Unexplained	1.0404	1.7	2.6
130	05	Med	Peripheral Vascular Disorders W CC	0.9425	4.4	5.5
131	05	Med	Peripheral Vascular Disorders W/O CC	0.5566	3.2	3.9
132	05	Med	Atherosclerosis W CC	0.6273	2.2	2.8
133	05	Med	Atherosclerosis W/O CC	0.5337	1.8	2.2
134	05	Med	Hypertension	0.6068	2.4	3.1
135	05	Med	Cardiac Congenital & Valvular Disorders Age >17 W CC	0.8917	3.2	4.3
136	05	Med	Cardiac Congenital & Valvular Disorders Age >17 W/O CC	0.6214	2.2	2.8
137	05	Med *	Cardiac Congenital & Valvular Disorders Age 0–17	0.8288	3.3	3.3
138	05	Med	Cardiac Arrhythmia & Conduction Disorders W CC	0.8287	3.0	3.9
139	05	Med	Cardiac Arrhythmia & Conduction Disorders W/O CC	0.5227	2.0	2.4
140	05	Med	Angina Pectoris	0.5116	2.0	2.4
141	05	Med	Syncope & Collapse W CC	0.7521	2.7	3.5
142	05	Med	Syncope & Collapse W/O CC	0.5852	2.0	2.5
143	05	Med	Chest Pain	0.5659	1.7	2.1
144	05	Med	Other Circulatory System Diagnoses W CC	1.2761	4.1	5.8
145	05	Med	Other Circulatory System Diagnoses W/O CC	0.5835	2.1	2.6
146	06	Surg	Rectal Resection W CC	2.6621	8.6	10.0
147	06	Surg	Rectal Resection W/O CC	1.4781	5.2	5.8
148	06	Surg	Major Small & Large Bowel Procedures W CC	3.4479	10.0	12.3
149	06	Surg	Major Small & Large Bowel Procedures W/O CC	1.4324	5.4	6.0
150	06	Surg	Peritoneal Adhesiolysis W CC	2.8061	8.9	11.0
151	06	Surg	Peritoneal Adhesiolysis W/O CC	1.2641	4.0	5.1
152	06	Surg	Minor Small & Large Bowel Procedures W CC	1.8783	6.7	8.0
153	06	Surg	Minor Small & Large Bowel Procedures W/O CC	1.0821	4.5	5.0
154	06	Surg	Stomach, Esophageal & Duodenal Procedures Age >17 W CC	4.0399	9.9	13.3
155	06	Surg	Stomach, Esophageal & Duodenal Procedures Age >17 W/O CC	1.2889	3.1	4.1

Drg	*Mdc*	*Type*	*Drg Title*	*Weights*	*Mean LOS*	*Arithmetic Mean LOS*
156	06	Surg *	Stomach, Esophageal, & Duodenal Procedures Age 0–17	0.8535	6.0	6.0
157	06	Surg	Anal & Stomal Procedures W CC	1.3356	4.1	5.8
158	06	Surg	Anal & Stomal Procedures W/O CC	0.6657	2.1	2.6
159	06	Surg	Hernia Procedures Except Inguinal & Femoral Age >17 W CC	1.4081	3.8	5.1
160	06	Surg	Hernia Procedures Except Inguinal & Femoral Age >17 W/O CC	0.8431	2.2	2.7
161	06	Surg	Inguinal & Femoral Hernia Procedures Age >17 W CC	1.1931	3.1	4.4
162	06	Surg	Inguinal & Femoral Hernia Procedures Age >17 W/O CC	0.6785	1.7	2.1
163	06	Surg	Hernia Procedures Age 0–17	0.6723	2.2	2.9
164	06	Surg	Appendectomy W Complicated Principal Diag W CC	2.2476	6.6	8.0
165	06	Surg	Appendectomy W Complicated Principal Diag W/O CC	1.1868	3.6	4.2
166	06	Surg	Appendectomy W/O Complicated Principal Diag W CC	1.4521	3.3	4.5
167	06	Surg	Appendectomy W/O Complicated Principal Diag W/O CC	0.8929	1.9	2.2
168	03	Surg	Mouth Procedures W CC	1.2662	3.3	4.9
169	03	Surg	Mouth Procedures W/O CC	0.7297	1.8	2.3
170	06	Surg	Other Digestive System O.R. Procedures W CC	2.9612	7.8	11.0
171	06	Surg	Other Digestive System O.R. Procedures W/O CC	1.1905	3.1	4.1
172	06	Med	Digestive Malignancy W CC	1.4125	5.1	7.0
173	06	Med	Digestive Malignancy W/O CC	0.7443	2.7	3.6
174	06	Med	G.I. Hemorrhage W CC	1.0060	3.8	4.7
175	06	Med	G.I. Hemorrhage W/O CC	0.5646	2.4	2.9
176	06	Med	Complicated Peptic Ulcer	1.1246	4.1	5.2
177	06	Med	Uncomplicated Peptic Ulcer W CC	0.9166	3.6	4.4
178	06	Med	Uncomplicated Peptic Ulcer W/O CC	0.7013	2.6	3.1
179	06	Med	Inflammatory Bowel Disease	1.0911	4.5	5.9
180	06	Med	G.I. Obstruction W CC	0.9784	4.2	5.4
181	06	Med	G.I. Obstruction W/O CC	0.5614	2.8	3.3
182	06	Med	Esophagitis, Gastroent, & Misc Digest Disorders Age >17 W CC	0.8413	3.4	4.4
183	06	Med	Esophagitis, Gastroent, & Misc Digest Disorders Age >17 W/O CC	0.5848	2.3	2.9
184	06	Med	Esophagitis, Gastroent, & Misc Digest Disorders Age 0–17	0.5663	2.5	3.3
185	03	Med	Dental & Oral Dis Except Extractions & Restorations, Age >17	0.8702	3.2	4.5
186	03	Med *	Dental & Oral Dis Except Extractions & Restorations, Age 0–17	0.3253	2.9	2.9
187	03	Med	Dental Extractions & Restorations	0.8363	3.1	4.2
188	06	Med	Other Digestive System Diagnoses Age >17 W CC	1.1290	4.2	5.6
189	06	Med	Other Digestive System Diagnoses Age >17 W/O CC	0.6064	2.4	3.1
190	06	Med	Other Digestive System Diagnoses Age 0–17	0.6179	3.1	4.4

