

Rhythm Management 2024 Billing and Coding Guide



INSIDE THIS GUIDE *Commonly*

billed scenarios for

- Pacemakers
- Defibrillators
- Intra Cardiac Ablations
- Cardiac Device Monitoring
- Subcutaneous Cardiac Rhythm Monitor

For more procedure payment guides, [click here](#)



2024 Billing and Coding Guide

Rhythm Management

Rhythm Management

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Introduction

Dear User,

The Boston Scientific Rhythm Management Health Economics and Market Access team is pleased to bring you the following 2023 Reimbursement Resources:

Reimbursement Customer Support Line — Certified reimbursement professionals answer reimbursement questions related to Boston Scientific products and procedures. Send your questions to crm.reimbursement@bsci.com

Billing and Coding Guide — The Billing and Coding Guide is a useful tool for hospital and physician billers and coders. The guide includes practical coverage and coding reference materials for Boston Scientific products and procedures.

Procedural Payment Guide — Locate facility and physician payment information for cardiology, rhythm, and intervention procedures in conveniently organized summaries. Visit our website at www.bostonscientific.com/reimbursement to find the Procedural Payment Guide.

Physician Website — Keep current with the latest reimbursement news and find other reimbursement education resources. Make the website your first stop for all your Boston Scientific reimbursement needs; access <http://www.bostonscientific.com/reimbursement>

Code Finder – Visit our website at www.bostonscientific.com/reimbursement to find the C-code for Boston Scientifics products.

For over 40 years, Boston Scientific has been committed to making more possible through innovation, clinical science, and collaboration. We're dedicated to providing physicians and allied health professionals with world class programs and services to help advance the standard of patient care.

We welcome your feedback. If you have questions about Rhythm Management resources, contact Boston Scientific at crm.reimbursement@bsci.com

To access additional reimbursement resources, visit our website at <http://www.bostonscientific.com/reimbursement>

Boston Scientific

Health Economics & Market Access

The information in this guide is current as of January 1, 2024. The Centers for Medicare and Medicaid Services (CMS) may initiate changes to coverage, coding, or payment guidelines at any time. Check the CMS website (<http://www.cms.gov>) for current information.

A Word to Our Customers

Boston Scientific is pleased you have chosen to partner with us to help you save and improve patients' lives. We are committed to working directly with you to ensure timely patient access to innovative medical solutions. As part of this commitment, we also work with the Centers for Medicare and Medicaid Services (CMS), private insurers, and other industry stakeholders to ensure appropriate reimbursement for physicians and hospitals.

Explanation of Contents

This document contains commonly used billing codes for physicians and hospitals related to Boston Scientific devices and procedures.

Disclaimer

Please note: this coding information may include some codes for procedures for which Boston Scientific currently offers no cleared or approved products. In those instances, such codes have been included solely in the interest of providing users with comprehensive coding information and are not intended to promote the use of any Boston Scientific products for which they are not cleared or approved. The Health Care Provider (HCP) is solely responsible for selecting the site of service and treatment modalities appropriate for the patient based on medically appropriate needs of that patient and the independent medical judgement of the HCP.

Health economic and reimbursement information provided by Boston Scientific Corporation is gathered from third-party sources and is subject to change without notice as a result of complex and frequently changing laws, regulations, rules, and policies. This information is presented for illustrative purposes only and does not constitute reimbursement or legal advice.

Boston Scientific encourages providers to submit accurate and appropriate claims for services. It is always the provider's responsibility to determine medical necessity, the proper site for delivery of any services, and to submit appropriate codes, charges, and modifiers for services rendered.

It is also always the provider's responsibility to understand and comply with Medicare national coverage determinations (NCD), Medicare local coverage determinations (LCD), and any other coverage requirements established by relevant payers which can be updated frequently. Boston Scientific recommends that you consult with your payers, reimbursement specialists, and/or legal counsel regarding coding, coverage, and reimbursement matters.

Boston Scientific does not promote the use of its products outside their FDA-approved label.

Payer policies will vary and should be verified prior to treatment for limitations on diagnosis, coding, or site of service requirements. The coding options listed within this guide are commonly used codes and are not intended to be an all-inclusive list. We recommend consulting your relevant manuals for appropriate coding options.

Medicare Payment Overview

OVERVIEW OF MEDICARE PAYMENT SYSTEMS

Medicare is a federally funded, national health insurance program providing coverage to Americans who are 65 years of age or older, certain younger people with disabilities, and individuals with end-stage renal disease (ESRD). Payment by Medicare is predicated on Medical Necessity.

Note: Medical Necessity is defined by CMS as services or supplies that are: proper and needed for the diagnosis or treatment of the patient's medical condition; are provided for the diagnosis, direct care, and treatment of the patient's medical condition; meet the standards of good medical practice in the local area; and are not mainly for the convenience of the patient's doctor. CMS's definition of Medical Necessity can be found at: <https://www.cms.gov/apps/glossary/default.asp?Letter=M&Language=English>

There are several payment systems within the Medicare program, including payment for inpatient hospital services, outpatient hospital services, ambulatory surgery centers, home health, physicians, and skilled nursing. In this guide, you will find information specific to facility and physician payment systems.

Hospital Inpatient Payment

The hospital inpatient payment system is a prospective payment system (PPS) that classifies patients according to diagnosis, type of treatment, age, and other relevant criteria using the ICD-10-PCS coding system. Under this system, hospitals typically receive a predefined payment for treating patients within a category or Medicare Severity Diagnosis Related Group (MS-DRG).

Note: Medicare's hospital inpatient payment information in this document is effective for Fiscal Year (FY) 2024 (October 1, 2023 – September 30, 2024).

Note: Maryland hospitals are paid under a program waiver (section 1814(b)(3) of the Social Security Act) in which the state establishes hospital inpatient and outpatient payment rates for Medicare, Medicaid, and private payers.^{1,2}

Hospital Outpatient Payment

The hospital outpatient payment system, OPPOS, is also a prospective payment system. In this system, hospitals receive a fixed payment, called an Ambulatory Payment Classification (APC), for a specific procedure. Each procedure described by a CPT® (Current Procedural Terminology) code is assigned directly to an APC. Unlike the inpatient (MS-DRG) payment system, if multiple procedures are performed, the hospital may be eligible to receive more than one APC payment per outpatient admission.

Note: Medicare's hospital outpatient payment information in this document is effective for Calendar Year (CY) 2023 (January 1, 2024 – December 31, 2024).

Ambulatory Surgery Center (ASC) Payment

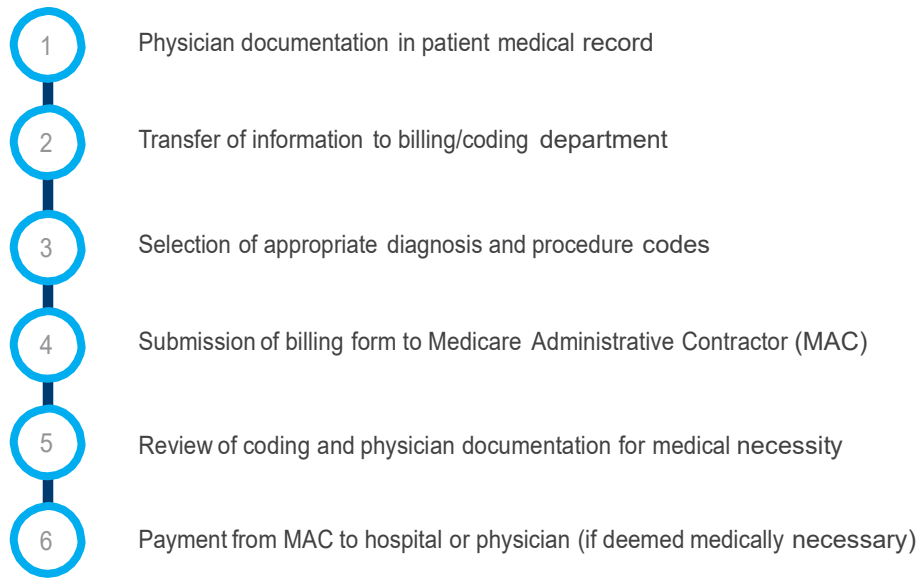
The Medicare ASC payment system, effective January 1, 2024, is a prospective payment system. The new ASC payment rates for most surgical procedures are set at ~ 65% of the APC payment rate for OPPOS. Device intensive procedures (such as pacemakers and defibrillators) will be paid at a higher rate (~ 86–96%) of the OPPOS rate. ASCs should bill Medicare using a CMS-1500 claim form and use CPT® codes to describe procedures performed.

Physician Payment

Physicians receive payment for each CPT® procedure code based on a fee schedule called the Medicare Physician Fee Schedule effective January 1, 2024. The Physician Fee Schedule is based on a scale of national uniform values for all physician services, commonly referred to as the Resource-Based Relative Value Scale (RBRVS).

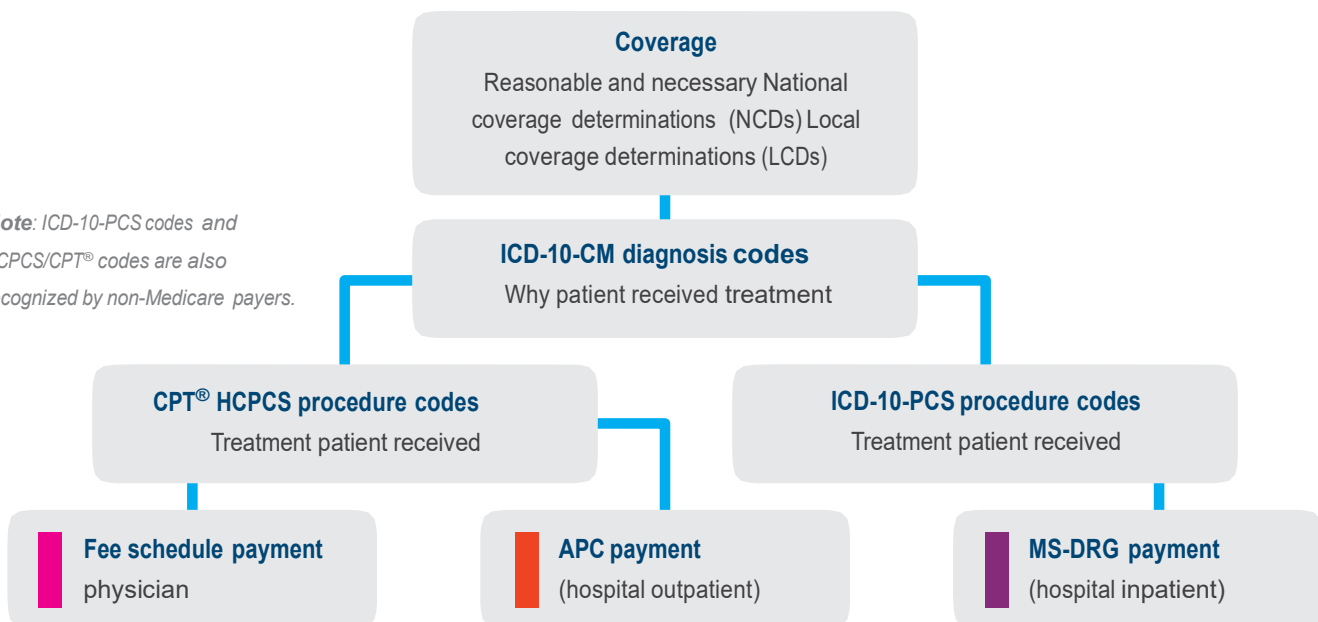
OVERVIEW OF MEDICARE PAYMENT PROCESS

All Medicare payment processes include these common steps:



Payer Coverage + Correct Coding + Compliance = Payment

Note: ICD-10-PCS codes and HCPCS/CPT® codes are also recognized by non-Medicare payers.



See page 4 for important information about the uses and limitations of this document. See the end of each section for Sources and Footnotes pertaining to each section. CPT ©2023 American Medical Association. All rights reserved. CPT is a registered trademark of the American Medical Association.

