Diagnosis Related Group Coding and Documentation

Billing for a patient admission has two components: a hospital component and a professional component. This chapter addresses the hospital component of billing. A hospital's financial standing is vulnerable to the documentation practices of the professionals who provide the services. If documentation practices are not sufficient, a hospital can lose substantially more funds than the providers. Therefore, it is imperative that the provider's documentation practices are accurate and reflect the true patient acuity.

The hospital receives payment based on provider documentation. The provider documentation is subject to a coding system that assigns numeric or alphanumeric designations (codes) to procedures, patient conditions, patient events, and services. These codes, which were approved by the Health Insurance Portability and Accountability Act of 1996, are then placed on a claim form. Each code has a standard definition. The insurance payment is based on “medical necessity,” a designation that is dependent on the provider's documentation. Different insurance companies have different regulations based on their payment plans. To help providers understand the importance of documentation and coding, this chapter addresses hospital reimbursement and medical necessity and explains the following terms: complication or comorbidity (CC), major complication or comorbidity (MCC), length of stay (LOS), present on admission (POA), and hospital-acquired condition (HAC).

MEDICARE SEVERITY–DIAGNOSIS RELATED GROUPS

Medicare reimbursement for an inpatient hospital admission is based on a predetermined, fixed amount of money, as outlined by the Inpatient Prospective Payment System which is the federal regulation for inpatient services. The amount paid for an inpatient hospital service is based on a classification system called Medicare Severity–Diagnosis Related Group (MS-DRG). The MS-DRG accounts for the resources needed for a medical diagnosis and the severity of illness. MS-DRG's are assigned based on a diagnosis code (ICD-10-CM).

The MS-DRG is assigned by a computer software program called a grouper that assigns a MS-DRG based on the International Classification of Diseases, Tenth Revision (ICD-10) diagnosis of the patient, as well as patient gender, procedures, patient age, discharge status of the patient, and presence of CC and MCC. A non-MCC or non-CC diagnosis may be present but will not affect the severity of illness in the MS-DRG system or increase resources and therefore does not increase Medicare payment. Documentation and the diagnosis code(s) entered into the coding software will
determine the MS-DRG assignment. The CMS MS-DRG grouper is used to determine the appropriate DRG to be assigned for payment purposes.

The MS-DRG relative weight is multiplied by the hospital base rate, and that determines hospital payment in the Inpatient Prospective Payment System, as follows:

\[
\text{MS-DRG Relative Weight} \times \text{Hospital Base Rate} = \text{Payment in Dollars.}
\]

The hospital base rate is a dollar amount for the hospital’s cost of providing the service. That cost is reflected in the wage index, which is based on geographic area, cost of labor, and the geographic area’s cost of living adjustment. There are 755 MS-DRGs in 2017. Additional payments are made if the hospital engages in teaching activities, if low-income patients are treated, if certain new technologies are used, and for high-cost outlier cases.

Other ways in which Medicare pays hospitals is through indirect medical education and disproportionate share hospital adjustments for inpatient services. Disproportionate share hospital adjustment is the Medicare adjustment for treating low-income patients. The indirect medical education portion goes toward teaching residents and interns.

**COMPLICATION OR COMORBIDITY, MAJOR COMPLICATION OR COMORBIDITY**

The designations MCC and CC depend on the primary diagnosis that caused the patient to be hospitalized. The MCC designation increases the DRG and payment because MCC entails the care of a more medically complicated patient, requiring more resources. MCC represents the highest level of severity, and CC is the next highest level of severity. The CC designation is assigned to a patient whose treatment is less complicated than that of a patient with MCC and more complicated than that of a patient without MCC or CC (Figure 2-1).

An example can help explain the MCC, CC, and non-MCC/CC DRGs: A patient arrives at the hospital with critical aortic stenosis and needs an aortic valve replacement. To determine whether coronary bypass surgery is needed as well, a preoperative cardiac catheterization is performed. The DRGs assigned for this admission are 216, 217, and 218. DRG 216 is with MCC, DRG 217 is with CC, and DRG 218 is without MCC or CC. The geometric length of stay (GLOS) is used to calculate reimbursement; the GLOS is statistically adjusted for all the cases with a given DRG and allows for outliers. In effect, the GLOS represents the per diem rate. The GLOS is calculated by multiplying the LOS and then taking the number of patients as the root of that number. In contrast, the arithmetic length of stay (ALOS) is the average number of days allowed for the particular DRG. The ALOS is the average LOS for patients with the same diagnosis added together and then divided by the number of patients. This is used to determine payment for outliers. Figure 2-2 presents an example of this payment system, showing the difference in payment based on the documentation of patient severity of illness.
FIGURE 2-1. Levels of reimbursement

This pyramid shows the levels of reimbursement based on the patient’s comorbidities. Major complication or comorbidity (MCC) is the highest level, complication or comorbidity (CC) is the middle level, and non-MCC/non-CC is the lowest level.
Abbreviation: DRG, diagnosis related group.