Drg	*Mdc*	*Type*	*Drg Title*	*Weights*	*Mean LOS*	*Arithmetic Mean LOS*
191	07	Surg	Pancreas, Liver, & Shunt Procedures W CC	3.9680	9.0	12.9
192	07	Surg	Pancreas, Liver, & Shunt Procedures W/O CC	1.6793	4.3	5.7
193	07	Surg	Biliary Tract Proc Except Only Cholecyst W Or W/O C.D.E. W CC	3.2818	9.9	12.1
194	07	Surg	Biliary Tract Proc Except Only Cholecyst W Or W/O C.D.E. W/O CC	1.5748	5.6	6.7
195	07	Surg	Cholecystectomy W C.D.E. W CC	3.0530	8.8	10.6
196	07	Surg	Cholecystectomy W C.D.E. W/O CC	1.6031	4.9	5.7
197	07	Surg	Cholecystectomy Except By Laparoscope W/O C.D.E. W CC	2.5425	7.5	9.2
198	07	Surg	Cholecystectomy Except By Laparoscope W/O C.D.E. W/O CC	1.1604	3.7	4.3
199	07	Surg	Hepatobiliary Diagnostic Procedure For Malignancy	2.4073	6.8	9.5
200	07	Surg	Hepatobiliary Diagnostic Procedure For Non-Malignancy	2.7868	6.5	9.8
201	07	Surg	Other Hepatobiliary Or Pancreas O.R. Procedures	3.7339	9.9	13.7
202	07	Med	Cirrhosis & Alcoholic Hepatitis	1.3318	4.7	6.2
203	07	Med	Malignancy Of Hepatobiliary System Or Pancreas	1.3552	4.9	6.5
204	07	Med	Disorders Of Pancreas Except Malignancy	1.1249	4.2	5.6
205	07	Med	Disorders Of Liver Except Malig, Cirr, Alc Hepa W CC	1.2059	4.4	6.0
206	07	Med	Disorders Of Liver Except Malig, Cirr, Alc Hepa W/O CC	0.7292	3.0	3.9
207	07	Med	Disorders Of The Biliary Tract W CC	1.1746	4.1	5.3
208	07	Med	Disorders Of The Biliary Tract W/O CC	0.6895	2.3	2.9
209	08	Surg	No Longer Valid	0.0000	17.1	17.1
210	08	Surg	Hip & Femur Procedures Except Major Joint Age >17 W CC	1.9059	6.1	6.9
211	08	Surg	Hip & Femur Procedures Except Major Joint Age >17 W/O CC	1.2690	4.4	4.7
212	08	Surg	Hip & Femur Procedures Except Major Joint Age 0–17	1.2877	2.4	2.9
213	08	Surg	Amputation For Musculoskeletal System & Conn Tissue Disorders	2.0428	7.2	9.7
214	08	Surg	No Longer Valid	0.0000	0.0	0.0
215	08	Surg	No Longer Valid	0.0000	0.0	0.0
216	08	Surg	Biopsies Of Musculoskeletal System & Connective Tissue	1.9131	3.3	5.8
217	08	Surg	Wnd Debrid & Skn Grft Except Hand, For Muscskelet & Conn Tiss Dis	3.0596	9.3	13.2
218	08	Surg	Lower Extrem & Humer Proc Except Hip, Foot, Femur Age >17 W CC	1.6648	4.4	5.6
219	08	Surg	Lower Extrem & Humer Proc Except Hip, Foot, Femur Age >17 W/O CC	1.0443	2.6	3.1
220	08	Surg *	Lower Extrem & Humer Proc Except Hip, Foot, Femur Age 0–17	0.5913	5.3	5.3
221	08	Surg	No Longer Valid	0.0000	0.0	0.0
222	08	Surg	No Longer Valid	0.0000	0.0	0.0
223	08	Surg	Major Shoulder/Elbow Proc, Or Other Upper Extremity Proc W CC	1.1164	2.3	3.2