Medicare National Coverage Determination (NCD) Policies

MEDICARE NCD (20.8.3) FOR CARDIAC PACEMAKERS: Single Chamber and Dual Chamber Permanent Cardiac Pacemakers³

Effective date of this version: August 13, 2013

Benefit Category

- Inpatient Hospital Services
- Physicians' Services
- Prosthetic Devices

Note: This may not be an exhaustive list of all applicable Medicare benefit categories for this item or service.

Item/Service Description

A. General

Permanent cardiac pacemakers refer to a group of self-contained, battery operated, implanted devices that send electrical stimulation to the heart through one or more implanted leads. They are often classified by the number of chambers of the heart that the devices stimulate (pulse or depolarize). Single chamber pacemakers typically target either the right atrium or right ventricle. Dual chamber pacemakers stimulate both the right atrium and the right ventricle.

The implantation procedure is typically performed under local anesthesia and requires only a brief hospitalization. A catheter is inserted into the chest and the pacemaker's leads are threaded through the catheter to the appropriate chamber(s) of the heart. The surgeon then makes a small "pocket" in the pad of the flesh under the skin on the upper portion of the chest wall to hold the power source. The pocket is then closed with stitches.

The Centers for Medicare & Medicaid Services (CMS) has determined that the evidence is sufficient to conclude that implanted permanent cardiac pacemakers, single chamber or dual chamber, are reasonable and necessary for the treatment of non-reversible symptomatic bradycardia due to sinus node dysfunction and second and/or third-degree atrioventricular block. Symptoms of bradycardia are symptoms that can be directly attributable to a heart rate less than 60 beats per minute (for example: syncope, seizures, congestive heart failure, dizziness, or confusion).

Indications and Limitations of Coverage

B. Nationally Covered Indications

The following indications are covered for implanted permanent single chamber or dual chamber cardiac pacemakers:

1. Documented non-reversible symptomatic bradycardia due to sinus node dysfunction, and
2. Documented non-reversible symptomatic bradycardia due to second degree and/or third-degree atrioventricular block.

C. Nationally Non-Covered Indications

The following indications are non-covered for implanted permanent single chamber or dual chamber cardiac pacemakers:

1. Reversible causes of bradycardia such as electrolyte abnormalities, medications or drugs, and hypothermia,
2. Asymptomatic first-degree atrioventricular block,
3. Asymptomatic sinus bradycardia,
4. Asymptomatic sino-atrial block or asymptomatic sinus arrest,
5. Ineffective atrial contractions (e.g., chronic atrial fibrillation or flutter, or giant left atrium) without symptomatic bradycardia,

6. Asymptomatic second-degree atrioventricular block of Mobitz Type I unless the QRS complexes are prolonged or electrophysiological studies have demonstrated that the block is at or beyond the level of the His Bundle (a component of the electrical conduction system of the heart),
7. Syncope of undetermined cause,
8. Bradycardia during sleep,
9. Right bundle branch block with left axis deviation (and other forms of fascicular or bundle branch block) without syncope or their symptoms of intermittent atrioventricular block,
10. Asymptomatic bradycardia in post-myocardial infarction patients about to initiate long-term beta-blocker drug therapy,
11. Frequent or persistent supraventricular tachycardias, except where the pacemaker is specifically for the control of tachycardia, and
12. A clinical condition in which pacing takes place only intermittently and briefly, and which is not associated with a reasonable likelihood that pacing needs will become prolonged.

D. Other

Medicare Administrative Contractors will determine coverage under section 1862(a)(1)(A) of the Social Security Act for any other indications for the implantation and use of single chamber or dual chamber cardiac pacemakers that are not specifically addressed in this national coverage determination.

(This NCD last reviewed August 2013.)

MEDICARE NCD (20.8.1) FOR CARDIAC PACEMAKER EVALUATION SERVICES⁴

Effective date of this version: October 1, 1984

Benefit Category

- Diagnostic Services in Outpatient Hospital
- Diagnostic Tests (other)

Note: This may not be an exhaustive list of all applicable Medicare benefit categories for this item or service.

Item/Service Description

Medicare covers a variety of services for the post-implant follow-up and evaluation of implanted cardiac pacemakers. The following guidelines are designed to assist Medicare Administrative Contractors (MACs) in identifying and processing claims for such services.

Indications and Limitations of Coverage

Note: These new guidelines are limited to lithium battery-powered pacemakers, because mercury-zinc battery-powered pacemakers are no longer being manufactured and virtually all have been replaced by lithium units. Contractors still receiving claims for monitoring such units should continue to apply the guidelines published in 1980 to those units until they are replaced.

There are two general types of pacemakers in current use - single-chamber pacemakers which sense and pace the ventricles of the heart, and dual-chamber pacemakers which sense and pace both the atria and the ventricles. These differences require different monitoring patterns over the expected life of the units involved. One fact of which MACs should be aware is that many dual-chamber units may be programmed to pace only the ventricles; this may be done either at the time the pacemaker is implanted or at some time afterward. In such cases, a dual-chamber unit, when programmed or reprogrammed for ventricular pacing, should be treated as a single-chamber pacemaker in applying screening guidelines.

The decision as to how often any patient's pacemaker should be monitored is the responsibility of the patient's physician, who is best able to consider the condition and circumstances of the individual patient. These may vary over time, requiring modifications

of the frequency with which the patient should be monitored. In cases where monitoring is done by some entity other than the patient's physician, such as a commercial monitoring service or hospital outpatient department, the physician's prescription for monitoring is required and should be periodically renewed (at least annually) to assure that the frequency of monitoring is proper for the patient.

Where a patient is monitored both during clinic visits and transtelephonically, the contractor should be sure to include frequency data on both types of monitoring in evaluating the reasonableness of the frequency of monitoring services received by the patient.

Since there are more than 200 pacemaker models in service at any given point, and a variety of patient conditions that give rise to the need for pacemakers, the question of the appropriate frequency of monitoring is a complex one. Nevertheless, it is possible to develop guidelines within which the vast majority of pacemaker monitoring will fall, and contractors should do this, using their own data and experience, as well as the frequency guidelines that follow, in order to limit extensive claims development to those cases requiring special attention.

PACEMAKER – TRANSTELEPHONIC MONITORING⁵

Effective date of this Version October 3, 2003

Benefit Category

- Outpatient Hospital Services Incident to a Physician's Service

Note: This may not be an exhaustive list of all applicable Medicare benefit categories for this item or service.

A. General

Transtelephonic monitoring of pacemakers is furnished by commercial suppliers, hospital outpatient departments, and physicians' offices.

Telephone monitoring of cardiac pacemakers as described below is medically efficacious in identifying early signs of possible pacemaker failure, thus reducing the number of sudden pacemaker failures requiring emergency replacement. All systems that monitor the pacemaker rate (bpm) in both the free-running and/or magnetic mode are effective in detecting subclinical pacemaker failure due to battery depletion. More sophisticated systems are also capable of detecting internal electronic problems within the pulse generator itself and other potential problems. In the case of dual-chamber pacemakers in particular, such monitoring may detect failure of synchronization of the atria and ventricles, and the need for adjustment and reprogramming of the device.

Note: The transmitting device furnished to the patient is simply one component of the diagnostic system and is not covered as durable medical equipment. Those engaged in transtelephonic pacemaker monitoring should reflect the costs of the transmitters in setting their charges for monitoring.

Indications and Limitations of Coverage

B. Definition of Transtelephonic Monitoring

For transtelephonic monitoring services to be covered, the services must consist of the following elements:

- A minimum 30-second readable strip of the pacemaker in the free-running mode
- Unless contraindicated, a minimum 30-second readable strip of the pacemaker in the magnetic mode
- A minimum 30 seconds of readable ECG strip

C. Frequency Guidelines for Transtelephonic Monitoring

The guidelines below constitute a system that contractors should use, in conjunction with their knowledge of local medical practices, to screen claims for transtelephonic monitoring prior to payment. It is important to note that they are not recommendations with respect to a minimum frequency for such monitoring, but rather a maximum frequency (within which payment may be made without further claims development). As with previous guidelines, more frequent monitoring may be covered in cases where contractors are satisfied that such monitoring is medically necessary; e.g., based on the condition of the patient, or with respect to pacemakers exhibiting unexpected defects or premature failure. Contractors should seek written justification for more frequent monitoring from the patient's physician and/or any monitoring service involved.

These guidelines are divided into two broad categories—Guideline I, which will apply to the majority of pacemakers now in use, and Guideline II, which will apply only to pacemaker systems (pacemaker and leads) for which sufficient long-term clinical information exists to assure that they meet the standards of the Inter-Society Commission for Heart Disease Resources (ICHHD) for longevity and end-of-life decay. (The ICHHD standards are: (1) 90% cumulative survival at five years following implant; and (2) an end-of-life decay of less than a 50% drop of output voltage and less than 20% deviation of magnet rate, or a drop of five beats per minute or less, over a period of three months or more). Contractors should consult with their medical advisers and other appropriate individuals and organizations (such as the North American Society of Pacing and Electrophysiology, which publishes product reliability information) should questions arise over whether a pacemaker system meets the ICHHD standards.

The two groups of guidelines are then further broken down into two general categories – single-chamber and dual-chamber pacemakers. Contractors should be aware that the frequency with which a patient is monitored may be changed from time to time for a number of reasons, such as a change in the patient's overall condition, a reprogramming of the patient's pacemaker, the development of better information on the pacemaker's longevity or failure mode, etc. Consequently, changes in the proper set of guidelines may be required. Contractors should inform physicians and monitoring services to alert contractors to any changes in the patient's monitoring prescription that might necessitate changes in the screening guidelines applied to that patient. (Of importance is the reprogramming of a dual-chamber pacemaker to a single-chamber mode of operation. Such reprogramming would shift the patient from the appropriate dual-chamber guideline to the appropriate single chamber guideline).

MEDICARE'S FREQUENCY GUIDELINES FOR ROUTINE TRANSTELEPHONIC MONITORING OF CARDIAC PACEMAKERS

Guideline I

Single-chamber pacemakers:

- 1st month: every 2 weeks
- 2nd through 36th month: every 8 weeks
- 37th month to failure: every 4 weeks

Dual-chamber pacemakers: 1st month: every 2 weeks

- 2nd through 6th month: every 4 weeks
- 7th through 36th month: every 8 weeks
- 37th month to failure: every 4 weeks

Guideline II

Single-chamber pacemakers:

- 1st month: every 2 weeks
- 2nd through 48th month: every 12 weeks
- 49th through 72nd month: every 8 weeks
- Thereafter: every 4 weeks

Dual-chamber pacemakers:

- 1st month: every 2 weeks
- 2nd through 30th month: every 12 weeks
- 31st through 48th month: every 8 weeks
- Thereafter: every 4 weeks

Pacemaker Clinic Services**General**

Pacemaker monitoring is also covered when done by pacemaker clinics. Clinic visits may be done in conjunction with transtelephonic monitoring or as a separate service; however, the services rendered by a pacemaker clinic are more extensive than those currently possible by telephone. They include, for example, physical examination of patients and reprogramming of pacemakers. Thus, the use of one of these types of monitoring does not preclude concurrent use of the other.

Frequency Guidelines

As with transtelephonic pacemaker monitoring, the frequency of clinic visits is the decision of the patient's physician considering, among other things, the medical condition of the patient. However, contractors can develop monitoring guidelines that will prove useful in screening claims. The following are recommendations for monitoring guidelines on lithium-battery pacemakers:

MEDICARE'S FREQUENCY GUIDELINES FOR PACEMAKER CLINIC SERVICES

- For single-chamber pacemakers: twice in the first 6 months following implant, then once every 12 months
- For dual-chamber pacemakers: twice in the first 6 months, then once every 6 months

Note: Search the Medicare Coverage Database on the CMS website (<http://www.cms.hhs.gov/mcd/search.asp>) for coverage descriptions and updates.

MEDICARE NCD (20.4) FOR IMPLANTABLE CARDIOVERTER-DEFIBRILLATORS⁶ (ICDS)

Effective date of this version: February 15, 2018

Implementation date: March 26, 2019

Benefit Category

- Prosthetic Devices

Note: This may not be an exhaustive list of all applicable Medicare benefit categories for this item or service.