FIGURE 2-2. DRGs for valve surgery with cardiac catheterization (MS-DRG v. 34.0)

<table>
<thead>
<tr>
<th>DRG 216: Cardiac Valve With Other Major Cardiothoracic Procedures With Cardiac Catheterization With MCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal diagnosis: aortic valve stenosis (I35.0)</td>
</tr>
<tr>
<td>Secondary diagnosis: end-stage renal disease (N18.6)</td>
</tr>
<tr>
<td>GLOS = 12.1; ALOS = 15.1</td>
</tr>
<tr>
<td>Payment = Hospital Base Rate $ 9.64 = $</td>
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<table>
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<tr>
<th>DRG 217: Cardiac Valve With Other Major Cardiothoracic Procedures With Cardiac Catheterization With CC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal diagnosis: aortic valve stenosis (I35.0)</td>
</tr>
<tr>
<td>Secondary diagnosis: deep vein thrombosis (I82.4)</td>
</tr>
<tr>
<td>GLOS = 8.1; ALOS = 9.4</td>
</tr>
<tr>
<td>Payment = Hospital Base Rate $ 6.32 = $</td>
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<tr>
<th>DRG 218: Cardiac Valve With Other Major Cardiothoracic Procedures With Cardiac Catheterization Without MCC/CC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal diagnosis: aortic valve stenosis (I35.0)</td>
</tr>
<tr>
<td>Secondary diagnosis: chronic atrial fibrillation (I48.2)</td>
</tr>
<tr>
<td>GLOS = 5.4; ALOS = 6.5</td>
</tr>
<tr>
<td>Payment = Hospital Base Rate $ 5.67 = $</td>
</tr>
</tbody>
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The table above references the allotted LOS and payment per DRG in the same group with MCC, CC, and no MCC or CC.
Abbreviations: ALOS, arithmetic length of stay; CC, complication or comorbidity; DRG, diagnosis related group; GLOS, geometric length of stay; MCC, major complication or comorbidity; MS-DRG, Medicare Severity–Diagnosis Related Group.
LENGTH OF STAY

The importance of the MCC and CC is that they establish the allotted LOS (length of stay). The higher level of DRG with MCC has a higher LOS (Figure 2-2). If a patient is discharged before the expected LOS, the hospital gains money. If the patient is discharged on the day of the expected LOS, payment is about equal to cost. If the patient leaves after the expected LOS of that DRG, the hospital loses money. The goal is to discharge the patient when he or she is medically stable and safe and to prevent hospital readmission for the same diagnosis. The individual provider can track the LOS while the patient is in the hospital. It is important to keep track of LOS and provide accurate documentation so that the DRG reflects the patient acuity.

PRESENT ON ADMISSION CONDITIONS AND HOSPITAL-ACQUIRED CONDITIONS

To ensure proper coding and reimbursement, it is important to document which conditions are POA and which are HAC. On October 1, 2007, POA and HAC reporting became essential for hospital reporting. A POA report is required for all claims involving Medicare. POA is defined as a diagnosis at the time of inpatient admission. However, if a patient is not able to give a full history, and this patient’s medical information is discovered and documented later, it is still considered to be a POA condition.

For example, a patient who arrives at the hospital with shortness of breath and is diagnosed 3 days later with a pulmonary embolism is still considered to have a POA condition. A POA condition can be known at the time of admission, can be diagnosed later, or discovered during an outpatient encounter. In this type of situation, clear documentation practices will ensure proper coding and reimbursement.

If a diagnosis is not documented as a POA condition, the hospital will not receive payment for the treatment or services provided for the condition. This is especially true for pressure sores. If documented to be a POA condition, the pressure sores must be staged accurately. The goal of POA reporting is to ensure accuracy, validity, and efficiency of safety and quality measures as well as accuracy of risk mortality outcomes. It also is meant to improve the design and fairness of pay-for-performance programs.

