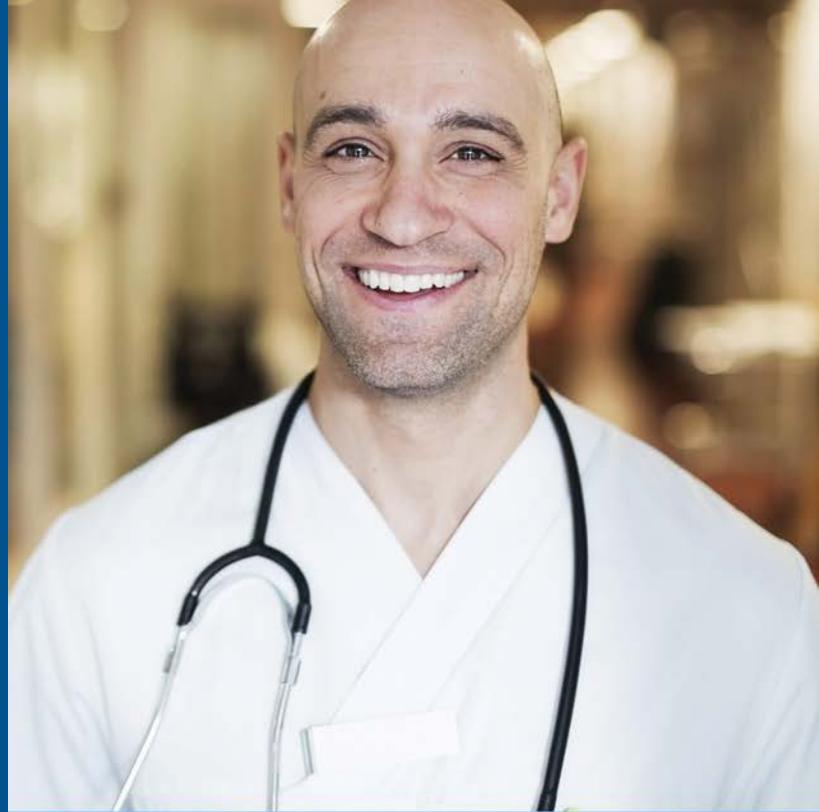


HOSPITAL & PHYSICIAN REIMBURSEMENT GUIDE

ICD THERAPY

Economics,
Reimbursement, and
Evidence

February 2021



Medtronic

HOSPITAL & PHYSICIAN REIMBURSEMENT GUIDE FOR ICD THERAPY

This guide was developed to help you understand Medicare coverage and payment for implantable cardioverter defibrillators (ICD) and cardiac resynchronization therapy with implantable cardioverter defibrillators (CRT-D).

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Coding, coverage, and reimbursement information is available at: [medtronic.com/crhfreimbursement](https://www.medtronic.com/crhfreimbursement). For questions or for more information, please contact Reimbursement Customer Support at 1-866-877-4102 (8 a.m. to 5 p.m. CT, Monday–Friday) or rs.healthcareeconomics@medtronic.com.

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OVERVIEW

The implantable automatic defibrillator is an electronic device designed to detect and treat life-threatening tachyarrhythmias. The device consists of a pulse generator and electrodes for sensing and defibrillating. When the device senses an arrhythmia, it sends an electrical signal through the leads to terminate the arrhythmia and restore normal heart rhythm.

Section 20.4 of the Medicare National Coverage Determinations (NCD) manual establishes conditions of coverage for ICDs.¹ First issued in 1986, the NCD provided limited coverage of ICDs and the policy has been expanded over the years since then. CMS last reconsidered this NCD in 2018. The most recent changes to the policy removed the registry requirement and added the shared decision making requirement for primary prevention indications.

MADIT-II and SCD-HeFT Patients

MADIT-II and SCD-HeFT were two clinical trials that studied the impact of ICD therapy on specific patient populations.^{2,3} Both trials demonstrated decreased risk of death from sudden cardiac arrest for patients who receive an ICD. MADIT-II patients have survived a previous myocardial infarction (MI) and have impairment of the left ventricle, but no prior history of an arrhythmia. MADIT-II and SCD-HeFT patient populations overlap. The SCD-HeFT population is broader; for example, a prior MI is a MADIT-II indication, but may or may not be present in an SCD-HeFT patient. Both populations may include abnormalities in QRS duration.