Item/Service Description**A. General**

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.

Indications and Limitations of Coverage**B. Covered Indications**

1. Patients with a personal history of sustained ventricular tachyarrhythmia or cardiac arrest due to ventricular fibrillation. Patients must have demonstrated:
 - An episode of sustained ventricular tachyarrhythmia, either spontaneous or induced by an electrophysiology (EP) study, not associated with an acute myocardial infarction and not due to a transient or reversible cause; or

- An episode of cardiac arrest due to ventricular fibrillation, not due to a transient or reversible cause.

2. Patients with a prior myocardial infarction and a measured left ventricular ejection fraction (LVEF) ≤ 0.30 . Patients must not have:

- New York Heart Association (NYHA) classification IV heart failure;
- Had a coronary artery bypass graft (CABG), or percutaneous coronary intervention (PCI) with angioplasty and/or stenting, within the past 3 months; or
- Had a myocardial infarction 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)) or qualified non-physician practitioner (meaning a physician assistant, nurse practitioner, or clinical nurse specialist as defined in §1861(aa)(5)) 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 ventricular tachyarrhythmia or cardiac arrest due to ventricular fibrillation, and have New York Heart Association (NYHA) Class II or III heart failure, left ventricular ejection fraction (LVEF) $\leq 35\%$. Additionally, patients must not have:

- Had a coronary artery bypass graft (CABG), or percutaneous coronary intervention (PCI) with angioplasty and/or stenting, within the past 3 months; or
- Had a myocardial infarction 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)) or qualified non-physician practitioner (meaning a physician assistant, nurse practitioner, or clinical nurse specialist as defined in §1861(aa) (5)) 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 non-ischemic dilated cardiomyopathy but no personal history of sustained ventricular tachyarrhythmia or cardiac arrest due to ventricular fibrillation, and have New York Heart Association (NYHA) Class II or III heart failure, left ventricular ejection fraction (LVEF) $\leq 35\%$, been on optimal medical therapy (OMT) for at least 3 months. Additionally, patients must not have:

- Had a coronary artery bypass graft (CABG), or percutaneous coronary intervention (PCI) with angioplasty and/or stenting, within the past 3 months; or
- Had a myocardial infarction 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)) or qualified non-physician practitioner (meaning a physician assistant, nurse practitioner, or clinical nurse specialist as defined in §1861(aa)(5)) 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 ventricular tachycardia or ventricular fibrillation), 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)) or qualified non-physician practitioner (meaning a physician assistant, nurse practitioner, or clinical nurse specialist as defined in §1861(aa) (5)) 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 these groups listed above, the following additional criteria must also be met:

- Patients must be clinically stable (e.g., not in shock, from any etiology);
- Left ventricular ejection fraction (LVEF) must be measured by echocardiography, radionuclide (nuclear medicine) imaging, cardiac magnetic resonance imaging (MRI), or catheter angiography;
- 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 1 year; or
 - Supraventricular tachycardia such as atrial fibrillation with a poorly controlled ventricular rate.

Exceptions to waiting periods for patients that have had a coronary artery bypass graft (CABG), or percutaneous coronary intervention (PCI) with angioplasty and/or stenting, within the past 3 months, or had a myocardial infarction 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 device 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, elective replacement indicator (ERI) or device/lead malfunction.

D. Other Indications:

For patients who 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 IDE trials (42 CFR 405.201).

See Appendix B for the NCD manual language.

MEDICARE NCD FOR CARDIAC RESYNCHRONIZATION THERAPY PACEMAKERS (CRT-P)

A cardiac resynchronization therapy pacemaker (CRT-P) utilizes biventricular pacing to coordinate the contraction of the ventricles with the intent of improving the hemodynamic status of the patient. This technology utilizes both conventional pacing technology as well as the addition of a third electrode that provides sensing and pacing capabilities in the left ventricle.

Currently there is no specific NCD for CRT-Ps. However, some MACs have developed Local Coverage Determinations (LCDs) for CRT-P that apply to certain regions. It is important for medical providers to check with their local MAC for non-Medicare payer(s) to determine patient coverage and coding/billing guidelines.

MEDICARE NCD FOR CARDIAC RESYNCHRONIZATION THERAPY DEFIBRILLATORS (CRT-D)

A cardiac resynchronization therapy defibrillator (CRT-D) utilizes biventricular pacing to coordinate the contraction of the ventricles and ICD capabilities to prevent ventricular tachyarrhythmias and ultimately the prevention of sudden cardiac death.

Currently there is no specific NCD for CRT-Ds. However, some MACs have developed Local Coverage Determinations (LCDs) for CRT-D that apply to certain regions. It is important for medical providers to check with their local MAC or non-Medicare payer(s) to determine patient coverage and coding/billing guidelines.

MEDICARE NCD (20.15) FOR ELECTROCARDIOGRAPHIC SERVICES (ICM) IMPLANTABLE CARDIAC RHYTHM MONITORS⁸

Effective date of this version: August 26, 2004

Implementation date: December 10, 2004

Benefit Category

- Diagnostic Tests (other)

Note: This may not be an exhaustive list of all applicable Medicare benefit categories for this item or service.

Item/Service Description**A. General**

1. An electrocardiogram (EKG) is a graphic representation of electrical activity within the heart. Electrodes placed on the body in predetermined locations sense this electrical activity, which is then recorded by various means for review and interpretation. EKG recordings are used to diagnose a wide range of heart disease and other conditions that manifest themselves by abnormal cardiac electrical activity.

EKG services are covered diagnostic tests when there are documented signs and symptoms or other clinical indications for providing the service. Coverage includes the review and interpretation of EKGs only by a physician. There is no coverage for EKG services when rendered as a screening test or as part of a routine examination unless performed as part of the one-time, "Welcome to Medicare" preventive physical examination under section 611 of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003.

2. Ambulatory electrocardiography (AECG) refers to services rendered in an outpatient setting over a specified period of time, generally while a patient is engaged in daily activities, including sleep. AECG devices are intended to provide the physician with documented episodes of arrhythmia, which may not be detected using a standard 12-lead EKG. AECG is most typically used to evaluate symptoms that may correlate with intermittent cardiac arrhythmias and/or myocardial ischemia. Such symptoms include syncope, dizziness, chest pain, palpitations, or shortness of breath. Additionally, AECG is used to evaluate patient response to initiation, revision, or discontinuation of arrhythmic drug therapy.

3. The Centers for Medicare & Medicaid Services (CMS), through the national coverage determination (NCD) process, may create new ambulatory EKG monitoring device categories if published, peer-reviewed clinical studies demonstrate evidence of improved clinical utility, or equal utility with additional advantage to the patient, as indicated by improved patient management and/or improved health outcomes in the Medicare population (such as superior ability to detect serious or life-threatening arrhythmias) as compared to devices or services in the currently described categories below.

Descriptions of Ambulatory EKG Monitoring Technologies

1. Dynamic electrocardiography devices that continuously record a real-time EKG, commonly known as Holter™ monitors, typically record over a 24-hour period. The recording is captured either on a magnetic tape or other digital medium. The data is then computer-analyzed at a later time, and a physician interprets the computer-generated report. A 24-hour recording is generally adequate to detect most transient arrhythmias. Documentation of medical necessity is required for monitoring longer than 24 hours. The recording device itself is not covered as durable medical equipment (DME) separate from the total diagnostic service.

2. An event monitor, or event recorder, is a patient-activated or event-activated EKG device that intermittently records cardiac arrhythmic events as they occur. The EKG is recorded on magnetic tape or other digital medium.

Cardiac event monitor technology varies among different devices. For patient-activated event monitors, the patient initiates recording when symptoms appear or when instructed to do so by a physician (e.g., following exercise). For self-sensing,

automatically triggered monitors, an EKG is automatically recorded when the device detects an arrhythmia, without patient intervention. Some devices permit a patient to transmit EKG data transtelephonically (i.e., via telephone) to a receiving center where the data is reviewed. A technician may be available at these centers to review transmitted data 24 hours per day. In some instances, when the EKG is determined to be outside certain pre-set criteria by a technician or other non-physician, a physician is available 24 hours per day to review the transmitted data and to make clinical

decisions regarding the patient. These services are known as “24-hour attended monitoring”. In other instances, transmitted EKG data is reviewed at a later time and are, therefore, considered “non-attended.”

Cardiac event monitors without transtelephonic capability must be removed from the patient and taken to a location for review of the stored EKG data. Some devices also permit a "time sampling" mode of operation. The "time sampling" mode is not covered under ambulatory EKG monitoring technology. Some cardiac event monitoring devices with transtelephonic capabilities require the patient to dial the phone number of a central EKG data reception center and initiate transmission of EKG data. Other devices use Internet-based in-home computers to capture and store EKG data. When such devices detect pre-programmed arrhythmias, data is automatically sent via modem and standard telephone lines to a central receiving center, or independent diagnostic testing facility (IDTF), where the data is reviewed. Internet-based in-home computer systems may also provide the receiving center with a daily computer-generated report that summarizes 24 hours of EKG data.

Certain cardiac event monitors capture electrical activity with a single electrode attached to the skin. Other devices may employ multiple electrodes in order to record more complex EKG tracings. Additionally, devices may be individually programmed to detect patient-specific factors, electrode malfunction, or other factors. Cardiac event monitors can be further categorized as either “pre-event” or “post-event” recorders, based on their memory capabilities:

A. Pre-symptom Memory Loop Recorder (MLR)

Upon detecting symptoms, the wearer presses a button, which activates the recorder to save (i.e., memorize) an interval of pre-symptom EKG data along with data during and subsequent to the symptomatic event. Self-sensing recorders (also known as event-activated or automatic trigger) do not require patient input to capture these data. Single or multiple events may be recorded. The device is worn at all times, usually for up to 30 days.

o Implantable (or Insertable Loop) Recorder (ILR)

Another type of pre-symptom MLR, it is implanted subcutaneously in a patient’s upper left chest and may remain implanted for many months. An ILR is used when syncope is thought to be cardiac-related, but is too infrequent to be detected by either a Holter™ monitor or a traditional pre-symptom MLR.

B. Post-symptom Recorder

The patient temporarily places this device against the chest when symptoms occur and activates it by pressing a button. These recorders represent old technology, as they do not include a memory loop. The device transmits EKG data telephonically in real-time and is usually used for up to 30 days.

Indications and Limitations of Coverage

B. Nationally Covered Indications

The following indications are covered nationally unless otherwise indicated:

1. Computer analysis of EKGs when furnished in a setting and under the circumstances required for coverage of other EKG services.
2. EKG services rendered by an IDTF, including physician review and interpretation. Separate physician services are not covered unless he/she is the patient’s attending or consulting physician.
3. Emergency EKGs (i.e., when the patient is or may be experiencing a life-threatening event) performed as a laboratory or diagnostic service by a portable x-ray supplier only when a physician is in attendance at the time the service is performed or immediately thereafter.
4. Home EKG services with documentation of medical necessity.
5. Transtelephonic EKG transmissions (effective March 1, 1980) as a diagnostic service for the indications described below, when performed with equipment meeting the standards described below, subject to the limitations and conditions

See page 4 for important information about the uses and limitations of this document. See the end of each section for Sources and Footnotes pertaining to each section. CPT ©2023 American Medical Association. All rights reserved. CPT is a registered trademark of the American Medical Association.

specified below. Coverage is further limited to the amounts payable with respect to the physician's service in interpreting the results of such transmissions, including charges for rental of the equipment. The device used by the beneficiary is part of a total diagnostic system and is not considered DME separately. Covered uses are to:

- a. Detect, characterize, and document symptomatic transient arrhythmias;
- b. Initiate, revise, or discontinue arrhythmic drug therapy; or,
- c. Carry-out early post-hospital monitoring of patients discharged after myocardial infarction (MI); (only if 24-hour coverage is provided, see C.5. below).

Certain uses other than those specified above may be covered if, in the judgment of the local Medicare Administrative Contractor (MAC), such use is medically necessary.