Drg	*Mdc*	*Type*	*Drg Title*	*Weights*	*Mean LOS*	*Arithmetic Mean LOS*
224	08	Surg	Shoulder, Elbow, Or Forearm Proc, Exc Major Joint Proc, W/O CC	0.8185	1.6	1.9
225	08	Surg	Foot Procedures	1.2251	3.7	5.2
226	08	Surg	Soft Tissue Procedures W CC	1.5884	4.5	6.5
227	08	Surg	Soft Tissue Procedures W/O CC	0.8311	2.1	2.6
228	08	Surg	Major Thumb Or Joint Proc, Or Oth Hand Or Wrist Proc W CC	1.1459	2.8	4.1
229	08	Surg	Hand Or Wrist Proc, Except Major Joint Proc, W/O CC	0.6976	1.9	2.5
230	08	Surg	Local Excision & Removal Of Int Fix Devices Of Hip & Femur	1.3174	3.7	5.6
231	08	Surg	No Longer Valid	0.0000	0.0	0.0
232	08	Surg	Arthroscopy	0.9702	1.8	2.8
233	08	Surg	Other Musculoskelet Sys & Conn Tiss O.R. Proc W CC	1.9184	4.6	6.8
234	08	Surg	Other Musculoskelet Sys & Conn Tiss O.R. Proc W/O CC	1.2219	2.0	2.8
235	08	Med	Fractures Of Femur	0.7768	3.8	4.8
236	08	Med	Fractures Of Hip & Pelvis	0.7407	3.8	4.6
237	08	Med	Sprains, Strains, & Dislocations Of Hip, Pelvis, & Thigh	0.6090	3.0	3.7
238	08	Med	Osteomyelitis	1.4401	6.7	8.7
239	08	Med	Pathological Fractures & Musculoskeletal & Conn Tiss Malignancy	1.0767	5.0	6.2
240	08	Med	Connective Tissue Disorders W CC	1.4051	5.0	6.7
241	08	Med	Connective Tissue Disorders W/O CC	0.6629	3.0	3.7
242	08	Med	Septic Arthritis	1.1504	5.1	6.7
243	08	Med	Medical Back Problems	0.7658	3.6	4.5
244	08	Med	Bone Diseases & Specific Arthropathies W CC	0.7200	3.6	4.5
245	08	Med	Bone Diseases & Specific Arthropathies W/O CC	0.4583	2.5	3.1
246	08	Med	Non-Specific Arthropathies	0.5932	2.8	3.6
247	08	Med	Signs & Symptoms Of Musculoskeletal System & Conn Tissue	0.5795	2.6	3.3
248	08	Med	Tendonitis, Myositis, & Bursitis	0.8554	3.8	4.8
249	08	Med	Aftercare, Musculoskeletal System, & Connective Tissue	0.7095	2.7	3.9
250	08	Med	Fx, Sprn, Strn, & Disl Of Forearm, Hand, Foot Age >17 W CC	0.6974	3.2	3.9
251	08	Med	Fx, Sprn, Strn, & Disl Of Forearm, Hand, Foot Age >17 W/O CC	0.4749	2.3	2.8
252	08	Med *	Fx, Sprn, Strn, & Disl Of Forearm, Hand, Foot Age 0–17	0.2567	1.8	1.8
253	08	Med	Fx, Sprn, Strn, & Disl Of Uparm, Lowleg Ex Foot Age >17 W CC	0.7747	3.8	4.6
254	08	Med	Fx, Sprn, Strn, & Disl Of Uparm, Lowleg Ex Foot Age >17 W/O CC	0.4588	2.6	3.1
255	08	Med *	Fx, Sprn, Strn, & Disl Of Uparm, Lowleg Ex Foot Age 0–17	0.2990	2.9	2.9
256	08	Med	Other Musculoskeletal System & Connective Tissue Diagnoses	0.8509	3.9	5.1

Drg	*Mdc*	*Type*	*Drg Title*	*Weights*	*Mean LOS*	*Arithmetic Mean LOS*
257	09	Surg	Total Mastectomy For Malignancy W CC	0.8967	2.0	2.6
258	09	Surg	Total Mastectomy For Malignancy W/O CC	0.7138	1.5	1.7
259	09	Surg	Subtotal Mastectomy For Malignancy W CC	0.9671	1.8	2.8
260	09	Surg	Subtotal Mastectomy For Malignancy W/O CC	0.7032	1.2	1.4
261	09	Surg	Breast Proc For Non-Malignancy Except Biopsy & Local Excision	0.9732	1.6	2.2
262	09	Surg	Breast Biopsy & Local Excision For Non-Malignancy	0.9766	3.3	4.8
263	09	Surg	Skin Graft &/Or Debrid For Skn Ulcer Or Cellulitis W CC	2.1130	8.6	11.4
264	09	Surg	Skin Graft &/Or Debrid For Skn Ulcer Or Cellulitis W/O CC	1.0635	5.0	6.5
265	09	Surg	Skin Graft &/Or Debrid Except For Skin Ulcer Or Cellulitis W CC	1.6593	4.4	6.8
266	09	Surg	Skin Graft &/Or Debrid Except For Skin Ulcer Or Cellulitis W/O CC	0.8637	2.3	3.2
267	09	Surg	Perianal & Pilonidal Procedures	0.8962	2.8	4.2
268	09	Surg	Skin, Subcutaneous Tissue, & Breast Plastic Procedures	1.1326	2.4	3.5
269	09	Surg	Other Skin, Subcut Tiss, & Breast Proc W CC	1.8352	6.2	8.6
270	09	Surg	Other Skin, Subcut Tiss, & Breast Proc W/O CC	0.8313	2.7	3.9
271	09	Med	Skin Ulcers	1.0195	5.6	7.1
272	09	Med	Major Skin Disorders W CC	0.9860	4.5	5.9
273	09	Med	Major Skin Disorders W/O CC	0.5539	2.9	3.7
274	09	Med	Malignant Breast Disorders W CC	1.1294	4.7	6.3
275	09	Med	Malignant Breast Disorders W/O CC	0.5340	2.4	3.3
276	09	Med	Non-Malignant Breast Disorders	0.6892	3.5	4.5
277	09	Med	Cellulitis Age >17 W CC	0.8676	4.6	5.6
278	09	Med	Cellulitis Age >17 W/O CC	0.5391	3.4	4.1
279	09	Med *	Cellulitis Age 0–17	0.7822	4.2	4.2
280	09	Med	Trauma To The Skin, Subcut Tiss, & Breast Age >17 W CC	0.7313	3.2	4.1
281	09	Med	Trauma To The Skin, Subcut Tiss, & Breast Age >17 W/O CC	0.4913	2.3	2.9
282	09	Med *	Trauma To The Skin, Subcut Tiss, & Breast Age 0–17	0.2600	2.2	2.2
283	09	Med	Minor Skin Disorders W CC	0.7423	3.5	4.6
284	09	Med	Minor Skin Disorders W/O CC	0.4563	2.4	3.0
285	10	Surg	Amputat Of Lower Limb For Endocrine, Nutrit, & Metabol Disorders	2.1831	8.2	10.5
286	10	Surg	Adrenal & Pituitary Procedures	1.9390	4.0	5.5
287	10	Surg	Skin Grafts & Wound Debrid For Endoc, Nutrit, & Metab Disorders	1.9470	7.8	10.4
288	10	Surg	O.R. Procedures For Obesity	2.0384	3.2	4.1
289	10	Surg	Parathyroid Procedures	0.9315	1.7	2.6
290	10	Surg	Thyroid Procedures	0.8891	1.6	2.1
291	10	Surg	Thyroglossal Procedures	1.0877	1.6	2.8
292	10	Surg	Other Endocrine, Nutrit, & Metab O.R. Proc W CC	2.6395	7.3	10.3
293	10	Surg	Other Endocrine, Nutrit, & Metab O.R. Proc W/O CC	1.3472	3.2	4.5
294	10	Med	Diabetes Age >35	0.7652	3.3	4.3

