



## Understanding Medicare Reimbursement under the Inpatient Prospective Payment System

### Overview

The Hospital Inpatient Prospective Payment System is a system set forth in the Section 1886(d) of the Social Security Act. It establishes that all Medicare inpatient hospital stays will be grouped into one of several hundred diagnostic related groups (DRGs) and that reimbursement to a hospital for any single patient's inpatient stay will be in one lump sum based on the corresponding DRG. Each year, the Center for Medicare and Medicaid Services (CMS) publishes a Final Rule which establishes these diagnostic related groups and assigns a "relative weight" to each based on the average resources used to treat Medicare patients in that DRG.

When we talk about reimbursement under the Inpatient Prospective Payment System, we are really discussing three distinct, yet interdependent components: Coding, Coverage and Payment. Understanding the Inpatient Prospective Payment System requires an understanding of each of these.

### Coding

When Medicare claims are filed electronically, medical "codes" are used to uniformly communicate information about the patient, including diagnoses, procedures performed, services rendered, and supplies used in the care of the patient. **Proper coding is a critical component of reimbursement.**

#### Inpatient Coding Systems

**ICD-9-CM codes are used to communicate both diagnoses and procedures** on Medicare Inpatient Claims. ICD-9-CM stands for International Classification of Diseases, Clinical Modification, 9th edition. These codes are based on the World Health Organization's, International Classification of Diseases (ICD-9).

The National Center for Health Statistics (NCHS) and the Centers for Medicare and Medicaid Services are the U.S. governmental agencies responsible for overseeing all changes and modifications to the ICD-9-CM. These changes are made approximately once a year.

**DRG codes are used to determine payment amount.** Although ICD-9-CM codes are necessary for proper submission of a claim, the *payment* of the claim will be based on a DRG code. These are assigned using special software, known as a DRG Grouper. The DRG grouper takes diagnosis and procedure codes, along with patient information such as age, gender and discharge status, and uses built-in logic to determine the proper DRG.

Note: DRG is assigned *retrospectively* after the patient is discharged.

#### Resources necessary for proper inpatient coding

- ❑ ICD-9-CM look-up tool, codeset or code book that is easy to use, includes synonym searching, and is up-to-date.
- ❑ Annual list of DRGs.

□ DRG Grouper tool.

DRG	FY 2006 Postacute Care Transfer DRG	FY 2006 Postacute Care Special Pay Transfer DRG	MDC	TYPE	DRG TITLE	RELATIVE WEIGHTS	GEOMETRIC MEAN LOS	ARITHMETIC MEAN LOS
164	No	No	06	SURG	APPECTOMY W COMPLICATED PRINCIPAL DIAG W CC	2.2476	6.6	8.0
165	No	No	06	SURG	APPECTOMY W COMPLICATED PRINCIPAL DIAG W/O CC	1.1868	3.6	4.2
166	No	No	06	SURG	APPECTOMY W/O COMPLICATED PRINCIPAL DIAG W CC	1.4521	3.3	4.5
167	No	No	06	SURG	APPECTOMY W/O COMPLICATED PRINCIPAL DIAG W/O CC	0.8929	1.9	2.2
168	No	No	03	SURG	MOUTH PROCEDURES W CC	1.2662	3.3	4.9
169	No	No	03	SURG	MOUTH PROCEDURES W/O CC	0.7297	1.8	2.3
..	..	..	..	..	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W	..	..	..

## Coverage

On November 24, 1998, the Secretary of the Department of Health and Human Services chartered the Medicare Coverage Advisory Committee (MCAC). The MCAC advises CMS on whether specific medical items and services are reasonable and necessary under Medicare law (if they are “covered” by Medicare).

CMS communicates coverage determinations through a series of documents called “National Coverage Determinations” or NCDs, as well as via guidance provided in the comprehensive CMS Internet-Only Manual system. An NCD sets forth the extent to which Medicare will cover specific services, procedures, or technologies on a national basis. All Medicare contractors are required to follow NCDs. The process of approving and revising NCDs is on-going; contractors, providers and patients are encouraged to participate in the process via an on-line comment system.

In the absence of a national determination, coverage decisions are pushed to the state or local-level. Medicare employs a set of contractors who work as “fiscal intermediaries” to process Medicare claims. When there is no NCD that specifically excludes, limits or approves of a particular product or service, the fiscal intermediary can then make a Local Coverage Determination, or LCD, to clarify coverage. This means that coverage for a particular procedure, service or product can vary from state to state, or sometimes within a state.

Updates to the CMS Internet-Only Manual system and LCDs published by individual contractors occur on a weekly, and often daily process.

If a patient seeks care that is specifically not covered by Medicare, and that decision is clearly communicated in an NCD or an LCD, the service provider is obligated to inform the patient (or *beneficiary*) that the care is not covered. This is done through a series of Beneficiary Notices, which must be signed prior to services.