Additionally, the transmitting devices must meet at least the following criteria:

- a. They must be capable of transmitting EKG Leads, I, II, or III; and,
- b. The tracing must be sufficiently comparable to a conventional EKG.

24-hour attended coverage used as early post-hospital monitoring of patients discharged after MI is only covered if provision is made for such 24-hour attended coverage in the manner described below:

- o 24-hour attended coverage means there must be, at a monitoring site or central data center, an EKG technician or other nonphysician, receiving calls and/or EKG data; tape recording devices do not meet this requirement. Further, such technicians should have immediate, 24-hour access to a physician to review transmitted data and make clinical decisions regarding the patient. The technician should also be instructed as to when and how to contact available facilities to assist the patient in case of emergencies.

C. Nationally Non-Covered Indications

The following indications are non-covered nationally unless otherwise specified below:

1. The time-sampling mode of operation of ambulatory EKG cardiac event monitoring/recording.
2. Separate physician services other than those rendered by an IDTF unless rendered by the patient's attending or consulting physician.
3. Home EKG services without documentation of medical necessity.
4. Emergency EKG services by a portable x-ray supplier without a physician in attendance at the time of service or immediately thereafter.
5. 24-hour attended coverage used as early post-hospital monitoring of patients discharged after MI unless provision is made for such 24-hour attended coverage in the manner described in section B.5. above.
6. Any marketed Food and Drug Administration (FDA)-approved ambulatory cardiac monitoring device or service that cannot be categorized according to the designated framework

Cross Reference

Medicare Benefit Policy Manual, Chapter 1, "Inpatient Hospital Services," §50. Medicare Benefit Policy Manual, Chapter 6, "Hospital Services Covered Under Part B," §10 and §20.3. Medicare Benefit Policy Manual, Chapter 15, "Covered Medical and Other Health Services," §§60.1 and 250. Medicare Claims Processing Manual, Chapter 16, "Laboratory Services From Independent Labs, Physicians, and Providers," §10.

Transmittal Information Transmittal Number 26

Coverage Transmittal Link

<https://www.cms.gov/Regulations-and-Guidance/Guidance/Transmittals/Downloads/R26NCD.pdf>

Revision History

12/2004 - Covered use of EKG services under specific criteria. In addition, EKG technologies are now organized into an updated framework to aid in making reasonable and necessary coverage determinations as they pertain to EKG technology. (TN 26) (CR 3590)

MEDICARE NCD FOR INTRACARDIAC ELECTROPHYSIOLOGY AND RELATED PROCEDURES

Some cardiovascular procedures, such as pacemakers and cardioverter-defibrillators, contain very clear national coverage criteria as defined by CMS. Other procedures, such as electrophysiology studies (EPS), do not have clearly defined coverage criteria at the national level. Some MACs have developed Local Coverage Determinations (LCDs) for EPS that apply to certain regions. It is important for providers to check with their local MAC or non-Medicare payer(s) to determine patient coverage and coding/billing guidelines.

Note: Search the Medicare Coverage Database on the CMS website (<http://www.cms.hhs.gov/mcd/search.asp>) for coverage descriptions, related coding & billing articles, and updates.

- Centers for Medicare and Medicaid Services: Clarification of payments and billing procedures for hospitals subject to the Maryland waiver, Transmittal R156CP (change request 3200, issued April 30, 2004, effective October 1, 2004), Internet-only Medicare Claims Processing Manual (CMS Pub. 100-04). Available at: <http://www.cms.hhs.gov/transmittals/Downloads/R156CP.pdf>. Accessed December 9, 2015.
- Health Services Cost Review Commission: About HSCRC available at: <http://www.hscrc.state.md.us/aboutUs.cfm>. Accessed December 9, 2015.
- Centers for Medicare and Medicaid Services. National Coverage Determination for Cardiac Pacemakers: single Chamber and Dual Chamber Permanent Cardiac Pacemakers (20.8.3). In: Medicare Coverage Database. Effective August 13, 2013. Available at: <https://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=357&ncdver=2&CoverageSelection=Both&ArticleType=All&PolicyType=Final&s=All&Keyword=pacemakers&KeywordLookup=Title&KeywordSearchType=And&bc=gAAAABAAAAAAAA%3d%3d&> Accessed December 9, 2015..
- Centers for Medicare and Medicaid Services. National Coverage Determination for Cardiac Pacemaker Evaluation Services (20.8.1). In: Medicare Coverage Database. Effective October 1, 1984. Available at: <https://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=160&ncdver=1&SearchType=Advanced&CoverageSelection=National&NCSelection=NCD&kq=true&bc=IAAA ABAAAA&> Accessed December 9, 2015.
- Centers for Medicare and Medicaid Services. Coverage determinations: Transtelephonic monitoring of cardiac pacemakers. In: Medicare National Coverage Determinations Manual. CMS Pub. 100-3; Chapter 1, Part 1, Section 20.8.1.1. October 3, 2003. Available at: <https://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=345&ncdver=1&CoverageSelection=Both&ArticleType=All&PolicyType=Final&s=All&Keyword=pacemakers&KeywordLookup=Title&KeywordSearchType=And&bc=gAAAABAAAAAAAA%3d%3d&> Accessed December 9, 2015.
- Centers for Medicare and Medicaid Services. National Coverage Determination for Implantable Automatic Defibrillators (20.4). In: Medicare Coverage Database. Effective February 15, 2018. Available at: <https://www.cms.gov/medicare-coverage-database/details/nca-decision-memo.aspx?NCAId=288&CoverageSelection=National&Keyword=ICD&KeywordLookup=Title&KeywordSearchType=And&FriendlyError=MissingNCDID&bc=gAAAACAAQAAA&>
- Alpert and Thygesen et al., 2000. Criteria for acute, evolving or recent MI. Either one of the following criteria satisfies the diagnosis for an acute, evolving or recent MI:
 - Typical rise and gradual fall (troponin) or more rapid rise and fall (CK-MB) of biochemical markers of myocardial necrosis with at least one of the following:
 - ischemic symptoms;
 - development of pathologic Q waves on the ECG;
 - ECG changes indicative of ischemia (ST segment elevation or depression); or d) coronary artery intervention (e.g., coronary angioplasty).
 - Pathologic findings of an acute MI.

Criteria for established MI. Any one of the following criteria satisfies the diagnosis for established MI:

 - Development of new pathologic Q waves on serial ECGs. The patient may or may not remember previous symptoms. Biochemical markers of myocardial necrosis may have normalized, depending on the length of time that has passed since the infarct developed.
 - Pathologic findings of a healed or healing MI.
- Centers for Medicare and Medicaid Services. National Coverage Determination for Electrocardiographic services (20.15). In: Medicare Coverage Database. Effective August 26, 2004. Available at <https://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=179>

MODERATE (CONSCIOUS) SEDATION

Refer to the 2023 CPT Manual for complete definitions of Preservice, Intraservice and Post-service work necessary for reporting of the moderate sedation codes (99151, 99152, 99153, 99155, 99156, 99157).

For purposes of reporting, the intraservice time is used to select the appropriate code. Intraservice work begins with the administration of the seating agent(s) and ends when the procedure is completed, the patient is stable for recovery status, and the physician or other qualified health care professional providing the sedation ends personal continuous face-to-face time with the patient.

If the physician or other qualified health care professional who provides the sedation services also performs the procedure supported by sedation (99151, 99152, 99153), the physician or other qualified health care professional will supervise and direct an independent trained observer who will assist in monitoring the patient's level of consciousness and physiological status throughout the procedure. An independent trained observer is an individual who is qualified to monitor the patient during the procedure, who has no other duties (e.g., assisting at surgery) during the procedure.

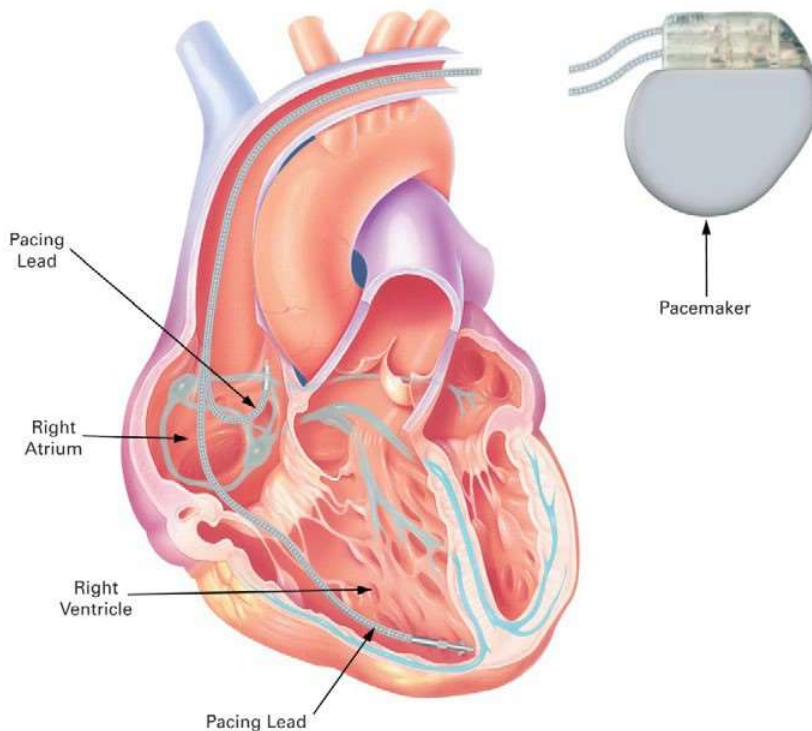
- 99151 Moderate sedation services provided by the same physician or other qualified health care professional performing the diagnostic or therapeutic service that the sedation supports, requiring the presence of an independent trained observer to assist in the monitoring of the patient's level of consciousness and physiological status; initial 15 minutes of intraservice time, patient younger than 5 years of age
 - 99152 initial 15 minutes of intraservice time, patient age 5 years or older
 - 99153 each additional 15 minutes intraservice time (List separately in addition to code for primary service)
- 99155 Moderate sedation services provided by a physician or other qualified health care professional other than the physician or other qualified health care professional performing the diagnostic or therapeutic service that the sedation supports: initial 15 minutes of intraservice time, patient younger than 5 years of age
 - 99156 Initial 15 minutes of intraservice time, patient age 5 years or older
 - 99157 Each additional 15 minutes intraservice time (List separately in addition to code for primary service)

1 Pacemakers

Pacemaker Coding Overview 1-1

Commonly Billed Pacemaker Scenarios 1-2

Pacemaker Coding Overview



Pacemaker Implant Procedure The implant of a permanent pacemaker system requires the use of a pacemaker pulse generator and one electrode or lead for a single chamber system, or two electrodes or leads for a dual chamber system. The leads monitor and deliver electrical stimulation to the right atrium or right ventricle for a single chamber system, or both the right atrium and right ventricle for a dual chamber system. The lead(s) are inserted through the subclavian vein and are positioned in the right atrium and/or right ventricle. In some cases, the cephalic or internal jugular vein may be used as an alternative to the subclavian vein.

A STEP-BY-STEP DESCRIPTION OF A TYPICAL INITIAL PACEMAKER SYSTEM IMPLANT PROCEDURE

1. The subclavian vein is accessed.
2. Under fluoroscopy, the pacing lead(s) are inserted into the right atrium (33206) or right ventricle (33207) for a single chamber system, or into the right atrium and right ventricle for a dual chamber system (33208).
3. Lead measurement tests, including pacing and sensing thresholds and lead impedances, are performed.
4. The pacemaker pulse generator (included in 33206, 33207, and 33208) is connected to the lead(s) that are in place and a pulse generator pocket is formed.
5. Additional testing of the lead(s) is completed.
6. The lead(s) and device are secured, and the pulse generator pocket is closed.

Note: This document is for reference purposes only and does not replace physicians' medical documentation.

Scenarios included within this document do not encompass all possible procedures.