Drg	*Mdc*	*Type*	*Drg Title*	*Weights*	*Mean LOS*	*Arithmetic Mean LOS*
295	10	Med	Diabetes Age 0–35	0.7267	2.8	3.7
296	10	Med	Nutritional & Misc Metabolic Disorders Age >17 W CC	0.8187	3.7	4.8
297	10	Med	Nutritional & Misc Metabolic Disorders Age >17 W/O CC	0.4879	2.5	3.1
298	10	Med	Nutritional & Misc Metabolic Disorders Age 0–17	0.5486	2.5	3.9
299	10	Med	Inborn Errors Of Metabolism	1.0329	3.7	5.2
300	10	Med	Endocrine Disorders W CC	1.0922	4.6	6.0
301	10	Med	Endocrine Disorders W/O CC	0.6118	2.7	3.4
302	11	Surg	Kidney Transplant	3.1679	7.0	8.2
303	11	Surg	Kidney, Ureter, & Major Bladder Procedures For Neoplasm	2.2183	5.8	7.4
304	11	Surg	Kidney, Ureter, & Major Bladder Proc For Non-Neopl W CC	2.3761	6.1	8.6
305	11	Surg	Kidney, Ureter, & Major Bladder Proc For Non-Neopl W/O CC	1.1595	2.6	3.2
306	11	Surg	Prostatectomy W CC	1.2700	3.6	5.5
307	11	Surg	Prostatectomy W/O CC	0.6202	1.7	2.1
308	11	Surg	Minor Bladder Procedures W CC	1.6349	3.9	6.1
309	11	Surg	Minor Bladder Procedures W/O CC	0.9085	1.6	2.0
310	11	Surg	Transurethral Procedures W CC	1.1898	3.0	4.5
311	11	Surg	Transurethral Procedures W/O CC	0.6432	1.5	1.9
312	11	Surg	Urethral Procedures, Age >17 W CC	1.1159	3.2	4.8
313	11	Surg	Urethral Procedures, Age >17 W/O CC	0.6783	1.7	2.2
314	11	Surg *	Urethral Procedures, Age 0–17	0.5012	2.3	2.3
315	11	Surg	Other Kidney & Urinary Tract O.R. Procedures	2.0823	3.6	6.8
316	11	Med	Renal Failure	1.2692	4.9	6.4
317	11	Med	Admit For Renal Dialysis	0.7942	2.4	3.5
318	11	Med	Kidney & Urinary Tract Neoplasms W CC	1.1539	4.2	5.8
319	11	Med	Kidney & Urinary Tract Neoplasms W/O CC	0.6385	2.1	2.8
320	11	Med	Kidney & Urinary Tract Infections Age >17 W CC	0.8658	4.2	5.2
321	11	Med	Kidney & Urinary Tract Infections Age >17 W/O CC	0.5652	3.0	3.6
322	11	Med	Kidney & Urinary Tract Infections Age 0–17	0.5498	2.9	3.4
323	11	Med	Urinary Stones W CC, &/Or Esw Lithotripsy	0.8214	2.3	3.1
324	11	Med	Urinary Stones W/O CC	0.5050	1.6	1.9
325	11	Med	Kidney & Urinary Tract Signs & Symptoms Age >17 W CC	0.6436	2.9	3.7
326	11	Med	Kidney & Urinary Tract Signs & Symptoms Age >17 W/O CC	0.4391	2.1	2.6
327	11	Med *	Kidney & Urinary Tract Signs & Symptoms Age 0–17	0.3748	3.1	3.1
328	11	Med	Urethral Stricture Age >17 W CC	0.7079	2.6	3.5
329	11	Med	Urethral Stricture Age >17 W/O CC	0.4701	1.5	1.8
330	11	Med *	Urethral Stricture Age 0–17	0.3227	1.6	1.6
331	11	Med	Other Kidney & Urinary Tract Diagnoses Age >17 W CC	1.0619	4.1	5.5
332	11	Med	Other Kidney & Urinary Tract Diagnoses Age >17 W/O CC	0.6160	2.4	3.1
333	11	Med	Other Kidney & Urinary Tract Diagnoses Age 0–17	0.9669	3.5	5.3
334	12	Surg	Major Male Pelvic Procedures W CC	1.4368	3.5	4.3