### Resources necessary for keeping up with Coverage policies

- ❑ Quick, easy-to-use, universal access to CMS Manuals, NCDs, and LCDs for the Fiscal Intermediaries which have jurisdiction in your area
- ❑ Printable beneficiary notices
- ❑ Alerting system to stay informed of constant changes in coverage policies

The image displays three overlapping screenshots of insurance coverage documents. The top screenshot is a CIGNA document titled "CIGNA HEALTHCARE COVERAGE POSITION" for "Subject: Low-Level Laser Therapy" with Coverage Position Number 0115 and an Effective Date of 7/15/2004. It includes a Table of Contents and a list of Related Coverage Positions. The middle screenshot is an "Empire Medicare Services Local Coverage Determination" document, also marked "DRAFT". The bottom screenshot is a Wellmark Blue Cross BlueShield website page for "Low-Level Laser for the Treatment of Carpal Tunnel Syndrome (CTS)", reviewed in October 2004. The page lists medical policy sections such as Description, Coverage Criteria, Procedure Codes and Billing Guidelines, References and Rationale, Policy History, and Contact Information. A disclaimer at the bottom states: "This policy applies to all products unless specific contract limitations, exclusions or exceptions apply. Please refer to the member's benefit certificate language for benefit availability. Managed care guidelines related to referral authorization, and precertification of inpatient hospitalization, home health, home infusion and hospice services apply."

## Payment

Payment under the Inpatient prospective payment system *appears* to be quite simple.

There is a pre-determined set of diagnostic related groups, each which has been weighted based on the amount of care and resources required. There is a national standard payment amount published each year, which is multiplied by the relative weight to prospectively assign a dollar amount to each DRG. (Figure 1)

*There are many complex factors which influence the cost of delivering care, and the prospective payment system has evolved to account for these factors, so the system is not as simple as it appears.*

Some of the factors which can adjust the actual payment made to a facility for care of a Medicare patient are dictated by the patient's condition and services necessary to treat the patient, some are dictated by conditions within the hospital that increase the cost of care, and some are dictated by the geographic region in which the hospital is located.

### Operating vs. Capital Costs of Delivering care.

The base payment given to a hospital for delivering inpatient care to a Medicare beneficiary is based on the average cost of delivering that care. This is the **Operating payment**. Section 1886(g) of the Act also requires that Medicare pay for the capital-related costs of inpatient acute hospital services "in accordance with a PPS established by the Secretary." This is the **Capital Payment**. There was a phase-in period, but in 2006 Medicare payment for hospital inpatient operating and capital-related costs is made at predetermined, specific rates for each hospital discharge.

Thus, the DRG Payment is actually composed of 2 factors: the larger Operating Payment and an additional Capital Payment. (Figure 2)

$$\left( \text{Standard Payment Amount} \right) \times \left( \text{DRG Weight} \right)$$

Figure 1

$$\left( \text{Operating Payment} \right) \times \left( \text{DRG Weight} \right) + \left( \text{Capital Payment} \right) \times \left( \text{DRG Weight} \right)$$

Figure 2

We will now consider factors which influence the Operating Payment which will be followed by a discussion of the factors influencing the Capital Payment. We will then combine the payments to generate the payment amount.

## Determining the Operating Payment

Labor vs. Non-Labor Costs, Quality Initiative, Indirect Medical Education and Disproportionate Share.

The total cost of delivering care is influenced by factors like wages and staffing, which are “labor-related” and by factors like supplies and use of equipment which are “nonlabor related”; this is reflected by the operating payment. In 2005 (2006 factors since they are referenced in other places?), the Standard Payment Amount is broken into a labor-related and nonlabor related share as follows: 69.7 Percent Labor Share/30.3 Percent Nonlabor Share. The labor-related share must be adjusted by the Wage Index of the geographic region where the hospital is located, while the nonlabor-related share is not.

The wage index is published annually, and is tied to the CBSA (Core Based Statistical Area) in which the hospital is located. Although, there may be special circumstances under which a hospital is granted a unique wage index or is allowed to use the wage index of a geographic region other than the one in which it is physically located. Similarly, nonlabor related costs are influenced by the cost-of-living, for example in Hawaii and Alaska the non-labor share is adjusted.

Operating Payment =

$$\left( \begin{array}{c} \text{Labor Share} \times \text{Wage Index} \\ + \\ \text{Non-Labor Share} \times \text{COLA} \end{array} \right) \times \left( \text{DRG Weight} \right)$$

In addition, each hospital has been asked to submit Quality Initiative data. As an incentive, hospitals which have submitted data are eligible to receive the full labor-related and nonlabor related amount, but hospitals which have not submitted data are only eligible to receive a reduced amount.