Patient Population Summary

MADIT-II

SCD-HeFT

Prior MI

Ischemic or nonischemic cardiomyopathy

Ejection fraction \leq 30%

NYHA Class II or III

Ejection fraction \leq 35%

Cardiac Resynchronization Therapy with Defibrillator

Cardiac resynchronization therapy with defibrillator (CRT-D) combines the benefits of defibrillation with synchronous biventricular pacing capabilities. CRT-D is used in individuals who qualify for an ICD **and** who also have indications for CRT.

Medicare does not have a national coverage determination specifically for CRT-D therapy. As CRT-D combines the benefits of defibrillation with synchronous biventricular pacing capabilities, it is important that the patient first and foremost meets the national coverage indications for an ICD. To determine if the biventricular pacing capabilities are warranted, the current indications for biventricular pacing and supporting literature should be considered. Please contact your local payer for more specific information regarding the coverage policies for your area.

COVERAGE FOR ICD THERAPY

Medicare Coverage

The Medicare coverage policy for ICD implants occurring on or after February 15, 2018, is printed verbatim; however, it is reformatted for easier readability.¹

The following information represents the CMS nationally covered indications for the use of implantable cardioverter defibrillators (ICDs) based on the national coverage determination (NCD) for ICDs (20.4).¹ Effective February 15, 2018. CMS covers ICDs for the following patient indications:

Medicare Coverage Policy

20.4 IMPLANTABLE AUTOMATIC DEFIBRILLATORS, Medicare National Coverage Determinations Manual (Chapter 1, Part I (Sections 10-80.12) Coverage Determinations)¹

A. General

An ICD is an electronic device designed to diagnose and treat life-threatening ventricular tachyarrhythmias.

Indications and Limitations of Coverage

B. Nationally Covered Indications

Effective for services performed on or after February 15, 2018, CMS has determined that the evidence is sufficient to conclude that the use of ICDs, (also referred to as defibrillators) is reasonable and necessary:

1. Patients with a personal history of sustained ventricular tachyarrhythmia (VT) or cardiac arrest due to ventricular fibrillation (VF). Patients must have demonstrated:
 - An episode of sustained VT, either spontaneous or induced by an electrophysiology (EP) study, not associated with an acute myocardial infarction (MI) and not due to a transient or reversible cause; or
 - An episode of cardiac arrest due to VF, not due to a transient or reversible cause.
2. Patients with a prior MI and a measured left ventricular ejection fraction (LVEF) \leq 0.30. Patients must not have:
 - New York Heart Association (NYHA) Classification IV heart failure; or
 - Had a coronary artery bypass graft (CABG) or percutaneous coronary intervention (PCI) with angioplasty and/or stenting, within the past three months; or
 - Had an MI within the past 40 days; or
 - Clinical symptoms and findings that would make them a candidate for coronary revascularization.

For these patients identified in B2, a formal shared decision making encounter must occur between the patient and a physician (as defined in Section 1861(r)(1) of the Social Security Act (the Act)) or qualified non-physician practitioner (meaning a physician assistant, nurse practitioner, or clinical nurse specialist as defined in §1861(aa) (5) of the Act) using an evidence-based decision tool on ICDs prior to initial ICD implantation. The shared decision making encounter may occur at a separate visit.

3. Patients who have severe, ischemic, dilated cardiomyopathy but no personal history of sustained VT or cardiac arrest due to VF, and have NYHA Class II or III heart failure, LVEF \leq 35%. Additionally, patients must not have:
 - Had a CABG, or PCI with angioplasty and/or stenting within the past three months; or
 - Had an MI within the past 40 days; or
 - Clinical symptoms and findings that would make them a candidate for coronary revascularization.

