

How Reimbursement Work for Inpatient Procedures

GuidePoint

Simplifying Reimbursement

**Cardiac Rhythm Management
and Electrophysiology**

Updated March 2010

In-Patient Admission General Rules

For a procedure to be performed in the inpatient setting, the physician must issue clear admission orders (“admit to hospital” versus “place in observation”), and the patient’s medical record must clearly and accurately document the medical justification.

Medical necessity is also guided by the following general rules for inpatient admissions:

1. Ascertain whether the procedure can be safely provided in an alternate site of service.
2. Document patient comorbidities and the underlying need for admission.
3. Clearly note “Admit to Inpatient Status” or “Place in Observation” (avoid vague terms such as “Admit”).
4. Communicate: Notify the director of admitting, utilization review director, and/or Medicare compliance officer.

In addition, patients are typically admitted on an inpatient basis only when they have an acute condition requiring treatment only in a hospital setting and, based on the physician’s assessment, are unlikely to be ready for discharge within 24 hours. If the nonemergent patient has comorbidities that require intense monitoring or hospitalization, that information must be clearly noted in the patient’s chart to support the medical necessity of an inpatient admission

The Heart Rhythm Society has issued a position document on hospitalization criteria for pacemaker and ICD placement and EP/ablations. This document lists criteria that may be helpful for determining the appropriate setting for these procedures. It must be recognized and acknowledged that this determination is a clinical decision best made by the patient’s attending physician after a careful consideration of multiple clinical factors, including, but not limited to, the specific procedure planned, the urgency of the procedure, the hemodynamic stability of the patient, patient co-morbidities, and the likelihood and consequences of complications arising from the procedure.

If physicians are unsure about the need, they may consider placing the patient in outpatient observation, as outpatient observation can be progressed to inpatient if the patient’s condition warrants additional care and such need is clearly and accurately documented.¹

¹ See *Medicare Quality Improvement Organization Manual*, Chapter 4, “Case Review,” for a discussion of inpatient criteria. The chapter is available online at <http://www.cms.hhs.gov/manuals/downloads/qio110c04.pdf>.

ICD-9-CM Procedure Codes

Hospitals report inpatient services and treatments using ICD-9-CM procedure codes, as opposed to the CPT® and HCPCS procedure codes used in the outpatient setting.

MS-DRG Basics

Hospital inpatient care is paid under a Medicare Severity Diagnosis-Related Group (MSDRG) system. CMS categorizes each inpatient case into an MS-DRG on the basis of several factors:

- Principal procedure and up to five additional procedures
- Patient's age
- Patient's sex
- Patient's discharge status

As can be seen, the MS-DRG system represents a classification of patients into clinically cohesive groups having similar consumption of hospital resources and length of stay patterns.

MS-DRG Payments

Because complicated cases consume more resources than uncomplicated ones, CMS also established three different levels of severity for claims. The hierarchy, shown in the table below, is listed from highest to lowest.

MCC	Major Complications or comorbidities
CC	Complications or comorbidities
Non-CC	Non Complications/comorbidities

With regard to heart failure, all acute heart failure is coded as an MCC, whereas chronic heart failure is coded as a CC, and congestive heart failure, (unspecified) and heart failure (unspecified) are coded as non-CCs. For this reason, you can see that accurate MS-DRG assignment requires physicians to document with specificity the type and location of heart failure. Classifying diagnoses to MCC, CC, or non-CC can mean a difference of thousands of dollars in reimbursement.

The following table shows the levels of severity for various congestive heart failure ICD-9-CM diagnosis.

Levels of Severity for Congestive Heart Failure

Level of severity	Type of heart failure	ICD-9-CM codes
MCC (Major Complication or Comorbidity)	Acute heart-failure	428.21—Acute systolic heart failure 428.23—Acute on chronic systolic heart failure 428.31—Acute diastolic heart failure 428.33—Acute on chronic diastolic heart failure 428.41—Acute systolic and diastolic heart failure 428.43—Acute on chronic systolic heart failure

Level of severity	Type of heart failure	ICD-9-CM codes
CC (Complication or Comorbidity)	Chronic heart-failure	428.1—Left heart failure 428.20—Systolic heart failure NOS 428.22—Chronic systolic heart failure 428.30—Unspecified diastolic heart failure 428.32—Chronic diastolic heart failure 428.40—Systolic and diastolic heart failure 428.42—Chronic combined systolic and diastolic heart failure
Non-CC (Non Complication or Comorbidity)	Unspecific heart-failure	428.0—Congestive heart failure NOS 428.9—Heart failure NOS

Accuracy of the diagnosis and procedural coding, therefore, is essential to ensure that the case is assigned to the appropriate MS-DRG.

Other factors may impact the hospital's specific MS-DRG payment rates, such as a high percentage of low-income patients. Payment is also increased for unusually costly cases known as outliers. The additional outlier payment is designed to protect the hospital from large financial losses due to exceptionally expensive care. The following table shows sources of variation in MS-DRG payments among hospitals.

Variations in MS-DRG Payments Among Hospitals

<i>Variable</i>	<i>Influence on Base Payment</i>
1 Geographic Wage Variations	Increase or decrease (+/-)
2 Indirect Medical Education (IME)	Increase (+)
3 Disproportionate Share Hospital (DSH)	Increase (+)

MS-DRG Logic for CRM Procedures

The following discussion describes the MS-DRG logic for CRM procedures. The inpatient payment system, as explained above, is driven by ICD-9-CM codes and assigned to an MS-DRG based on a hierarchy. Each MS-DRG represents a similar case complexity for reimbursement purposes.