**TABLE 2.--HOSPITAL CASE-MIX IN FEDERAL FISCAL YEAR 2006; FEDERAL FISCAL YEAR 2006; FOR FEDERAL FISCAL YEARS (DATA), AND 2006 (2002 WAGE AVERAGE OF HOSPIT**

Provider Number	Case-Mix Index <sup>3</sup>	FY 2006 Wage Index	Aver Hourly FY 2
010001	1.4738	0.7757	\$1
010004	***	*	\$2
010005 <sup>b</sup>	1.1467	0.9379	\$1
010006	1.4559	0.8297	\$1
010007	1.0885	0.7463	\$1
010008	1.0025	0.8300	\$1
010009	0.9852	0.8601	\$2
010010 <sup>b</sup>	1.0269	0.9379	\$1
010011	1.5830	0.8959	\$2

**TABLE 1A.--NATIONAL ADJUSTED OPERATING STANDARDIZED AMOUNTS, LABOR/NONLABOR**

(69.7 Percent Labor Share/30.3 Percent Nonlabor Share If Wage Index Greater Than 1)

Full Update (3.7 Percent)		Reduced Update (3.3 Percent)	
Labor-related	Nonlabor-related	Labor-related	Nonlabor-related
\$3,297.84	\$1,433.63	\$3,285.12	\$1,428.10

Finally, operating costs at any individual hospital can be driven up if the hospital is a teaching hospital (Indirect Medical Education, IME), or if it serves a disproportionate share of Medicare and Medicaid patients (DSH). These factors can increase the payment an individual hospital receives for an inpatient stay.

*Note: IME for non-teaching hospitals=0; DSH is calculated using SSI and Medicaid data.*

# Operating Payment =

$$\left( \begin{array}{c} \text{(Labor Share x Operating Wage Index)} \\ + \\ \text{(Non-Labor Share x COLA)} \end{array} \right) \times \left( 1 + \text{IME} + \text{DSH} \right) \times \left( \text{DRG Weight} \right)$$

(full or reduced)

## Determining the Capital Payment

Several factors we've already discussed also influence the Capital Payment. In addition to an IME, DSH and COLA adjustment, there are 2 other variables which dictate the final capital payment. They are the GAF and the Large Urban Add-On. The GAF, or Geographic Adjustment Factor reflects the relative costs of furnishing services from one area of the country to another. The Large Urban Add-On is a 3% adjustment which applies to the entire capital payment for hospitals located in large urban areas. The Capital Payment starts with the Capital Standard Federal Payment Rate, which is published in the final rule and is adjusted for each hospital in the following manner:

# Capital Payment =

$$\text{(Standard Federal Rate)} \times \text{(GAF)} \times \text{(Large Urban Add-on)} \times \text{(Capital COLA)} \\ \times \text{(1 + Capital DSH + Capital IME Adjustment Factor)} \times \text{(DRG Weight)}$$

### Source of variables:

**Inpatient Impact File (updated annually):** COLAs, IMEs, DSHs, Special Wage Index (if applicable)

**Inpatient PPS Final Rule:** Capital Standard Federal Rate = \$420.65 for FY 2006.

**Inpatient PPS Final Rule Table 1:** Labor Share, Non-Labor Share.

**Inpatient PPS Final Rule Tables 4a and 4b:** Wage Index and Capital GAF (separate tables for Urban and Rural must be combined.)

**Inpatient PPS Final Rule Table 5:** DRG Weight

**Large Urban Add-On:** 3% (multiply payment amount by 1.03)

**Inpatient Provider-Specific File:** Indicator to determine if special Wage Index applies, and whether to apply full or reduced Standard Payment Amounts, and whether to apply the large urban add-on

Beyond "Payment = (Operating + Capital)"

We've discussed the Inpatient PPS Operating and Capital Payments and the hospital-specific variables which can adjust payment from the national payment. In addition to these hospital-specific variables, there are several other adjustments which can be made to the payment. These are based on extenuating circumstances surrounding the patient, as well as add-ons based on the particular DRG assigned. These are outside the scope of this discussion, but are outlined in detail in the final rule itself.

## Conclusion

The Medicare program is the single largest purchaser of health care in the United States, covering 45 million Americans and accounting for 20 percent of overall health spending. Medicare enrollment is expected to double over the next 3 decades.

This makes it essential that staff *throughout* your hospital understand and properly implement the issues related to Inpatient PPS. This is a task which may seem overwhelming, given staffing levels and other financial pressures in the health care setting.

At SMA Informatics, we are committed to demystifying PPS and other related federal regulatory hurdles facing hospitals by providing always-on, easy-to-use, hospital-wide access to Coding Resources, Coverage Policies and Payment Tools. This includes organization-wide alerts, personalized alerts, custom work-spaces, and unsurpassed customer service.

## Bibliography

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*Acute Inpatient Web Page*. Center for Medicare and Medicaid Services, Baltimore, MD. August, 2005. <http://www.cms.hhs.gov/providers/hipps/default.asp>.

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