For these patients identified in B3, a formal shared decision making encounter must occur between the patient and a physician (as defined in Section 1861(r)(1) of the Act) or qualified non-physician practitioner (meaning a physician assistant, nurse practitioner, or clinical nurse specialist as defined in §1861(aa)(5) of the Act) using an evidence-based decision tool on ICDs prior to initial ICD implantation. The shared decision making encounter may occur at a separate visit.

4. Patients who have severe, nonischemic, dilated cardiomyopathy but no personal history of cardiac arrest or sustained VT, NYHA Class II or III heart failure, LVEF \leq 35%, been on optimal medical therapy for at least three months. Additionally, patients must not have:
- Had a CABG or PCI with angioplasty and/or stenting within the past three months; or
 - Had an MI within the past 40 days; or
 - Clinical symptoms and findings that would make them a candidate for coronary revascularization.

For these patients identified in B4, a formal shared decision making encounter must occur between the patient and a physician (as defined in Section 1861(r)(1) of the Act) or qualified non-physician practitioner (meaning a physician assistant, nurse practitioner, or clinical nurse specialist as defined in §1861(aa)(5) of the Act) using an evidence-based decision tool on ICDs prior to initial ICD implantation. The shared decision making encounter may occur at a separate visit.

5. Patients with documented, familial, or genetic disorders with a high risk of life-threatening tachyarrhythmias (sustained VT or VF, to include, but not limited to, long QT syndrome or hypertrophic cardiomyopathy.)

For these patients identified in B5, a formal shared decision making encounter must occur between the patient and a physician (as defined in Section 1861(r)(1) of the Act) or qualified non-physician practitioner (meaning a physician assistant, nurse practitioner, or clinical nurse specialist as defined in §1861(aa)(5) of the Act) using an evidence-based decision tool on ICDs prior to initial ICD implantation. The shared decision making encounter may occur at a separate visit.

6. Patients with an existing ICD may receive an ICD replacement if it is required due to the end of battery life, elective replacement indicator (ERI), or device/lead malfunction.

For each of the six covered indications above, the following additional criteria must also be met:

1. Patients must be clinically stable (e.g., not in shock, from any etiology);
2. LVEF must be measured by echocardiography, radionuclide (nuclear medicine) imaging, cardiac magnetic resonance imaging (MRI), or catheter angiography;
3. Patients must not have:
 - Significant, irreversible brain damage; or
 - Any disease, other than cardiac disease (e.g., cancer, renal failure, liver failure) associated with a likelihood of survival less than one year; or
 - Supraventricular tachycardia such as atrial fibrillation with a poorly controlled ventricular rate.

Exceptions to waiting periods for patients that have had a CABG or PCI with angioplasty and/or stenting within the past three months, or had an MI within the past 40 days:

Cardiac pacemakers: Patients who meet all CMS coverage requirements for cardiac pacemakers, and who meet the criteria in this national coverage determination for an ICD, may receive the combined devices in one procedure, at the time the pacemaker is clinically indicated.

Replacement of ICDs: Patients with an existing ICD may receive an ICD replacement if it is required due to the end of battery life, ERI, or device/lead malfunction.

C. Nationally Non-covered Indications

N/A

D. Other

For patients that are candidates for heart transplantation on the United Network for Organ Sharing (UNOS) transplant list awaiting a donor heart, coverage of ICDs, as with cardiac resynchronization therapy, as a bridge-to-transplant to prolong survival until a donor becomes available, is determined by the local Medicare Administrative Contractors (MACs).

All other indications for ICDs not currently covered in accordance with this decision may be covered under Category B Investigational Device Exemption (IDE) trials (42 CFR 405.201).

Please see the following page for a Medicare ICD/CRT-D coverage overview chart.

Shared Decision Making (SDM)

For primary prevention patients, the CMS NCD specifies that a formal shared decision making encounter must occur between the patient and a physician or qualified non-physician practitioner (physician assistant, nurse practitioner, or clinical nurse specialist) using an evidence-based decision tool on ICDs prior to initial ICD implantation. This encounter can happen during a separate visit.

The NCD references a sample shared decision making tool that can be found at:

<https://patientdecisionaid.org/icd/>.