Drg	*Mdc*	*Type*	*Drg Title*	*Weights*	*Mean LOS*	*Arithmetic Mean LOS*
335	12	Surg	Major Male Pelvic Procedures W/O CC	1.1004	2.4	2.7
336	12	Surg	Transurethral Prostatectomy W CC	0.8425	2.5	3.3
337	12	Surg	Transurethral Prostatectomy W/O CC	0.5747	1.7	1.9
338	12	Surg	Testes Procedures, For Malignancy	1.3772	3.9	6.2
339	12	Surg	Testes Procedures, Non-Malignancy Age >17	1.1866	3.2	5.1
340	12	Surg *	Testes Procedures, Non-Malignancy Age 0–17	0.2868	2.4	2.4
341	12	Surg	Penis Procedures	1.2622	1.9	3.2
342	12	Surg	Circumcision Age >17	0.8737	2.5	3.4
343	12	Surg *	Circumcision Age 0–17	0.1559	1.7	1.7
344	12	Surg	Other Male Reproductive System O.R. Procedures For Malignancy	1.2475	1.7	2.7
345	12	Surg	Other Male Reproductive System O.R. Proc Except For Malignancy	1.1472	3.1	4.8
346	12	Med	Malignancy, Male Reproductive System, W CC	1.0441	4.2	5.7
347	12	Med	Malignancy, Male Reproductive System, W/O CC	0.6104	2.2	3.1
348	12	Med	Benign Prostatic Hypertrophy W CC	0.7188	3.2	4.1
349	12	Med	Benign Prostatic Hypertrophy W/O CC	0.4210	1.9	2.4
350	12	Med	Inflammation Of The Male Reproductive System	0.7289	3.5	4.5
351	12	Med *	Sterilization, Male	0.2392	1.3	1.3
352	12	Med	Other Male Reproductive System Diagnoses	0.7360	2.9	4.0
353	13	Surg	Pelvic Evisceration, Radical Hysterectomy, & Radical Vulvectomy	1.8504	4.7	6.3
354	13	Surg	Uterine, Adnexa Proc For Non-Ovarian/Adnexal Malig W CC	1.5135	4.6	5.7
355	13	Surg	Uterine, Adnexa Proc For Non-Ovarian/Adnexal Malig W/O CC	0.8824	2.8	3.1
356	13	Surg	Female Reproductive System Reconstructive Procedures	0.7428	1.7	1.9
357	13	Surg	Uterine & Adnexa Proc For Ovarian Or Adnexal Malignancy	2.2237	6.5	8.1
358	13	Surg	Uterine & Adnexa Proc For Non-Malignancy W CC	1.1448	3.2	4.0
359	13	Surg	Uterine & Adnexa Proc For Non-Malignancy W/O CC	0.7948	2.2	2.4
360	13	Surg	Vagina, Cervix, & Vulva Procedures	0.8582	2.0	2.6
361	13	Surg	Laparoscopy & Incisional Tubal Interruption	1.0847	2.2	3.0
362	13	Surg *	Endoscopic Tubal Interruption	0.3057	1.4	1.4
363	13	Surg	D&C, Conization & Radio-Implant, For Malignancy	0.9728	2.7	3.8
364	13	Surg	D&C, Conization Except For Malignancy	0.8709	3.0	4.2
365	13	Surg	Other Female Reproductive System O.R. Procedures	2.0408	5.3	7.7
366	13	Med	Malignancy, Female Reproductive System W CC	1.2348	4.8	6.6
367	13	Med	Malignancy, Female Reproductive System W/O CC	0.5728	2.3	3.0
368	13	Med	Infections, Female Reproductive System	1.1684	5.2	6.7
369	13	Med	Menstrual & Other Female Reproductive System Disorders	0.6310	2.4	3.3
370	14	Surg	Cesarean Section W CC	0.8974	4.1	5.2
371	14	Surg	Cesarean Section W/O CC	0.6066	3.1	3.4
372	14	Med	Vaginal Delivery W Complicating Diagnoses	0.5027	2.5	3.2
373	14	Med	Vaginal Delivery W/O Complicating Diagnoses	0.3556	2.0	2.2
374	14	Surg	Vaginal Delivery W Sterilization &/Or D&C	0.6712	2.5	2.8

Drg	*Mdc*	*Type*	*Drg Title*	*Weights*	*Mean LOS*	*Arithmetic Mean LOS*
375	14	Surg *	Vaginal Delivery W O.R. Proc Except Steril &/Or D&C	0.5837	4.4	4.4
376	14	Med	Postpartum & Post Abortion Diagnoses W/O O.R. Procedure	0.5242	2.6	3.4
377	14	Surg	Postpartum & Post Abortion Diagnoses W O.R. Procedure	1.6996	2.9	4.5
378	14	Med	Ectopic Pregnancy	0.7472	1.9	2.3
379	14	Med	Threatened Abortion	0.3578	2.0	2.8
380	14	Med	Abortion W/O D&C	0.3925	1.6	2.1
381	14	Surg	Abortion W D&C, Aspiration Curettage Or Hysterotomy	0.6034	1.6	2.2
382	14	Med	False Labor	0.2070	1.3	1.4
383	14	Med	Other Antepartum Diagnoses W Medical Complications	0.5053	2.6	3.7
384	14	Med	Other Antepartum Diagnoses W/O Medical Complications	0.3225	1.8	2.6
385	15	Med *	Neonates, Died Or Transferred To Another Acute Care	1.3930	1.8	1.8
386	15	Med *	Extreme Immaturity Or Respiratory Distress Syndrome, Facility Neonate	4.5935	17.9	17.9
387	15	Med *	Prematurity W Major Problems	3.1372	13.3	13.3
388	15	Med *	Prematurity W/O Major Problems	1.8929	8.6	8.6
389	15	Med *	Full Term Neonate W Major Problems	3.2226	4.7	4.7
390	15	Med *	Neonate W Other Significant Problems	1.1406	3.4	3.4
391	15	Med *	Normal Newborn	0.1544	3.1	3.1
392	16	Surg	Splenectomy Age >17	3.0459	6.5	9.2
393	16	Surg *	Splenectomy Age 0–17	1.3645	9.1	9.1
394	16	Surg	Other O.R. Procedures Of The Blood And Blood Forming Organs	1.9109	4.5	7.4
395	16	Med	Red Blood Cell Disorders Age >17	0.8328	3.2	4.3
396	16	Med *	Red Blood Cell Disorders Age 0–17	0.8323	2.6	4.3
397	16	Med	Coagulation Disorders	1.2986	3.7	5.1
398	16	Med	Reticuloendothelial & Immunity Disorders W CC	1.2082	4.4	5.7
399	16	Med	Reticuloendothelial & Immunity Disorders W/O CC	0.6674	2.7	3.3
400	17	Surg	No Longer Valid	0.0000	0.0	0.0
401	17	Surg	Lymphoma & Non-Acute Leukemia W Other O.R. Proc W CC	2.9678	8.0	11.3
402	17	Surg	Lymphoma & Non-Acute Leukemia W Other O.R. Proc W/O CC	1.1810	2.8	4.1
403	17	Med	Lymphoma & Non-Acute Leukemia W CC	1.8432	5.8	8.1
404	17	Med	Lymphoma & Non-Acute Leukemia W/O CC	0.9265	3.0	4.2
405	17	Med *	Acute Leukemia W/O Major O.R. Procedure Age 0–17	1.9346	4.9	4.9
406	17	Surg	Myeloprolif Disord Or Poorly Diff Neopl W Maj O.R.Proc W CC	2.7897	7.0	9.9
407	17	Surg	Myeloprolif Disord Or Poorly Diff Neopl W Maj O.R.Proc W/O CC	1.2289	3.0	3.8
408	17	Surg	Myeloprolif Disord Or Poorly Diff Neopl W Other O.R.Proc	2.2460	4.8	8.2
409	17	Med	Radiotherapy	1.2074	4.3	5.8