Pacemakers or Cardiac Resynchronization Therapy Pacemakers

The MS-DRG logic for single/dual and CRT pacemaker implants divides cases into three tiers:

- The presence of an MCC diagnosis places the case in MS-DRG 242.
- If a CC is present, MS-DRG 243 with CC is assigned.
- If no CC or MCC is present, MS-DRG 244 is assigned.

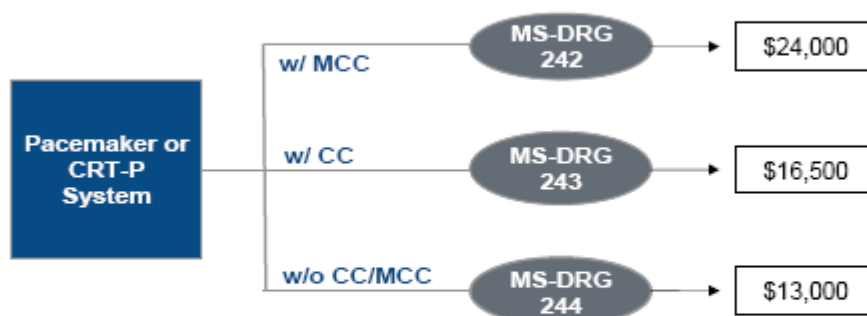
The following case scenario demonstrates the logic. A patient has a single-chamber pacer for bradycardia. The patient develops class III heart failure and conduction delay. The single-chamber pacemaker is upgraded to a CRT-P system. Under the MS-DRG system, heart failure unspecified (428.0) is designated as a non-CC; therefore, MS-DRG 244 is assigned. However, if the patient presented with chronic combined systolic and diastolic heart failure, code 428.42 and MS-DRG 243 would be assigned, as this code is a designated CC. If the patient had acute combined systolic and diastolic heart failure, code 428.41, then MS-DRG 242 would be assigned, as this code is an MCC.

ICD or Cardiac Resynchronization Therapy Defibrillator

The MS-DRG logic for ICD and CRT-D system implants includes consideration of whether an MCC diagnosis is present.

- If no cardiac catheterization is performed, the presence of an MCC splits the DRGs into MS-DRG 226 or 227.
- If a cardiac catheterization is performed, the presence of a diagnosis of heart failure, acute myocardial infarction, or shock with an MCC diagnosis splits the DRGs into MS-DRG 222 or 223. Without a diagnosis of heart failure, acute myocardial infarction, or shock, the MCC diagnosis also splits the DRGs into MS-DRG 224 or 225.

The following case scenario demonstrates the logic. A patient has a single-chamber pacemaker for bradycardia. The patient develops class III heart failure and conduction delay. The single-chamber pacemaker is upgraded to a CRT-P system. Under the MS-DRG



Note: 2009 national average payments. Amounts have been rounded. Final rates may vary due to geographic differences.

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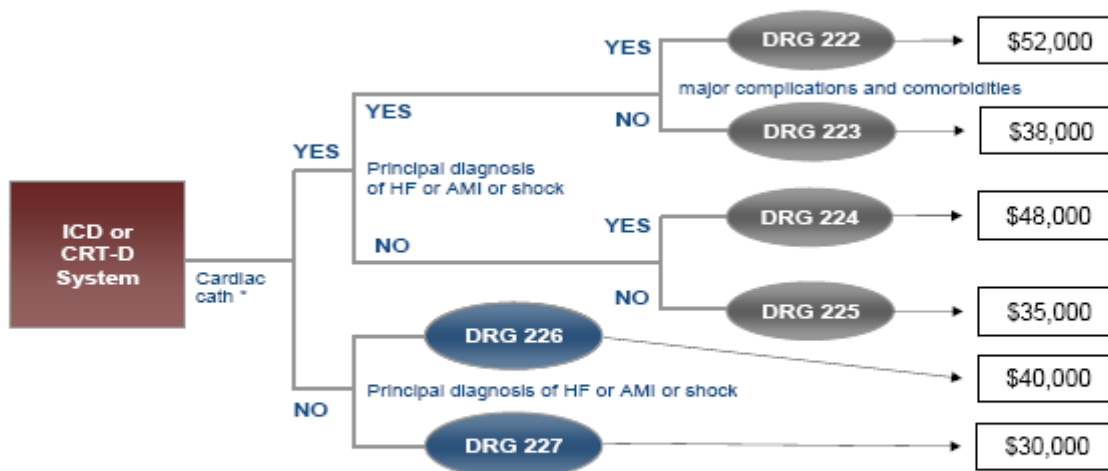
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As mentioned previously, acute heart failure is an MCC, chronic heart failure is a CC, and 428.9 or 428.0 as stand-alone codes are classified as a non-CC. The codes for acute myocardial infarction (initial episode) and cardiogenic shock are designated as MCCs.

The following case example demonstrates the logic. A patient presents with a dual-chamber ICD due to ventricular tachycardia (427.1) and needs the device upgraded to a



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CRT-D due to Class III heart failure (428.0). No cardiac cath is performed; therefore, MS-DRG 226 is assigned, since 427.1 is a designated MCC. If an ICD generator only is implanted or replaced, MS-DRG 245 is assigned for this stand-alone procedure.

Electrophysiology Study and Ablation

The presence of an MCC diagnosis drives the logic for MS-DRGs relating to catheter ablation and EP studies:

- If an MCC diagnosis is present, the case groups to MS-DRG 250.
- If no MCC is present, MS-DRG 251 is assigned.

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