A second sample tool can be found at:

<https://www.cardiosmart.org/healthwise/abk4/103/abk4103>.

In addition, guidelines published in 2017 by AHA/ACC/HRS provide recommendations for the elements of shared decision making.⁴

A commonly accepted definition for shared decision making includes four components:

1. At least two participants — the clinician and the patient — are involved
2. Both parties share information
3. Both parties take steps to build a consensus about the preferred treatment
4. An agreement is reached on the treatment to implement

The decision memo can be found at the following link:

<https://www.cms.gov/medicare-coverage-database/details/nca-decision-memo.aspx?NCAId=288>

Medicare ICD/CRT-D Coverage Overview Chart

Primary or Secondary Prevention	Indication	Left Ventricle Ejection Fraction*	NYHA Class	Exclusions or Other Criteria	Shared Decision Making Required
Secondary	History of sustained ventricular tachyarrhythmia (VT) [†] or cardiac arrest due to ventricular fibrillation (VF).	N/A	N/A	<ul style="list-style-type: none"> An episode of sustained VT, either spontaneous or induced by an electrophysiology (EP) study, not associated with an acute myocardial infarction (MI) and not due to a transient or reversible cause; or An episode of cardiac arrest due to VF, not due to a transient or reversible cause 	No
Primary	Documented prior MI ^{**}	≤ 30%	Any except IV	<ul style="list-style-type: none"> Had a CABG or PCI with angioplasty and/or stenting with the past three months; or Had an MI within the past 40 days; or Clinical symptoms and findings that would make them a candidate for coronary revascularization. 	Yes
Primary	Ischemic, dilated cardiomyopathy but no personal history of sustained VT or cardiac arrest due to VF	≤ 35%	II or III	<ul style="list-style-type: none"> Had an MI within the past 40 days; or Clinical symptoms and findings that would make them a candidate for coronary revascularization. 	Yes
Primary	Nonischemic, dilated cardiomyopathy but no personal history of cardiac arrest or sustained VT [†] and has been on optimal medical therapy for at least three months	≤ 35%	II or III		Yes
Primary	Documented, familial, or genetic disorders with a high risk of life-threatening tachyarrhythmias (sustained VT or VF, to include, but not limited to, long QT syndrome or hypertrophic cardiomyopathy)	N/A	N/A		Yes
N/A	ICD replacement	N/A	N/A	Due to the end of battery life, elective replacement indicator (ERI), or device/lead malfunction	No

*Ejection fractions must be measured by angiography, radionuclide scanning, or echocardiography.

[†]The ICD Registry™ includes the following definition of spontaneous sustained VT: Spontaneous VT lasts > 30 seconds in duration or requires termination due to hemodynamic compromise in < 30 seconds.

^{**}MI's must be documented and defined according to the consensus document of the Joint European Society of Cardiology/American College of Cardiology Committee for the Redefinition of Myocardial Infarction.

Coverage with Non-Medicare Payers

Non-Medicare payers typically determine coverage for procedures based on medical policy and prior authorization requirements. It is recommended that you review the payer's coverage policy to verify that you have met all the criteria for coverage for your specific patient. Not all published policies apply to all patients covered by a specific payer. We recommend you contact the payer to obtain a prior authorization or prior approval. Determining coverage after implant may result in unpaid claims, leaving both the hospital and the physician without compensation.

CODING FOR ICD THERAPY

These coding suggestions do not replace seeking coding advice from the payer and/or your own coding staff. The ultimate responsibility for correct coding lies with the provider of services. All diagnosis and procedure codes reported must be supported by clear documentation within the medical record.

Physician Procedure Codes

The following CPT^{®5} codes describe procedures associated with ICD therapy implants. Depending on the type of ICD implanted, one or more of the following codes may be appropriate. This is not an all-inclusive list. These codes are used by physicians to report their services. Additionally, hospitals use CPT[®] codes to report services rendered in the outpatient hospital setting.