Drg	*Mdc*	*Type*	*Drg Title*	*Weights*	*Mean LOS*	*Arithmetic Mean LOS*
410	17	Med	Chemotherapy W/O Acute Leukemia As Secondary Diagnosis	1.1069	3.0	3.8
411	17	Med	History Of Malignancy W/O Endoscopy	0.3635	2.5	3.3
412	17	Med	History Of Malignancy W Endoscopy	0.8451	1.8	2.8
413	17	Med	Other Myeloprolif Dis Or Poorly Diff Neopl Diag W CC	1.3048	5.0	6.8
414	17	Med	Other Myeloprolif Dis Or Poorly Diff Neopl Diag W/O CC	0.7788	3.0	4.0
415	18	Surg	O.R. Procedure For Infectious & Parasitic Diseases	3.9890	11.0	14.8
416	18	Med	Septicemia Age >17	1.6774	5.6	7.5
417	18	Med	Septicemia Age 0–17	1.1689	3.2	4.1
418	18	Med	Postoperative & Post-Traumatic Infections	1.0716	4.8	6.2
419	18	Med	Fever Of Unknown Origin Age >17 W CC	0.8453	3.4	4.4
420	18	Med	Fever Of Unknown Origin Age >17 W/O CC	0.6077	2.7	3.4
421	18	Med	Viral Illness Age >17	0.7664	3.1	4.1
422	18	Med	Viral Illness & Fever Of Unknown Origin Age 0–17	0.6171	2.6	3.7
423	18	Med	Other Infectious & Parasitic Diseases Diagnoses	1.9196	6.0	8.4
424	19	Surg	O.R. Procedure W Principal Diagnoses Of Mental Illness	2.2773	7.3	12.4
425	19	Med	Acute Adjustment Reaction & Psychosocial Dysfunction	0.6191	2.6	3.5
426	19	Med	Depressive Neuroses	0.4656	3.0	4.1
427	19	Med	Neuroses Except Depressive	0.5135	3.2	4.7
428	19	Med	Disorders Of Personality & Impulse Control	0.6981	4.6	7.3
429	19	Med	Organic Disturbances & Mental Retardation	0.7919	4.3	5.6
430	19	Med	Psychoses	0.6483	5.8	7.9
431	19	Med	Childhood Mental Disorders	0.5178	4.0	5.9
432	19	Med	Other Mental Disorder Diagnoses	0.6282	2.9	4.3
433	20	Med	Alcohol/Drug Abuse Or Dependence, Left Ama	0.2776	2.2	3.0
434	20	Med	No Longer Valid	0.0000	0.0	0.0
435	20	Med	No Longer Valid	0.0000	0.0	0.0
436	20	Med	No Longer Valid	0.0000	0.0	0.0
437	20	Med	No Longer Valid	0.0000	0.0	0.0
438	20		No Longer Valid	0.0000	0.0	0.0
439	21	Surg	Skin Grafts For Injuries	1.9398	5.4	8.9
440	21	Surg	Wound Debridements For Injuries	1.9457	5.9	9.2
441	21	Surg	Hand Procedures For Injuries	0.9382	2.3	3.4
442	21	Surg	Other O.R. Procedures For Injuries W CC	2.5660	6.0	8.9
443	21	Surg	Other O.R. Procedures For Injuries W/O CC	0.9943	2.6	3.4
444	21	Med	Traumatic Injury Age >17 W CC	0.7556	3.2	4.1
445	21	Med	Traumatic Injury Age >17 W/O CC	0.5033	2.2	2.8
446	21	Med *	Traumatic Injury Age 0–17	0.2999	2.4	2.4
447	21	Med	Allergic Reactions Age >17	0.5569	1.9	2.6
448	21	Med *	Allergic Reactions Age 0–17	0.0987	2.9	2.9
449	21	Med	Poisoning & Toxic Effects Of Drugs Age >17 W CC	0.8529	2.6	3.7
450	21	Med	Poisoning & Toxic Effects Of Drugs Age >17 W/O CC	0.4282	1.6	2.0
451	21	Med *	Poisoning & Toxic Effects Of Drugs Age 0–17	0.2663	2.1	2.1