Commonly Billed Pacemaker Scenarios

KEY

+ Add-on code

■ Physician CPT® Codes¹■ Hospital Outpatient CPT® Codes²■ Possible Hospital Inpatient ICD-10-PCS® Codes³

1.1 Initial single chamber rate-responsive pacemaker system implant with right atrial lead

Scenario 1.1: Physician CPT® Codes¹

33206 Insertion of new or replacement of permanent pacemaker with transvenous electrode(s); atrial

Add conscious sedation codes as appropriate (see page 20)

Scenario 1.1: Hospital Outpatient CPT® Codes²

33206 Insertion of new or replacement of permanent pacemaker with transvenous electrode(s); atrial

C1786 Pacemaker, single chamber rate-responsive (implantable)

Add conscious sedation codes as appropriate (see page 20)

Scenario 1.1: Possible Hospital Inpatient ICD-10-PCS Codes³

02H64JZ Insertion of Pacemaker Lead into Right Atrium, Percutaneous Endoscopic Approach

02H63JZ Insertion of Pacemaker Lead into Right Atrium, Percutaneous Approach

0JH605Z Insertion of Pacemaker, Single Chamber Rate Responsive into Chest Subcutaneous Tissue and Fascia, Open Approach

0JH635Z Insertion of Pacemaker, Single Chamber Rate Responsive into Chest Subcutaneous Tissue and Fascia, Percutaneous Approach

0JH805Z Insertion of Pacemaker, Single Chamber Rate Responsive into Abdomen Subcutaneous Tissue and Fascia, Open Approach

0JH835Z Insertion of Pacemaker, Single Chamber Rate Responsive into Abdomen Subcutaneous Tissue and Fascia, Percutaneous Approach

B5060ZZ Plain Radiography of Right Subclavian Vein using High Osmolar Contrast

B5061ZZ Plain Radiography of Right Subclavian Vein using Low Osmolar Contrast

B506YZZ Plain Radiography of Right Subclavian Vein using Other Contrast

B5070ZZ Plain Radiography of Left Subclavian Vein using High Osmolar Contrast

B5071ZZ Plain Radiography of Left Subclavian Vein using Low Osmolar Contrast

B507YZZ Plain Radiography of Left Subclavian Vein using Other Contrast

B5160ZZ Fluoroscopy of Right Subclavian Vein using High Osmolar Contrast

B5161ZZ Fluoroscopy of Right Subclavian Vein using Low Osmolar Contrast

B516YZZ Fluoroscopy of Right Subclavian Vein using Other Contrast

B516ZZZ Fluoroscopy of Right Subclavian Vein

B5170ZZ Fluoroscopy of Left Subclavian Vein using High Osmolar Contrast

B5171ZZ Fluoroscopy of Left Subclavian Vein using Low Osmolar Contrast

B517YZZ Fluoroscopy of Left Subclavian Vein using Other Contrast

B517ZZZ Fluoroscopy of Left Subclavian Vein

1.2 Initial single chamber *rate-responsive pacemaker system implant with right ventricular lead*

Scenario 1.2: Physician CPT® Codes¹

33207 Insertion of new or replacement of permanent pacemaker with transvenous electrode(s); ventricular

Add conscious sedation codes as appropriate (see page 20)

Scenario 1.2: Hospital Outpatient CPT® Codes²

33207 Insertion of new or replacement of permanent pacemaker with transvenous electrode(s); ventricular

C1786 Pacemaker, single chamber rate-responsive (implantable)

Add conscious sedation codes as appropriate (see page 20)

Scenario 1.2: Possible Hospital Inpatient ICD-10-PCS Codes³

02HK3JZ Insertion of Pacemaker Lead into Right Ventricle, Percutaneous Approach

02HK4JZ Insertion of Pacemaker Lead into Right Ventricle, Percutaneous Endoscopic Approach

0JH605Z Insertion of Pacemaker, Single Chamber Rate Responsive into Chest Subcutaneous Tissue and Fascia, Open Approach

0JH635Z Insertion of Pacemaker, Single Chamber Rate Responsive into Chest Subcutaneous Tissue and Fascia, Percutaneous Approach

0JH805Z Insertion of Pacemaker, Single Chamber Rate Responsive into Abdomen Subcutaneous Tissue and Fascia, Open Approach

0JH835Z Insertion of Pacemaker, Single Chamber Rate Responsive into Abdomen Subcutaneous Tissue and Fascia, Percutaneous Approach

B5060ZZ Plain Radiography of Right Subclavian Vein using High Osmolar Contrast

B5061ZZ Plain Radiography of Right Subclavian Vein using Low Osmolar Contrast

B506YZZ Plain Radiography of Right Subclavian Vein using Other Contrast

B5070ZZ Plain Radiography of Left Subclavian Vein using High Osmolar Contrast

B5071ZZ Plain Radiography of Left Subclavian Vein using Low Osmolar Contrast

B507YZZ Plain Radiography of Left Subclavian Vein using Other Contrast

B5160ZZ Fluoroscopy of Right Subclavian Vein using High Osmolar Contrast

B5161ZZ Fluoroscopy of Right Subclavian Vein using Low Osmolar Contrast

B516YZZ Fluoroscopy of Right Subclavian Vein using Other Contrast

B516ZZZ Fluoroscopy of Right Subclavian Vein

B5170ZZ Fluoroscopy of Left Subclavian Vein using High Osmolar Contrast

B5171ZZ Fluoroscopy of Left Subclavian Vein using Low Osmolar Contrast

B517YZZ Fluoroscopy of Left Subclavian Vein using Other Contrast

B517ZZZ Fluoroscopy of Left Subclavian Vein

1.3 Initial dual chamber *pacemaker system implantation*

Scenario 1.3: Physician CPT® Codes¹

33208 Insertion of new or replacement of permanent pacemaker with transvenous electrode(s); atrial and ventricular

Add conscious sedation codes as appropriate (see page 20)

Scenario 1.3: Hospital Outpatient CPT® Codes²

33208 Insertion of new or replacement of permanent pacemaker with transvenous electrode(s); atrial and ventricular

C1785 Pacemaker, dual chamber rate-responsive (implantable)

Add conscious sedation codes as appropriate (see page 20)

Scenario 1.3: Possible Hospital Inpatient ICD-10-PCS Codes³

02H64JZ Insertion of Pacemaker Lead into Right Atrium, Percutaneous Endoscopic Approach

02H63JZ Insertion of Pacemaker Lead into Right Atrium, Percutaneous Approach

02HK4JZ Insertion of Pacemaker Lead into Right Ventricle, Percutaneous Endoscopic Approach

02HK3JZ Insertion of Pacemaker Lead into Right Ventricle, Percutaneous Approach

0JH606Z Insertion of Pacemaker, Dual Chamber into Chest Subcutaneous Tissue and Fascia, Open Approach

0JH636Z Insertion of Pacemaker, Dual Chamber into Chest Subcutaneous Tissue and Fascia, Percutaneous Approach

0JH806Z Insertion of Pacemaker, Dual Chamber into Abdomen Subcutaneous Tissue and Fascia, Open Approach

0JH836Z Insertion of Pacemaker, Dual Chamber into Abdomen Subcutaneous Tissue and Fascia, Percutaneous Approach

B5060ZZ Plain Radiography of Right Subclavian Vein using High Osmolar Contrast

B5061ZZ Plain Radiography of Right Subclavian Vein using Low Osmolar Contrast

B506YZZ Plain Radiography of Right Subclavian Vein using Other Contrast

B5070ZZ Plain Radiography of Left Subclavian Vein using High Osmolar Contrast

B5071ZZ Plain Radiography of Left Subclavian Vein using Low Osmolar Contrast

B507YZZ Plain Radiography of Left Subclavian Vein using Other Contrast

B5160ZZ Fluoroscopy of Right Subclavian Vein using High Osmolar Contrast

B5161ZZ Fluoroscopy of Right Subclavian Vein using Low Osmolar Contrast

B516YZZ Fluoroscopy of Right Subclavian Vein using Other Contrast

B516ZZZ Fluoroscopy of Right Subclavian Vein

B5170ZZ Fluoroscopy of Left Subclavian Vein using High Osmolar Contrast

B5171ZZ Fluoroscopy of Left Subclavian Vein using Low Osmolar Contrast

B517YZZ Fluoroscopy of Left Subclavian Vein using Other Contrast

B517ZZZ Fluoroscopy of Left Subclavian Vein

1.4 Initial dual chamber pacemaker insertion with external cardioversion performed prior to device implant session for treatment of patient in atrial fibrillation

Scenario 1.4: Physician CPT® Codes¹

33208	Insertion of new or replacement of permanent pacemaker with transvenous electrode(s); atrial and ventricular
92960-59, 51 ⁴	Cardioversion, elective, electrical conversion of arrhythmia; external

Add conscious sedation codes as appropriate (see page 20)

Scenario 1.4: Hospital Outpatient CPT® Codes²

33208	Insertion of new or replacement of permanent pacemaker with transvenous electrode(s); ventricular
92960-59	Cardioversion, elective, electrical conversion of arrhythmia; external
C1785	Pacemaker, dual chamber rate-responsive (implantable)

Add conscious sedation codes as appropriate (see page 20)

Scenario 1.4: Possible Hospital Inpatient ICD-10-PCS Codes³

0JH606Z	Insertion of Pacemaker, Dual Chamber into Chest Subcutaneous Tissue and Fascia, Open Approach
0JH636Z	Insertion of Pacemaker, Dual Chamber into Chest Subcutaneous Tissue and Fascia, Percutaneous Approach
0JH806Z	Insertion of Pacemaker, Dual Chamber into Abdomen Subcutaneous Tissue and Fascia, Open Approach
0JH836Z	Insertion of Pacemaker, Dual Chamber into Abdomen Subcutaneous Tissue and Fascia, Percutaneous Approach
02H64JZ	Insertion of Pacemaker Lead into Right Atrium, Percutaneous Endoscopic Approach
02H63JZ	Insertion of Pacemaker Lead into Right Atrium, Percutaneous Approach
02HK4JZ	Insertion of Pacemaker Lead into Right Ventricle, Percutaneous Endoscopic Approach
02HK3JZ	Insertion of Pacemaker Lead into Right Ventricle, Percutaneous Approach
5A2204Z	Restoration of Cardiac Rhythm
B5060ZZ	Plain Radiography of Right Subclavian Vein using High Osmolar Contrast
B5061ZZ	Plain Radiography of Right Subclavian Vein using Low Osmolar Contrast
B506YZZ	Plain Radiography of Right Subclavian Vein using Other Contrast
B5070ZZ	Plain Radiography of Left Subclavian Vein using High Osmolar Contrast
B5071ZZ	Plain Radiography of Left Subclavian Vein using Low Osmolar Contrast
B507YZZ	Plain Radiography of Left Subclavian Vein using Other Contrast
B5160ZZ	Fluoroscopy of Right Subclavian Vein using High Osmolar Contrast
B5161ZZ	Fluoroscopy of Right Subclavian Vein using Low Osmolar Contrast
B516YZZ	Fluoroscopy of Right Subclavian Vein using Other Contrast
B516ZZZ	Fluoroscopy of Right Subclavian Vein
B5170ZZ	Fluoroscopy of Left Subclavian Vein using High Osmolar Contrast
B5171ZZ	Fluoroscopy of Left Subclavian Vein using Low Osmolar Contrast
B517YZZ	Fluoroscopy of Left Subclavian Vein using Other Contrast
B517ZZZ	Fluoroscopy of Left Subclavian Vein

1.5 Replacement of single chamber *rate-responsive pulse generator*

Scenario 1.5: Physician CPT® Codes¹

33227 Removal of permanent pacemaker pulse generator with replacement of pacemaker pulse generator; single lead system

Add conscious sedation codes as appropriate (see page 20)

Scenario 1.5: Hospital Outpatient CPT® Codes²

33227 Removal of permanent pacemaker pulse generator with replacement of pacemaker pulse generator; single lead system

C1786 Pacemaker, single chamber rate-responsive (implantable)

Add conscious sedation codes as appropriate (see page 20)

Scenario 1.5: Possible Hospital Inpatient ICD-10-PCS Codes³

0JH605Z Insertion of Pacemaker, Single Chamber Rate Responsive into Chest Subcutaneous Tissue and Fascia, Open Approach