CPT[®] Code CPT[®] Code Description

33202	Insertion of epicardial electrode(s); open incision (e.g., thoracotomy, median sternotomy, subxiphoid approach)
33203	Insertion of epicardial electrode(s); endoscopic approach (e.g., thoracoscopy, pericardioscopy)
33216	Insertion of a single transvenous electrode, permanent pacemaker, or implantable defibrillator
33217	Insertion of 2 transvenous electrodes, permanent pacemaker, or implantable defibrillator
33224	Insertion of pacing electrode, cardiac venous system, for left ventricular pacing, with attachment to previously placed pacemaker or implantable defibrillator pulse generator (including revision of pocket, removal, insertion, and/or replacement of existing generator)
+33225	Insertion of pacing electrode, cardiac venous system, for left ventricular pacing, at time of insertion of implantable defibrillator or pacemaker pulse generator (e.g., for upgrade to dual chamber system) (List separately in addition to code for primary procedure)
33230	Insertion of implantable defibrillator pulse generator only; with existing dual leads
33231	Insertion of implantable defibrillator pulse generator only; with existing multiple leads
33240	Insertion of implantable defibrillator pulse generator only; with existing single lead
33241	Removal of implantable defibrillator pulse generator only
33244	Removal of single or dual chamber implantable defibrillator electrode(s); by transvenous extraction
33249	Insertion or replacement of permanent implantable defibrillator system, with transvenous lead(s), single or dual chamber
33262	Removal of implantable defibrillator pulse generator with replacement of implantable defibrillator pulse generator; single lead system
33263	Removal of implantable defibrillator pulse generator with replacement of implantable defibrillator pulse generator; dual lead system
33264	Removal of implantable defibrillator pulse generator with replacement of implantable defibrillator pulse generator; multiple lead system

+ Add-on code.

Physician Specialty⁶

The previous page includes various procedure codes associated with ICD implants. Only certain physician specialties are allowed to bill and be reimbursed based on information entered in the internet-based Provider Enrollment, Chain, and Ownership System (PECOS). Physicians self-designate their Medicare physician specialty on the Medicare enrollment application or PECOS. This specialty code is then associated with the claims submitted by that physician. When important information changes occur, revisions must be communicated via paper or the applicable fields updated in the PECOS system.⁶ Selected physician specialty codes are:

- 06 Cardiology
- 11 Internal Medicine
- 21 Cardiac Electrophysiology

Hospital Inpatient Procedure Codes

The following ICD-10-PCS codes describe commonly performed defibrillator procedures. This is not an all-inclusive list. These codes are only used by hospitals for reporting inpatient services.

ICD-10-PCS	Description
Implant Cardioverter-defibrillator Generator	
0JH608Z	Insertion of defibrillator generator into chest subcutaneous tissue and fascia, open approach
0JH638Z	Insertion of defibrillator generator into chest subcutaneous tissue and fascia, percutaneous approach
0JH808Z	Insertion of defibrillator generator into abdomen subcutaneous tissue and fascia, open approach
0JH838Z	Insertion of defibrillator generator into abdomen subcutaneous tissue and fascia, percutaneous approach
Insert RA or RV Lead, Transvenous	
02H63KZ	Insertion of defibrillator lead into right atrium, percutaneous approach
02HK3KZ	Insertion of defibrillator lead into right ventricle, percutaneous approach
Insert Subcutaneous Defibrillator Lead Implantation	
0JH60PZ	Insertion of cardiac rhythm-related device into chest subcutaneous tissue and fascia, open approach
Replace Epicardial Lead	
02HN0KZ	Insertion of defibrillator lead into pericardium, open approach
02PA0MZ	Removal of cardiac lead from heart, open approach
Revise and Reposition RA, RV, or LV Lead	
02WA0MZ	Revision of cardiac lead in heart, open approach
02WA3MZ	Revision of cardiac lead in heart, percutaneous approach

Revise or Relocate Pocket

0JWT0PZ	Revision of cardiac rhythm-related device in trunk subcutaneous tissue and fascia, open approach
0JWT3PZ	Revision of cardiac rhythm-related device in trunk subcutaneous tissue and fascia, percutaneous approach

Remove Generator

0JPT0PZ	Removal of cardiac rhythm-related device from trunk subcutaneous tissue and fascia, open approach
0JPT3PZ	Removal of cardiac rhythm-related device from trunk subcutaneous tissue and fascia, percutaneous approach

Hospital Outpatient Procedure Codes

Please refer to page 8 for CPT procedure codes pertaining to ICD procedures. These same codes would be used by hospitals to report ICD procedures performed in the outpatient setting. This is not an all-inclusive list and the appropriate coding would be dependent on documentation for the procedure(s) performed.