Drg	*Mdc*	*Type*	*Drg Title*	*Weights*	*Mean LOS*	*Arithmetic Mean LOS*
452	21	Med	Complications Of Treatment W CC	1.0462	3.5	4.9
453	21	Med	Complications Of Treatment W/O CC	0.5285	2.2	2.8
454	21	Med	Other Injury, Poisoning, & Toxic Effect Diag W CC	0.8141	2.9	4.1
455	21	Med	Other Injury, Poisoning, & Toxic Effect Diag W/O CC	0.4725	1.7	2.2
456	22		No Longer Valid	0.0000	0.0	0.0
457	22	Med	No Longer Valid	0.0000	0.0	0.0
458	22	Surg	No Longer Valid	0.0000	0.0	0.0
459	22	Surg	No Longer Valid	0.0000	0.0	0.0
460	22	Med	No Longer Valid	0.0000	0.0	0.0
461	23	Surg	O.R. Proc W Diagnoses Of Other Contact W Health Services	1.3974	3.0	5.1
462	23	Med	Rehabilitation	0.8700	8.9	10.8
463	23	Med	Signs & Symptoms W CC	0.6960	3.1	3.9
464	23	Med	Signs & Symptoms W/O CC	0.5055	2.4	2.9
465	23	Med	Aftercare W History Of Malignancy As Secondary Diagnosis	0.6224	2.4	3.8
466	23	Med	Aftercare W/O History Of Malignancy As Secondary Diagnosis	0.7806	2.8	5.3
467	23	Med	Other Factors Influencing Health Status	0.4803	2.0	2.7
468			Extensive O.R. Procedure Unrelated To Principal Diagnosis	4.0031	9.7	13.2
469		**	Principal Diagnosis Invalid As Discharge Diagnosis	0.0000	0.0	0.0
470		**	Ungroupable	0.0000	0.0	0.0
471	08	Surg	Bilateral Or Multiple Major Joint Procs Of Lower Extremity	3.1391	4.5	5.1
472	22	Surg	No Longer Valid	0.0000	0.0	0.0
473	17	Med	Acute Leukemia W/O Major O.R. Procedure Age >17	3.4231	7.4	12.7
474	04	Surg	No Longer Valid	0.0000	0.0	0.0
475	04	Med	Respiratory System Diagnosis With Ventilator Support	3.6091	8.1	11.3
476		Surg	Prostatic O.R. Procedure Unrelated To Principal Diagnosis	2.1822	7.4	10.5
477		Surg	Non-Extensive O.R. Procedure Unrelated To Principal Diagnosis	2.0607	5.8	8.7
478	05	Surg	No Longer Valid	0.0000	0.0	0.0
479	05	Surg	Other Vascular Procedures W/O CC	1.4434	2.1	2.8
480	Pre	Surg	Liver Transplant And/Or Intestinal Transplant	8.9693	13.7	18.0
481	Pre	Surg	Bone Marrow Transplant	6.2321	18.2	21.7
482	Pre	Surg	Tracheostomy For Face, Mouth, & Neck Diagnoses	3.3387	9.6	12.1
483	Pre	Surg	No Longer Valid	0.0000	0.0	0.0
484	24	Surg	Craniotomy For Multiple Significant Trauma	5.1438	9.3	12.8
485	24	Surg	Limb Reattachment, Hip And Femur Proc For Multiple Significant Trauma	3.4952	8.4	10.2
486	24	Surg	Other O.R. Procedures For Multiple Significant Trauma	4.7323	8.5	12.5
487	24	Med	Other Multiple Significant Trauma	1.9459	5.3	7.3
488	25	Surg	HIV W Extensive O.R. Procedure	4.4353	11.8	16.4
489	25	Med	HIV W Major Related Condition	1.8058	5.9	8.4
490	25	Med	HIV W Or W/O Other Related Condition	1.0639	3.8	5.4

Drg	*Mdc*	*Type*	*Drg Title*	*Weights*	*Mean LOS*	*Arithmetic Mean LOS*
491	08	Surg	Major Joint & Limb Reattachment Procedures Of Upper Extremity	1.6780	2.6	3.1
492	17	Med	Chemotherapy W Acute Leukemia Or W Use Of Hi Dose Chemoagent	3.5926	8.8	13.7
493	07	Surg	Laparoscopic Cholecystectomy W/O C.D.E. W CC	1.8333	4.5	6.1
494	07	Surg	Laparoscopic Cholecystectomy W/O C.D.E. W/O CC	1.0285	2.1	2.7
495	Pre	Surg	Lung Transplant	8.5736	14.0	17.3
496	08	Surg	Combined Anterior/Posterior Spinal Fusion	6.0932	6.4	8.8
497	08	Surg	Spinal Fusion Except Cervical W CC	3.6224	5.0	5.9
498	08	Surg	Spinal Fusion Except Cervical W/O CC	2.7791	3.4	3.8
499	08	Surg	Back & Neck Procedures Except Spinal Fusion W CC	1.3831	3.1	4.3
500	08	Surg	Back & Neck Procedures Except Spinal Fusion W/O CC	0.9046	1.8	2.2
501	08	Surg	Knee Procedures W Pdx Of Infection W CC	2.6462	8.5	10.4
502	08	Surg	Knee Procedures W Pdx Of Infection W/O CC	1.4462	4.9	5.9
503	08	Surg	Knee Procedures W/O Pdx Of Infection	1.2038	2.9	3.8
504	22	Surg	Exten. Burns Or Full Thickness Burn W/Mv 96+ Hrs W/Skin Gft	11.8018	21.7	27.3
505	22	Med	Exten. Burns Or Full Thickness Burn W/Mv 96+ Hrs W/O Skin Gft	2.2953	2.4	4.6
506	22	Surg	Full Thickness Burn W Skin Graft Or Inhal Inj W CC Or Sig Trauma	4.0939	11.2	15.9
507	22	Surg	Full Thickness Burn W Skin Grft Or Inhal Inj W/O CC Or Sig Trauma	1.7369	5.8	8.5
508	22	Med	Full Thickness Burn W/O Skin Grft Or Inhal Inj W CC Or Sig Trauma	1.2767	5.1	7.4
509	22	Med	Full Thickness Burn W/O Skin Grft Or Inh Inj W/O CC Or Sig Trauma	0.8217	3.6	5.2
510	22	Med	Non-Extensive Burns W CC Or Significant Trauma	1.1817	4.4	6.4
511	22	Med	Non-Extensive Burns W/O CC Or Significant Trauma	0.7424	2.6	4.1
512	Pre	Surg	Simultaneous Pancreas/Kidney Transplant	5.3660	10.7	12.8
513	Pre	Surg	Pancreas Transplant	5.9669	8.9	9.9
514	05	Surg	No Longer Valid	0.0000	0.0	0.0
515	05	Surg	Cardiac Defibrillator Implant W/O Cardiac Cath	5.5205	2.6	4.3
516	05	Surg	No Longer Valid	0.0000	0.0	0.0
517	05	Surg	No Longer Valid	0.0000	0.0	0.0
518	05	Surg	Perc Cardio Proc W/O Coronary Artery Stent Or Ami	1.6544	1.8	2.5
519	08	Surg	Cervical Spinal Fusion W CC	2.4695	3.0	4.8
520	08	Surg	Cervical Spinal Fusion W/O CC	1.6788	1.6	2.0
521	20	Med	Alcohol/Drug Abuse Or Dependence W CC	0.6939	4.2	5.6
522	20	Med	Alc/Drug Abuse Or Depend W Rehabilitation Therapy W/O CC	0.4794	7.7	9.6
523	20	Med	Alc/Drug Abuse Or Depend W/O Rehabilitation Therapy W/O CC	0.3793	3.2	3.9
524	01	Med	Transient Ischemia	0.7288	2.6	3.2
525	05	Surg	Other Heart Assist System Implant	11.4282	7.2	13.6