If a diagnosis is designated HAC (hospital acquired condition), it needs to be documented as well. Hospitals do not receive the higher payment for patient hospitalization when a condition is acquired during a hospital stay. This means the diagnosis was not a POA condition. The case is paid as though the secondary diagnosis (i.e., HAC) was not present. Figure 2-3 lists HACs. It is important to avoid HACs to avoid losses in reimbursement as well as to ensure quality healthcare.
FIGURE 2-3. Hospital-acquired conditions (this list includes all hospital-acquired conditions that do not increase hospital reimbursement)

1. Foreign object retained after surgery
2. Air embolism
3. Blood incompatibility
4. Stage III and IV pressure ulcer
5. Falls and trauma causing dislocation, fracture, burn, intracranial injury, crush injury, or other injuries
6. Catheter-associated urinary tract infection
7. Vascular-associated catheter infection
8. Manifestation of poor glycemic control such as diabetic ketoacidosis, nonketotic hyperosmolar coma, hypoglycemic coma, secondary diabetes with ketoacidosis, and secondary diabetes with hyperosmolarity
9. Surgical site infection, mediastinitis, following coronary artery bypass graft (CABG)
10. Surgical site infection following certain orthopedic procedures: spine, neck, shoulder, and elbow
11. Surgical site infection following bariatric surgery for obesity: laparoscopic gastric bypass, gastroenterostomy, and laparoscopic gastric restrictive surgery
12. Surgical site infection following cardiac implantable electronic device
14. Iatrogenic pneumothorax with venous catheterization

Data from Department of Health and Human Services, Centers for Medicare & Medicaid Services.

MEDICAL NECESSITY

It must be clear to a third party as to why a patient has been ordered to undergo a given test or procedure. In addition, the intensity of service must reflect the patient’s current illness. For hospital admission, the provider determines the services that are necessary to treat the patient’s condition. The code selection is based on the medical necessity that is supported by the documentation. According to the American Medical Association, the criteria for medical necessity include services that are proper, reasonable, and needed to diagnose the patient’s medical condition based on type, frequency, extent, site, and duration of the problem; services that meet good standards of practice; and services that are not merely for the convenience of the patient, provider, or supplier. If a patient asks to have an inpatient test because
it is convenient for him or her, but the test is not related to the medical diagnosis for inpatient admission, the hospital will not receive reimbursement for the test. Similarly, if the provider wants a patient to have an inpatient test because the provider had already planned to order it as an outpatient test anyway, the test will not be reimbursed for a different admitted medical diagnosis. Medical necessity has nothing to do with the volume of work; instead, the necessity of the work depends on the medical diagnosis. The approach to ordering and documenting inpatient tests must be in accordance with the medical standards of care. In the final analysis, proper reimbursement depends not on what the provider does but on what the provider has documented.

VALUE-BASED PURCHASING

Congress authorized Inpatient Hospital Value-Based Purchasing (VPB) in Section 3001(a) of the Affordable Care Act. This program uses the hospital quality data reporting developed for the Hospital Inpatient Quality Reporting (IQR) program, authorized by Section 501(b) of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003. The goal of VPB is to reward hospitals that provide high-quality care to their patients. In 2017, MS-DRG payments were reduced by 2% and the savings were redistributed to the hospitals that were performing well. Hospital performance is assessed by means of the hospital’s total performance score (TPS). The performance scores are based on quality measures that are updated annually by the Centers for Medicare and Medicaid Services (CMS) and can be found on the CMS website at https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/hospital-value-based-purchasing/Downloads/HVBP_Measure_Reliability-.pdf.

The VBP program reviews the following data:

1. Clinical care process (5%)
2. Clinical care outcomes (25%)
3. Safety (20%)
4. Patient and caregiver coordination experience (25%)
5. Efficiency and cost reduction (25%)

The data can be reviewed on the CMS website: https://www.medicare.gov/hospitalcompare/data/total-performance-scores.html

Hospitals are rewarded financially not only for the quantity of care provided but also for the quality of care that is provided in the acute care setting. The practitioner’s documentation is important to support quality of care for every patient.
THE PAST AND FUTURE OF HOSPITAL BILLING

ICD-10-CM and ICD-10-PCS were implemented October 1, 2015. This was one of the largest transformations within the healthcare system. The tenth revision is more specific than previous versions of ICD (ICD-9-CM) and requires more exact and detailed documentation practices than ever before. ICD-10 has introduced many new codes and poses challenges to the hospital revenue cycle. The goal for providers is to capture the severity of illness and accurately measure healthcare quality.

These changes have made it imperative for providers to maintain accurate and specific documentation practices. Inpatient hospital reimbursement depends on MCCs, CCs, LOS, POA conditions, HACs, and medical necessity. Accurate provider documentation is the key to reimbursement. The electronic health record can provide easier access to the provider’s care and documentation practices and makes it easier to maintain accuracy. However, use caution as cloning has become problematic. Cloning is the process of cutting and pasting information into the medical record that is the same for every encounter or for every patient. Every patient encounter should be unique to that patient’s condition for that date of service.

The Affordable Care Act requires providers not only to demonstrate medical necessity when reporting the diagnosis code but to also document the patient encounter in detail. Payers are paying more attention to utilization and documentation than ever before, and this will only intensify in the years to come.
REFERENCES