HCPCS (C-codes) (Device Codes)

Medicare provides Device C-codes for hospital use in billing Medicare for medical devices in the outpatient setting.

The following HCPCS (C-codes) (Device Codes) relate to the implantation of an implantable defibrillator (ICD) and cardiac resynchronization therapy-defibrillator (CRT-D) components. Depending on the type of device implanted and the specific components, one or more of the following codes may be appropriate:

HCPCS Codes	HCPCS Code Description
C1721	Cardioverter-defibrillator, dual chamber (implantable)
C1722	Cardioverter-defibrillator, single chamber (implantable)
C1777	Lead, cardioverter-defibrillator, endocardial single coil (implantable)
C1779	Lead, pacemaker, transvenous VDD single pass (implantable)
C1882	Cardioverter-defibrillator, other than single or dual chamber (implantable)
C1895	Lead, cardioverter-defibrillator, endocardial dual coil (implantable)
C1896	Lead, cardioverter-defibrillator, other than endocardial single or dual coil (implantable)
C1898	Lead, pacemaker, other than transvenous VDD single pass
C1899	Lead, pacemaker-cardioverter-defibrillator combination (implantable)
C1900	Lead, left ventricular coronary venous system

Use of HCPCS (C-codes) for Medicare Patients

Medicare (CMS) no longer uses procedure-to-device and device-to-procedure edits for device-intensive hospital outpatient services. For calendar year 2021, a procedure that requires a device to be implanted and is also assigned to a device-intensive ambulatory payment classification (APC), the claim must include a "device code."

The table below provides implantable cardioverter defibrillator device-intensive APCs⁷:

Device-intensive APC Number and APC Description	Procedure Code	Procedure Code Brief Description
5222 Level 2 Pacemaker and Similar Procedures	33216	Insert single lead, pacemaker or ICD
	33217	Insert 2 leads, pacemaker or ICD
5231 Level 1 ICD and Similar Procedures	33240	Insert ICD pulse generator only; w/existing single lead
	33262	Remove ICD gen, replace ICD gen; single lead system
	33263	Remove ICD gen, replace ICD gen; dual lead system
5232 Level 2 ICD and Similar Procedures	33231	Insert ICD pulse generator only; w/existing multiple leads
	33249	Insert/replace ICD system w/leads single or dual chamber
	33264	Remove ICD gen, replace ICD gen; multiple lead system
	33270	Insert/replace subcutaneous defibrillator system w/subcutaneous electrode

ICD-10-CM Diagnosis Codes

The following is a list of examples of possible ICD-10-CM diagnosis codes that relate to indications associated with ICD procedures. Payers will determine coverage based on their medical policies, criteria, and documented medical necessity. This is not an all-inclusive list and the diagnosis codes reported should be based on documentation of what the individual patient presents with.⁸

ICD-10-CM Diagnosis Code	ICD-10-CM Diagnosis Code Description
I47.2	Ventricular tachycardia
I49.01	Ventricular fibrillation
I49.02	Ventricular flutter
I46.2	Cardiac arrest due to underlying cardiac condition

I46.9	Cardiac arrest, cause unspecified
I49.9	Cardiac arrhythmia, unspecified
T82.120A	Displacement of cardiac electrode, initial encounter
T82.121A	Displacement of cardiac pulse generator (battery), initial encounter
T82.190A	Other mechanical complication of cardiac electrode, initial encounter
T82.191A	Other mechanical complication of cardiac pulse generator (battery), initial encounter
Z86.74	Personal history of sudden cardiac arrest (SCA) (successfully resuscitated)
Z45.02	Encounter for adjustment and management of automatic implantable cardiac defibrillator