0JH635Z Insertion of Pacemaker, Single Chamber Rate Responsive into Chest Subcutaneous Tissue and Fascia, Percutaneous Approach

0JH805Z Insertion of Pacemaker, Single Chamber Rate Responsive into Abdomen Subcutaneous Tissue and Fascia, Open Approach

0JH835Z Insertion of Pacemaker, Single Chamber Rate Responsive into Abdomen Subcutaneous Tissue and Fascia, Percutaneous Approach

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

1.6 Replacement of dual chamber pacemaker, insertion of new atrial lead, capping of existing atrial lead

Scenario 1.6: Physician CPT® Codes¹

33206	Insertion of new or replacement of permanent pacemaker with transvenous electrode(s); atrial
33233-51 ⁴	Removal of permanent pacemaker pulse generator only

Add conscious sedation codes as appropriate (see page 20)

Scenario 1.6: Hospital Outpatient CPT® Codes²

33206	Insertion of new or replacement of permanent pacemaker with transvenous electrode(s); atrial
33233	Removal of permanent pacemaker pulse generator only
C1785	Pacemaker, dual chamber rate-responsive (implantable)

Add conscious sedation codes as appropriate (see page 20)

Scenario 1.6: Possible Hospital Inpatient ICD-10-PCS Codes³

02H63JZ	Insertion of Pacemaker Lead into Right Atrium, Percutaneous Approach
02H60JZ	Insertion of Pacemaker Lead into Right Atrium, Open Approach
0JH606Z	Insertion of Pacemaker, Dual Chamber into Chest Subcutaneous Tissue and Fascia, Open Approach
0JH636Z	Insertion of Pacemaker, Dual Chamber into Chest Subcutaneous Tissue and Fascia, Percutaneous Approach
0JH806Z	Insertion of Pacemaker, Dual Chamber into Abdomen Subcutaneous Tissue and Fascia, Open Approach
0JH836Z	Insertion of Pacemaker, Dual Chamber into Abdomen Subcutaneous Tissue and Fascia, Percutaneous Approach
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
B5060ZZ	Plain Radiography of Right Subclavian Vein using High Osmolar Contrast
B5061ZZ	Plain Radiography of Right Subclavian Vein using Low Osmolar Contrast
B506YZZ	Plain Radiography of Right Subclavian Vein using Other Contrast
B5070ZZ	Plain Radiography of Left Subclavian Vein using High Osmolar Contrast
B5071ZZ	Plain Radiography of Left Subclavian Vein using Low Osmolar Contrast
B507YZZ	Plain Radiography of Left Subclavian Vein using Other Contrast
B5160ZZ	Fluoroscopy of Right Subclavian Vein using High Osmolar Contrast
B5161ZZ	Fluoroscopy of Right Subclavian Vein using Low Osmolar Contrast
B516YZZ	Fluoroscopy of Right Subclavian Vein using Other Contrast
B516ZZZ	Fluoroscopy of Right Subclavian Vein
B5170ZZ	Fluoroscopy of Left Subclavian Vein using High Osmolar Contrast
B5171ZZ	Fluoroscopy of Left Subclavian Vein using Low Osmolar Contrast
B517YZZ	Fluoroscopy of Left Subclavian Vein using Other Contrast
B517ZZZ	Fluoroscopy of Left Subclavian Vein

1.7 Replacement of dual chamber pacemaker, insertion of new ventricular lead, capping of existing ventricular lead

Scenario 1.7: Physician CPT® Codes¹

- 33207 Insertion of new or replacement of permanent pacemaker with transvenous electrode(s); ventricular
- 33233-51⁴ Removal of permanent pacemaker pulse generator only

Add conscious sedation codes as appropriate (see page 20)

Scenario 1.7: Hospital Outpatient CPT® Codes²

- 33207 Insertion of new or replacement of permanent pacemaker with transvenous electrode(s); ventricular
- 33233 Removal of permanent pacemaker pulse generator only
- C1785 Pacemaker, dual chamber rate-responsive (implantable)

Add conscious sedation codes as appropriate (see page 20)

Scenario 1.7: Possible Hospital Inpatient ICD-10-PCS Codes³

- 0JH606Z Insertion of Pacemaker, Dual Chamber into Chest Subcutaneous Tissue and Fascia, Open Approach
- 0JH636Z Insertion of Pacemaker, Dual Chamber into Chest Subcutaneous Tissue and Fascia, Percutaneous Approach
- 0JH806Z Insertion of Pacemaker, Dual Chamber into Abdomen Subcutaneous Tissue and Fascia, Open Approach
- 0JH836Z Insertion of Pacemaker, Dual Chamber into Abdomen Subcutaneous Tissue and Fascia, Percutaneous Approach
- 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
- 02HL0JZ Insertion of Pacemaker Lead into Left Ventricle, Open Approach
- 02HL3JZ Insertion of Pacemaker Lead into Left Ventricle, Percutaneous Approach
- 02HK0JZ Insertion of Pacemaker Lead into Right Ventricle, Open Approach
- 02HK3JZ Insertion of Pacemaker Lead into Right Ventricle, Percutaneous Approach
- B5060ZZ Plain Radiography of Right Subclavian Vein using High Osmolar Contrast
- B5061ZZ Plain Radiography of Right Subclavian Vein using Low Osmolar Contrast
- B506YZZ Plain Radiography of Right Subclavian Vein using Other Contrast
- B5070ZZ Plain Radiography of Left Subclavian Vein using High Osmolar Contrast
- B5071ZZ Plain Radiography of Left Subclavian Vein using Low Osmolar Contrast
- B507YZZ Plain Radiography of Left Subclavian Vein using Other Contrast
- B5160ZZ Fluoroscopy of Right Subclavian Vein using High Osmolar Contrast
- B5161ZZ Fluoroscopy of Right Subclavian Vein using Low Osmolar Contrast
- B516YZZ Fluoroscopy of Right Subclavian Vein using Other Contrast
- B516ZZZ Fluoroscopy of Right Subclavian Vein
- B5170ZZ Fluoroscopy of Left Subclavian Vein using High Osmolar Contrast
- B5171ZZ Fluoroscopy of Left Subclavian Vein using Low Osmolar Contrast
- B517YZZ Fluoroscopy of Left Subclavian Vein using Other Contrast
- B517ZZZ Fluoroscopy of Left Subclavian Vein

1.8 Replacement of dual chamber pacemaker on a pacemaker-dependent patient with temporary pacemaker insertion

Scenario 1.8: Physician CPT® Codes¹

- 33228** Removal of permanent pacemaker pulse generator with replacement of pacemaker pulse generator; dual lead system
- Effective 2013 the National Correct Coding Initiative Edits (NCCI) no longer allow temporary pacing codes 33210-33211 to be reported with open or percutaneous cardiac procedures performed at the same patient encounter.

Add conscious sedation codes as appropriate (see page 20)

Scenario 1.8: Hospital Outpatient CPT® Codes²

- 33228** Removal of permanent pacemaker pulse generator with replacement of pacemaker pulse generator; dual lead system
- C1785** Pacemaker, dual chamber rate-responsive (implantable)

Add conscious sedation codes as appropriate (see page 20)

Scenario 1.8: Possible Hospital Inpatient ICD-10-PCS Codes³

- 5A1213Z** Performance of Cardiac Pacing, Intermittent
- 5A1223Z** Performance of Cardiac Pacing, Continuous
- 0JH606Z** Insertion of Pacemaker, Dual Chamber into Chest Subcutaneous Tissue and Fascia, Open Approach
- 0JH636Z** Insertion of Pacemaker, Dual Chamber into Chest Subcutaneous Tissue and Fascia, Percutaneous Approach
- 0JH806Z** Insertion of Pacemaker, Dual Chamber into Abdomen Subcutaneous Tissue and Fascia, Open Approach
- 0JH836Z** Insertion of Pacemaker, Dual Chamber into Abdomen Subcutaneous Tissue and Fascia, Percutaneous Approach
- 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
- B5060ZZ** Plain Radiography of Right Subclavian Vein using High Osmolar Contrast
- B5061ZZ** Plain Radiography of Right Subclavian Vein using Low Osmolar Contrast
- B506YZZ** Plain Radiography of Right Subclavian Vein using Other Contrast
- B5070ZZ** Plain Radiography of Left Subclavian Vein using High Osmolar Contrast
- B5071ZZ** Plain Radiography of Left Subclavian Vein using Low Osmolar Contrast
- B507YZZ** Plain Radiography of Left Subclavian Vein using Other Contrast
- B5160ZZ** Fluoroscopy of Right Subclavian Vein using High Osmolar Contrast
- B5161ZZ** Fluoroscopy of Right Subclavian Vein using Low Osmolar Contrast
- B516YZZ** Fluoroscopy of Right Subclavian Vein using Other Contrast
- B516ZZZ** Fluoroscopy of Right Subclavian Vein
- B5170ZZ** Fluoroscopy of Left Subclavian Vein using High Osmolar Contrast
- B5171ZZ** Fluoroscopy of Left Subclavian Vein using Low Osmolar Contrast
- B517YZZ** Fluoroscopy of Left Subclavian Vein using Other Contrast
- B517ZZZ** Fluoroscopy of Left Subclavian Vein

1.9 Replacement of dual chamber *pulse generator*

Scenario 1.9: Physician CPT® Codes¹

33228 Removal of permanent pacemaker pulse generator with replacement of pacemaker pulse generator; dual lead system

Add conscious sedation codes as appropriate (see page 20)

Scenario 1.9: Hospital Outpatient CPT® Codes²

33228 Removal of permanent pacemaker pulse generator with replacement of pacemaker pulse generator; dual lead system

C1785 Pacemaker, dual chamber rate-responsive (implantable)

Add conscious sedation codes as appropriate (see page 20)

Scenario 1.9: Possible Hospital Inpatient ICD-10-PCS Codes³

0JH606Z Insertion of Pacemaker, Dual Chamber into Chest Subcutaneous Tissue and Fascia, Open Approach

0JH636Z Insertion of Pacemaker, Dual Chamber into Chest Subcutaneous Tissue and Fascia, Percutaneous Approach

0JH806Z Insertion of Pacemaker, Dual Chamber into Abdomen Subcutaneous Tissue and Fascia, Open Approach

0JH836Z Insertion of Pacemaker, Dual Chamber into Abdomen Subcutaneous Tissue and Fascia, Percutaneous Approach

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

1.10 Upgrade from single chamber pacemaker with a ventricular lead to a dual chamber pacemaker with the addition of the right atrial lead

Scenario 1.10: Physician CPT® Codes¹

33214 Upgrade of implanted pacemaker system, conversion of single chamber system to dual chamber system (includes removal of previously placed pulse generator, testing of existing lead, insertion of new lead, insertion of new pulse generator)

Add conscious sedation codes as appropriate (see page 20)

Scenario 1.10: Hospital Outpatient CPT® Codes²

33214 Upgrade of implanted pacemaker system, conversion of single chamber system to dual chamber system (includes removal of previously placed pulse generator, testing of existing lead, insertion of new lead, insertion of new pulse generator)

C1785 Pacemaker, dual chamber rate-responsive (implantable)

Add conscious sedation codes as appropriate (see page 20)

Scenario 1.10: Possible Hospital Inpatient ICD-10-PCS Codes³

0JH606Z Insertion of Pacemaker, Dual Chamber into Chest Subcutaneous Tissue and Fascia, Open Approach

0JH636Z Insertion of Pacemaker, Dual Chamber into Chest Subcutaneous Tissue and Fascia, Percutaneous Approach

0JH806Z Insertion of Pacemaker, Dual Chamber into Abdomen Subcutaneous Tissue and Fascia, Open Approach

0JH836Z Insertion of Pacemaker, Dual Chamber into Abdomen Subcutaneous Tissue and Fascia, Percutaneous Approach

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

02H64JZ Insertion of Pacemaker Lead into Right Atrium, Percutaneous Endoscopic Approach