Drg	*Mdc*	*Type*	*Drg Title*	*Weights*	*Mean LOS*	*Arithmetic Mean LOS*
526	05	Surg	No Longer Valid	0.0000	0.0	0.0
527	05	Surg	No Longer Valid	0.0000	0.0	0.0
528	01	Surg	Intracranial Vascular Proc W Pdx Hemorrhage	7.0505	13.8	17.2
529	01	Surg	Ventricular Shunt Procedures W CC	2.3160	5.3	8.3
530	01	Surg	Ventricular Shunt Procedures W/O CC	1.2041	2.4	3.1
531	01	Surg	Spinal Procedures W CC	3.1279	6.5	9.6
532	01	Surg	Spinal Procedures W/O CC	1.4195	2.8	3.7
533	01	Surg	Extracranial Procedures W CC	1.5767	2.4	3.8
534	01	Surg	Extracranial Procedures W/O CC	1.0201	1.5	1.8
535	05	Surg	Cardiac Defib Implant W Cardiac Cath W Ami/Hf/Shock	7.9738	7.9	10.3
536	05	Surg	Cardiac Defib Implant W Cardiac Cath W/O Ami/Hf/Shock	6.9144	5.9	7.6
537	08	Surg	Local Excis & Remov Of Int Fix Dev Except Hip & Femur W CC	1.8360	4.8	6.9
538	08	Surg	Local Excis & Remov Of Int Fix Dev Except Hip & Femur W/O CC	0.9833	2.1	2.8
539	17	Surg	Lymphoma & Leukemia W Major Or Procedure W CC	3.2782	7.0	10.8
540	17	Surg	Lymphoma & Leukemia W Major Or Procedure W/O CC	1.1940	2.6	3.6
541	Pre	Surg	Ecmo Or Trach W Mv 96+Hrs Or Pdx Exc Face, Mouth, & Neck W Maj O.R.	19.8038	38.1	45.7
542	Pre	Surg	Trach W Mv 96+Hrs Or Pdx Exc Face, Mouth, & Neck W/O Maj O.R.	12.8719	29.1	35.1
543	01	Surg	Craniotomy W/Implant Of Chemo Agent Or Acute Complx Cns Pdx	4.4184	8.5	12.3
544	08	Surg	Major Joint Replacement Or Reattachment Of Lower Extremity	1.9643	4.1	4.5
545	08	Surg	Revision Of Hip Or Knee Replacement	2.4827	4.5	5.2
546	08	Surg	Spinal Fusion Exc Cerv With Curvature Of The Spine Or Malig	5.0739	7.1	8.8
547	05	Surg	Coronary Bypass W Cardiac Cath W Major Cv Dx	6.1948	10.8	12.3
548	05	Surg	Coronary Bypass W Cardiac Cath W/O Major Cv Dx	4.7198	8.2	9.0
549	05	Surg	Coronary Bypass W/O Cardiac Cath W Major Cv Dx	5.0980	8.7	10.3
550	05	Surg	Coronary Bypass W/O Cardiac Cath W/O Major Cv Dx	3.6151	6.2	6.9
551	05	Surg	Permanent Cardiac Pacemaker Impl W Maj Cv Dx Or Aicd Lead Or Gnrtr	3.1007	4.4	6.4
552	05	Surg	Other Permanent Cardiac Pacemaker Implant W/O Major Cv Dx	2.0996	2.5	3.5
553	05	Surg	Other Vascular Procedures W CC W Major Cv Dx	3.0957	6.6	9.7
554	05	Surg	Other Vascular Procedures W CC W/O Major Cv Dx	2.0721	4.0	5.9
555	05	Surg	Percutaneous Cardiovascular Proc W Major Cv Dx	2.4315	3.4	4.7
556	05	Surg	Percutaneous Cardiovasc Proc W Non-Drug-Eluting Stent W/O Maj Cv Dx	1.9132	1.6	2.1
557	05	Surg	Percutaneous Cardiovascular Proc W Drug-Eluting Stent W Major Cv Dx	2.8717	3.0	4.1

Drg	*Mdc*	*Type*	*Drg Title*	*Weights*	*Mean LOS*	*Arithmetic Mean LOS*
558	05	Surg	Percutaneous Cardiovascular Proc W Drug-Eluting Stent W/O Maj Cv Dx	2.2108	1.5	1.9
559	01	Med	Acute Ischemic Stroke With Use Of Thrombolytic Agent	2.2473	5.8	7.2

Medicare Data Have Been Supplemented By Data From 19 States For Low Volume Drgs.

Drgs 469 And 470 Contain Cases Which Could Not Be Assigned To Valid Drgs.

Note: Geometric Mean Is Used Only To Determine Payment For Transfer Cases.

Note: Arithmetic Mean Is Presented For Informational Purposes Only.

Note: Relative Weights Are Based On Medicare Patient Data And May Not Be Appropriate For Other Patients.