Ischemic Cardiomyopathy

ICD-10-CM Diagnosis Code	ICD-10-CM Diagnosis Code Description
I25.5	Ischemic cardiomyopathy
I25.6	Silent myocardial ischemia
I25.9	Chronic ischemic heart disease, unspecified

Nonischemic Cardiomyopathy

ICD-10-CM Diagnosis Code	ICD-10-CM Diagnosis Code Description
I42.1	Obstructive hypertrophic cardiomyopathy
I42.2	Other hypertrophic cardiomyopathy
I42.0	Dilated cardiomyopathy
I42.5	Other restrictive cardiomyopathy
I42.8	Other cardiomyopathies
I42.9	Cardiomyopathy, unspecified

Long QT Syndrome

ICD-10-CM Diagnosis Code	ICD-10-CM Diagnosis Code Description
I45.81	Long QT syndrome

QRS Duration, Wide and Narrow

ICD-10-CM Diagnosis Code	ICD-10-CM Diagnosis Code Description
R94.31	Abnormal electrocardiogram [ECG] [EKG]

Prior Myocardial Infarction

With ICD-10-CM Diagnosis Coding: An acute myocardial infarction (AMI) is identified as “acute” for four weeks from the time of the incident.

Documentation

CMS has posted a “Clinical Concepts in Cardiology” tip sheet on their website identifying several clinical documentation tips for cardiology services and ICD-10-CM diagnosis codes.⁹ The tip sheet includes common codes, clinical documentation tips, and clinical scenarios. Some of these tips are:

- Document why the patient encounter took place.
- When known, document whether the patient is compliant with their medications.
- Document lab test results, both normal and abnormal.

Please review the CMS tip sheet for complete information at:

<https://www.cms.gov/Medicare/Coding/ICD10/Downloads/ICD10ClinicalConceptsCardiology1.pdf>

Heart Failure ICD-10-CM Diagnosis Code Documentation

Physician documentation should include specific information about the patient's heart failure to ensure that the acuity of the patient is recognized. For hospital inpatients, physician documentation for MS-DRGs (Medicare Severity Diagnosis Related Groups) assignment is critical. All primary and secondary diagnoses must be clearly identified in the patient's record to facilitate appropriate payment.

Heart Failure as a CC (Complication or Comorbidity) or MCC (Major Complication or Comorbidity)

Under the MS-DRG system, heart failure can be considered both a chronic and acute condition. Documentation about the specific type of heart failure is critical to determine if the condition is considered a CC or an MCC.

Heart failure diagnosis codes must be explicitly documented by the physician; it cannot be assumed by the coder on the basis of the ejection fraction. Nondiagnostic and nonspecific terms such as “low ejection fraction” and “ventricular dysfunction” should also be avoided. Low ejection fraction is a characteristic of heart failure, and it is essential that physicians document the diagnosis clearly.

INPATIENT HOSPITAL MS-DRGs FOR ICD THERAPY

When Medicare deems the ICD or CRT-D procedure to be reasonable and necessary for the inpatient admission, the MS-DRG (Medicare Severity Diagnosis Related Group) assignment may be:

MS-DRG	Description
MS-DRG 222	Cardiac defibrillator implant with cardiac catheterization with acute myocardial infarction/heart failure/shock with MCC*
MS-DRG 223	Cardiac defibrillator implant with cardiac catheterization with acute myocardial infarction/heart failure/shock without MCC*
MS-DRG 224	Cardiac defibrillator implant with cardiac catheterization without acute myocardial infarction/heart failure/shock with MCC*
MS-DRG 225	Cardiac defibrillator implant with cardiac catheterization without acute myocardial infarction/heart failure/shock without MCC*
MS-DRG 226	Cardiac defibrillator implant without cardiac catheterization with MCC*
MS-DRG 227	Cardiac defibrillator implant without cardiac catheterization without MCC*
MS-DRG 245	Automatic implantable cardiac defibrillator generator procedures
MS-DRG 265	Automatic implantable cardiac defibrillator lead procedures

*MCC = Major Complication or Comorbidity.