02H63JZ Insertion of Pacemaker Lead into Right Atrium, Percutaneous Approach

B5060ZZ Plain Radiography of Right Subclavian Vein using High Osmolar Contrast

B5061ZZ Plain Radiography of Right Subclavian Vein using Low Osmolar Contrast

B506YZZ Plain Radiography of Right Subclavian Vein using Other Contrast

B5070ZZ Plain Radiography of Left Subclavian Vein using High Osmolar Contrast

B5071ZZ Plain Radiography of Left Subclavian Vein using Low Osmolar Contrast

B507YZZ Plain Radiography of Left Subclavian Vein using Other Contrast

B5160ZZ Fluoroscopy of Right Subclavian Vein using High Osmolar Contrast

B5161ZZ Fluoroscopy of Right Subclavian Vein using Low Osmolar Contrast

B516YZZ Fluoroscopy of Right Subclavian Vein using Other Contrast

B516ZZZ Fluoroscopy of Right Subclavian Vein

B5170ZZ Fluoroscopy of Left Subclavian Vein using High Osmolar Contrast

B5171ZZ Fluoroscopy of Left Subclavian Vein using Low Osmolar Contrast

B517YZZ Fluoroscopy of Left Subclavian Vein using Other Contrast

B517ZZZ Fluoroscopy of Left Subclavian Vein

1.11 Insertion of one permanent *transvenous pacing electrode*

Scenario 1.11: Physician CPT® Codes¹

33216 Insertion of a single transvenous electrode, permanent pacemaker or implantable defibrillator

Add conscious sedation codes as appropriate (see page 20)

Scenario 1.11: Hospital Outpatient CPT® Codes²

33216 Insertion of a single transvenous electrode, permanent pacemaker or implantable defibrillator

Add conscious sedation codes as appropriate (see page 20)

Scenario 1.11: Possible Hospital Inpatient ICD-10-PCS Codes³

02H64JZ Insertion of Pacemaker Lead into Right Atrium, Percutaneous Endoscopic Approach

02H63JZ Insertion of Pacemaker Lead into Right Atrium, Percutaneous Approach

02HK3JZ Insertion of Pacemaker Lead into Right Ventricle, Percutaneous Approach

02HK4JZ Insertion of Pacemaker Lead into Right Ventricle, Percutaneous Endoscopic Approach

B5060ZZ Plain Radiography of Right Subclavian Vein using High Osmolar Contrast

B5061ZZ Plain Radiography of Right Subclavian Vein using Low Osmolar Contrast

B506YZZ Plain Radiography of Right Subclavian Vein using Other Contrast

B5070ZZ Plain Radiography of Left Subclavian Vein using High Osmolar Contrast

B5071ZZ Plain Radiography of Left Subclavian Vein using Low Osmolar Contrast

B507YZZ Plain Radiography of Left Subclavian Vein using Other Contrast

B5160ZZ Fluoroscopy of Right Subclavian Vein using High Osmolar Contrast

B5161ZZ Fluoroscopy of Right Subclavian Vein using Low Osmolar Contrast

B516YZZ Fluoroscopy of Right Subclavian Vein using Other Contrast

B516ZZZ Fluoroscopy of Right Subclavian Vein

B5170ZZ Fluoroscopy of Left Subclavian Vein using High Osmolar Contrast

B5171ZZ Fluoroscopy of Left Subclavian Vein using Low Osmolar Contrast

B517YZZ Fluoroscopy of Left Subclavian Vein using Other Contrast

B517ZZZ Fluoroscopy of Left Subclavian Vein

1.12 Insertion of two permanent *transvenous pacing electrode*

Scenario 1.12: Physician CPT® Codes¹

33217 Insertion of two transvenous electrodes, permanent pacemaker or implantable defibrillator

Add conscious sedation codes as appropriate (see page 20)

Scenario 1.12: Hospital Outpatient CPT® Codes²

33217 Insertion of two transvenous electrodes, permanent pacemaker or implantable defibrillator

Add conscious sedation codes as appropriate (see page 20)

Scenario 1.12: Possible Hospital Inpatient ICD-10-PCS Codes³

02H64JZ Insertion of Pacemaker Lead into Right Atrium, Percutaneous Endoscopic Approach

02H63JZ Insertion of Pacemaker Lead into Right Atrium, Percutaneous Approach

02HK4JZ Insertion of Pacemaker Lead into Right Ventricle, Percutaneous Endoscopic Approach

02HK3JZ Insertion of Pacemaker Lead into Right Ventricle, Percutaneous Approach

B5060ZZ Plain Radiography of Right Subclavian Vein using High Osmolar Contrast

B5061ZZ Plain Radiography of Right Subclavian Vein using Low Osmolar Contrast

B506YZZ Plain Radiography of Right Subclavian Vein using Other Contrast

B5070ZZ Plain Radiography of Left Subclavian Vein using High Osmolar Contrast

B5071ZZ Plain Radiography of Left Subclavian Vein using Low Osmolar Contrast

B507YZZ Plain Radiography of Left Subclavian Vein using Other Contrast

B5160ZZ Fluoroscopy of Right Subclavian Vein using High Osmolar Contrast

B5161ZZ Fluoroscopy of Right Subclavian Vein using Low Osmolar Contrast

B516YZZ Fluoroscopy of Right Subclavian Vein using Other Contrast

B516ZZZ Fluoroscopy of Right Subclavian Vein

B5170ZZ Fluoroscopy of Left Subclavian Vein using High Osmolar Contrast

B5171ZZ Fluoroscopy of Left Subclavian Vein using Low Osmolar Contrast

B517YZZ Fluoroscopy of Left Subclavian Vein using Other Contrast

B517ZZZ Fluoroscopy of Left Subclavian Vein

1.13 Single lead extraction from a single lead system *pacemaker electrode*

Scenario 1.13: Physician CPT® Codes¹

33234 Removal of transvenous pacemaker electrode(s); single lead system, atrial or ventricular

Add conscious sedation codes as appropriate (see page 20)

Scenario 1.13: Hospital Outpatient CPT® Codes²

33234 Removal of transvenous pacemaker electrode(s); single lead system, atrial or ventricular

Add conscious sedation codes as appropriate (see page 20)

Scenario 1.13: Possible Hospital Inpatient ICD-10-PCS Codes³

02PA0MZ	Removal of Cardiac Lead from Heart, Open Approach
02PA3MZ	Removal of Cardiac Lead from Heart, Percutaneous Approach
02PA4MZ	Removal of Cardiac Lead from Heart, Percutaneous Endoscopic Approach
02PAXMZ	Removal of Cardiac Lead from Heart, External Approach
B5060ZZ	Plain Radiography of Right Subclavian Vein using High Osmolar Contrast
B5061ZZ	Plain Radiography of Right Subclavian Vein using Low Osmolar Contrast
B506YZZ	Plain Radiography of Right Subclavian Vein using Other Contrast
B5070ZZ	Plain Radiography of Left Subclavian Vein using High Osmolar Contrast
B5071ZZ	Plain Radiography of Left Subclavian Vein using Low Osmolar Contrast
B507YZZ	Plain Radiography of Left Subclavian Vein using Other Contrast
B5160ZZ	Fluoroscopy of Right Subclavian Vein using High Osmolar Contrast
B5161ZZ	Fluoroscopy of Right Subclavian Vein using Low Osmolar Contrast
B516YZZ	Fluoroscopy of Right Subclavian Vein using Other Contrast
B516ZZZ	Fluoroscopy of Right Subclavian Vein
B5170ZZ	Fluoroscopy of Left Subclavian Vein using High Osmolar Contrast
B5171ZZ	Fluoroscopy of Left Subclavian Vein using Low Osmolar Contrast
B517YZZ	Fluoroscopy of Left Subclavian Vein using Other Contrast
B517ZZZ	Fluoroscopy of Left Subclavian Vein

1.14 Repositioning of right atrial or right ventricular *electrode within 90 days of implant performed by the implanting physician*

Scenario 1.14: Physician CPT® Codes¹

33215-78 Repositioning of previously implanted transvenous pacemaker or implantable defibrillator (right atrial or right ventricular) electrode

Add conscious sedation codes as appropriate (see page 20)

Scenario 1.14: Hospital Outpatient CPT® Codes²

33215-78* Repositioning of previously implanted transvenous pacemaker or implantable defibrillator (right atrial or right ventricular) electrode
*78 Modifier for Hospitals only applies to the same day of the original procedure.

Add conscious sedation codes as appropriate (see page 20)

Scenario 1.14: Possible Hospital Inpatient ICD-10-PCS Codes³

02WA0MZ Revision of Cardiac Lead in Heart, Open Approach

02WA3MZ Revision of Cardiac Lead in Heart, Percutaneous Approach

02WA4MZ Revision of Cardiac Lead in Heart, Percutaneous Endoscopic Approach

0JWT0PZ Revision of Cardiac Rhythm Related Device in Trunk Subcutaneous Tissue and Fascia, Open Approach

1.15 Single chamber *pacemaker follow-up (in person)*

Scenario 1.15: Physician CPT® Codes¹

93288 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead pacemaker system

or 93279 Programming device evaluation (in person) with iterative adjustments of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; single lead pacemaker system

Scenario 1.15: Hospital Outpatient CPT® Codes²

93288 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead pacemaker system

or 93279 Programming device evaluation (in person) with iterative adjustments of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; single lead pacemaker system

Scenario 1.15: Possible Hospital Inpatient ICD-10-PCS Codes³

4B02XSZ Measurement of Cardiac Pacemaker, External Approach

1.16 Dual chamber *pacemaker follow-up (in person)*

Scenario 1.16: Physician CPT® Codes¹

93288 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead pacemaker system

or 93280 Programming device evaluation (in person) with iterative adjustments of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; dual lead pacemaker system

Scenario 1.16: Hospital Outpatient CPT® Codes²

93288 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead pacemaker system

or 93280 Programming device evaluation (in person) with iterative adjustments of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; dual lead pacemaker system

Scenario 1.16: Possible Hospital Inpatient ICD-10-PCS Codes³

4B02XSZ Measurement of Cardiac Pacemaker, External Approach

1.17 Device programming evaluation dual chamber *with wound check performed by implanting physician 14 days post-op in clinic*

Scenario 1.17: Physician CPT® Codes¹

93280 Programming device evaluation (in person) with iterative adjustments of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; dual lead pacemaker system
**Wound checks are included in the 90-day global surgical package and not separately billable*

Scenario 1.17: Hospital Outpatient CPT® Codes²

93280 Programming device evaluation (in person) with iterative adjustments of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; dual lead pacemaker system
**Wound checks are included in the 90-day global surgical package and not separately billable*

Scenario 1.17: Possible Hospital Inpatient ICD-10-PCS Codes³

N/A

1.18 Dual chamber *device follow-up – device permanently programmed VVIR due to damaged atrial lead, at same office visit, patient seen by physician for medication adjustment*

Scenario 1.18: Physician CPT® Codes¹

93288 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead pacemaker system

or **93279** Programming device evaluation (in person) with iterative adjustments of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; single lead pacemaker system

99211-99215-25 Office or other outpatient visit for the evaluation and management of an established patient (The correct level of service will depend on the documented elements; please refer to the AMA's 2017 Current Procedural Terminology manual). Definition of -25 Modifier: Significant, Separately Identifiable Evaluation and Management Service by the Same Physician or Other Qualified Health Care Professional on the Same Day of the Procedure or Other Service.