FREQUENTLY ASKED QUESTIONS

Does Medicare grant prior authorization for services?

No. Traditional (fee-for-service) Medicare does not typically require or grant prior authorization for these services; however, some Medicare Advantage plans do require prior authorizations. Please contact your local Medicare contractor when you have questions on Medicare coverage.

How do non-Medicare payers determine coverage for ICD implants?

Non-Medicare payers typically determine coverage through the prior authorization process and specific coverage policies. It is recommended that you review the payer's coverage policy to verify that you have met all the criteria for coverage for your specific patient. Not all published policies apply to all patients covered by a specific payer. We recommend you contact the payer to obtain a prior authorization or prior approval.

When was the last time the Medicare NCD for ICDs was revised?

Medicare revised the NCD on February 15, 2018. Claims with a date of service on or after this date no longer have the registry requirement for primary prevention indications and added the requirement of shared decision making for primary prevention indications.¹

Does Medicare cover ICD therapy for the treatment of atrial fibrillation in patients who do not have a corresponding ventricular indication?

No. As of October 1, 2003, Medicare coverage is not available for ICD therapy for the treatment of atrial fibrillation in patients who do not have a corresponding ventricular indication, unless the patients are receiving ICD therapy under category B IDE trial (42 CFR §405.201) or the CMS routine clinical trials policy (CIM 30-1, NCD 310.1).¹⁰

Are there national CMS QRS requirements for NYHA Class IV heart failure CRT-D patients?

No, but Medicare local contractors may develop local coverage decisions or coding/billing articles for cardiac resynchronization therapy defibrillators (CRT-Ds). Some of these local coverage decisions (LCDs) may require a strict adherence for FDA labeling (e.g., patients must have a QRS duration > 120 ms or 130 ms) in order for coverage to be granted. Contact your local Medicare contractor for more information regarding these and other policy requirements. Local Medicare coverage can be researched at:

www.cms.gov/medicare-coverage-database/overview-and-quick-search.aspx.

What are the documentation requirements for replacing ICDs?

The Medicare NCD does not discuss coverage criteria for replacing an ICD generator. In the absence of a policy, Medicare will determine coverage on a case by case basis, including a review of documented medical necessity.

What are the four NYHA (New York Heart Association) functional classifications?

The NYHA functional capacity is an estimation of a patient’s limitation during physical activity as shown below.

NYHA I: No limitation of physical activity. Ordinary physician activity does not cause undue fatigue, palpitation, dyspnea (shortness of breath).

NYHA II: Slight limitation of physical activity. Comfortable at rest. Ordinary physical activity results in fatigue, palpitation, dyspnea (shortness of breath).

NYHA III: Marked limitation of physical activity. Comfortable at rest. Less than ordinary activity causes fatigue, palpitation, or dyspnea.

NYHA IV: Unable to carry on any physical activity without discomfort. Symptoms of heart failure at rest. If any physical activity is undertaken, discomfort increases.

Source: <https://www.heart.org/en/health-topics/heart-failure/what-is-heart-failure/classes-of-heart-failure>

Do secondary diagnosis codes make a difference in MS-DRG assignment?

Yes. With the MS-DRG payment structure, secondary diagnoses codes can affect the MS-DRG assignment. The secondary diagnosis will determine if the patient has a major complication or comorbidity (MCC) or a complication or comorbidity (CC).

Can certain CC or MCC codes be excluded for MS-DRG assignment in particular situations?

Yes. Eight ICD-10 MCC diagnosis codes are only valid as an MCC if the patient is discharged alive. This list includes¹¹:

I46.2	I46.8	I46.9	I49.01	R09.2	R57.0	R57.1	R57.8
Cardiac arrest due to underlying cardiac condition	Cardiac arrest due to other underlying condition	Cardiac arrest, cause unspecified	Ventricular fibrillation	Respiratory arrest	Cardiogenic shock	Hypovolemic shock	Other shock

FOR ADDITIONAL INFORMATION, PLEASE CONTACT

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