Scenario 1.18: Hospital Outpatient CPT® Codes²

93288 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead pacemaker system

or **93279** Programming device evaluation (in person) with iterative adjustments of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; single lead pacemaker system

Scenario 1.18: Possible Hospital Inpatient ICD-10-PCS Codes³

N/A

1.19 Single, dual or multi chamber pacemaker follow-up (remote)

Scenario 1.19: Physician CPT® Codes¹

- | | |
|-------|---|
| 93294 | Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional |
| 93296 | Interrogation device evaluation(s) (remote), up to 90 days single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results |

Scenario 1.19: Hospital Outpatient CPT® Codes²

- | | |
|-------|---|
| 93294 | Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional |
| 93296 | Interrogation device evaluation(s) (remote), up to 90 days single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results |

Scenario 1.19: Possible Hospital Inpatient ICD-10-PCS Codes³

N/A

1.20 Single, dual, or multi chamber pacemaker follow-up (remote) with analysis of Implantable Cardiovascular Physiologic Monitor (ICPM)

Scenario 1.20: Physician CPT® Codes¹

- | | |
|-----------|---|
| 93294 | Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional |
| 93296 | Interrogation device evaluation(s) (remote), up to 90 days single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results |
| and 93297 | Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular physiologic monitor system, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, analysis, review(s) and report(s) by a physician or other qualified health care professional |
| G2066 | Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular physiologic monitor system, implantable loop recorder system, or subcutaneous cardiac rhythm monitor system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results – Technical component only |

Scenario 1.20: Hospital Outpatient CPT® Codes²

- | | |
|-----------|---|
| 93294 | Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional |
| 93296 | Interrogation device evaluation(s) (remote), up to 90 days single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results |
| and 93297 | Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular physiologic monitor system, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, analysis, review(s) and report(s) by a physician or other qualified health care professional |
| G2066 | Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular physiologic monitor system, implantable loop recorder system, or subcutaneous cardiac rhythm monitor system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results – Technical component only |

Scenario 1.20: Possible Hospital Inpatient ICD-10-PCS Codes³

N/A

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2. As of January 1, 2005, the Centers for Medicare and Medicaid Services (CMS) require hospitals to report all device category codes (C-codes) on Medicare outpatient claims when medical devices are used in conjunction with procedure(s) billed. Find C-codes for CRM devices at <http://www.bostonscientific.com/en-US/reimbursement/c-code-finder.html> Also find C-codes for CRM devices and related accessories (e.g., introducers, catheters, sheaths) at <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/HospitalOutpatientPPS/Downloads/Complelist-DeviceCats-OPPS.pdf>.
3. 2024 The Complete Official Codebook ICD-10-PCS Copyright 2023 Optum360, LLC.
4. Modifiers 26 (professional component) and 51 (multiple procedures) are for physician billing only. See the AMA's *2022 Current Procedural Terminology* for complete descriptions. Always verify appropriate usage with payers.

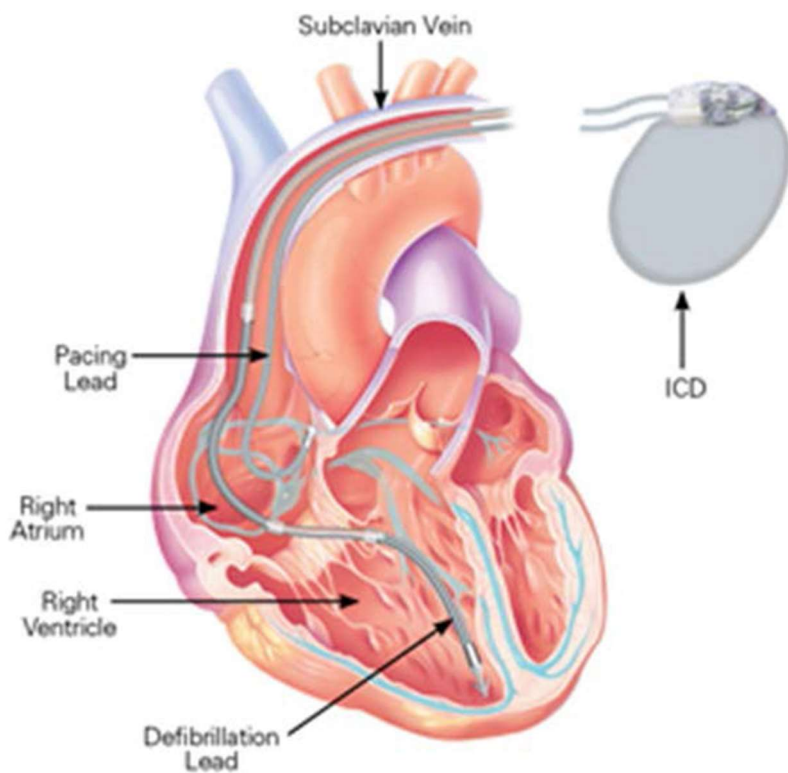


Transvenous Implantable Cardioverter- Defibrillators (ICDs)

Implantable Cardioverter- Defibrillator (ICD)
Coding Overview 2-1

Commonly Billed Cardioverter- Defibrillator
(ICD) Scenarios 2-2

Implantable Cardioverter-Defibrillator (ICD) Coding Overview



ICD Implant Procedure

The implant of an ICD system requires the use of an ICD pulse generator and a defibrillation electrode, or lead, placed in the right ventricle for a single chamber system. If a dual chamber ICD system is required, a defibrillation lead is placed in the right ventricle and a pacing electrode or lead is placed in the right atrium. The defibrillation lead delivers electrical shock therapy if a lethal arrhythmia is detected. In addition, the lead system monitors and delivers electrical pacing stimulation if required. The leads are inserted through the subclavian vein. In some cases, the cephalic or internal jugular vein may be used as an alternative to the subclavian vein.

A STEP-BY-STEP DESCRIPTION OF A TYPICAL INITIAL ICD SYSTEM IMPLANT PROCEDURE

1. The subclavian vein is accessed.
2. Using fluoroscopy, a defibrillation lead is inserted into the right ventricle.
3. If implanting a dual chamber system, a pacing lead is also inserted into the right atrium under fluoroscopy.
4. Lead measurement tests, including pacing and sensing thresholds and lead impedances, are performed.
5. The ICD pulse generator (33249 includes the generator and one or two leads) is connected to the lead(s) and a pulse generator pocket is formed.
6. Testing of defibrillation thresholds (93641), including arrhythmia induction, is performed.
7. Additional testing of the lead(s) is completed.
8. The lead(s) and device are secured, and the pulse generator pocket is closed.

Note: This document is for reference purposes only and does not replace physicians' medical documentation.

Scenarios included within this document do not encompass all possible procedures.

Commonly Billed Transvenous Implantable Cardioverter-Defibrillators (ICDs) Scenarios

KEY	+ Add-on code	■ Physician CPT® Codes ¹	■ Hospital Outpatient CPT® Codes ²	■ Possible Hospital Inpatient ICD-10-PCS® Codes ³
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2.1 Initial single or dual chamber ICD system implant, with defibrillator threshold testing at time of implant

Scenario 2.1: Physician CPT® Codes¹

33249	Insertion of new or replacement of permanent implantable defibrillator system, with transvenous electrode(s), single or dual chamber
93641–26/51 ⁴	Electrophysiologic evaluation of single or dual chamber pacing cardioverter- defibrillator leads including defibrillation threshold evaluation (induction of arrhythmia, evaluation of sensing and pacing for arrhythmia termination) at time of initial implantation or replacement; with testing of single or dual chamber pacing cardioverter-defibrillator pulse generator

Add conscious sedation codes as appropriate (see page 20)

Scenario 2.1: Hospital Outpatient CPT® Codes²

33249	Insertion of new or replacement of permanent implantable defibrillator system, with transvenous electrode(s), single or dual chamber
93641	Electrophysiologic evaluation of single or dual chamber pacing cardioverter- defibrillator leads including defibrillation threshold evaluation (induction of arrhythmia, evaluation of sensing and pacing for arrhythmia termination) at time of initial implantation or replacement; with testing of single or dual chamber pacing cardioverter-defibrillator pulse generator
C1721	cardioverter-defibrillator, dual chamber (implantable) or
C1722	cardioverter-defibrillator, single chamber (implantable)

Add conscious sedation codes as appropriate (see page 20)

Scenario 2.1: Possible Hospital Inpatient ICD-10-PCS Codes³

02H63KZ	Insertion of Defibrillator Lead into Right Atrium, Percutaneous Approach
02H64KZ	Insertion of Defibrillator Lead into Right Atrium, Percutaneous Endoscopic Approach
02HK3KZ	Insertion of Defibrillator Lead into Right Ventricle, Percutaneous Approach
02HK4KZ	Insertion of Defibrillator Lead into Right Ventricle, Percutaneous Endoscopic Approach
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
B5060ZZ	Plain Radiography of Right Subclavian Vein using High Osmolar Contrast
B5061ZZ	Plain Radiography of Right Subclavian Vein using Low Osmolar Contrast
B506YZZ	Plain Radiography of Right Subclavian Vein using Other Contrast
B5070ZZ	Plain Radiography of Left Subclavian Vein using High Osmolar Contrast
B5071ZZ	Plain Radiography of Left Subclavian Vein using Low Osmolar Contrast
B507YZZ	Plain Radiography of Left Subclavian Vein using Other Contrast
B5160ZZ	Fluoroscopy of Right Subclavian Vein using High Osmolar Contrast
B5161ZZ	Fluoroscopy of Right Subclavian Vein using Low Osmolar Contrast
B516YZZ	Fluoroscopy of Right Subclavian Vein using Other Contrast
B516ZZZ	Fluoroscopy of Right Subclavian Vein
B5170ZZ	Fluoroscopy of Left Subclavian Vein using High Osmolar Contrast
B5171ZZ	Fluoroscopy of Left Subclavian Vein using Low Osmolar Contrast
B517YZZ	Fluoroscopy of Left Subclavian Vein using Other Contrast
B517ZZZ	Fluoroscopy of Left Subclavian Vein

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2.2 Replacement of single chamber ICD pulse generator with defibrillator threshold testing at time of replacement

Scenario 2.2: Physician CPT® Codes¹

33262	Removal of implantable defibrillator pulse generator with replacement of implantable defibrillator pulse generator; single lead system
93641– 26/51*	Electrophysiologic evaluation of single or dual chamber pacing cardioverter- defibrillator leads including defibrillation threshold evaluation (induction of arrhythmia, evaluation of sensing and pacing for arrhythmia termination) at time of initial implantation or replacement; with testing of single or dual chamber pacing cardioverter-defibrillator pulse generator

Add conscious sedation codes as appropriate (see page 20)

Scenario 2.2: Hospital Outpatient CPT® Codes²

33262	Removal of implantable defibrillator pulse generator with replacement of implantable defibrillator pulse generator; single lead system
93641	Electrophysiologic evaluation of single or dual chamber pacing cardioverter- defibrillator leads including defibrillation threshold evaluation (induction of arrhythmia, evaluation of sensing and pacing for arrhythmia termination) at time of initial implantation or replacement; with testing of single or dual chamber pacing cardioverter-defibrillator pulse generator
C1722	cardioverter-defibrillator, single chamber (implantable)

Add conscious sedation codes as appropriate (see page 20)

Scenario 2.2: Possible Hospital Inpatient ICD-10-PCS Codes³

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
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
0JH608Z	Insertion of Defibrillator Generator into Chest Subcutaneous Tissue and Fascia, Open Approach

2.3 Single chamber transvenous ICD upgrade to dual chamber ICD *with retention of right ventricular ICD lead and insertion of new right atrial pacing lead, and defibrillator threshold testing at the time of replacement*

Scenario 2.3: Physician CPT® Codes¹

33249	Insertion or replacement of permanent implantable defibrillator system with transvenous lead(s), single or dual chamber
33241-51 ⁴	Removal of implantable defibrillator pulse generator
93641-26/51 ⁴	Electrophysiologic evaluation of single or dual chamber pacing cardioverter- defibrillator leads including defibrillation threshold evaluation (induction of arrhythmia, evaluation of sensing and pacing for arrhythmia termination) at time of initial implantation or replacement; with testing of single or dual chamber pacing cardioverter-defibrillator pulse generator

Add conscious sedation codes as appropriate (see page 20)

Scenario 2.3: Hospital Outpatient CPT® Codes²

33249	Insertion or replacement of permanent implantable defibrillator system with transvenous lead(s), single or dual chamber
33241	Removal of implantable defibrillator pulse generator
93641	Electrophysiologic evaluation of single or dual chamber pacing cardioverter- defibrillator leads including defibrillation threshold evaluation (induction of arrhythmia, evaluation of sensing and pacing for arrhythmia termination) at time of initial implantation or replacement; with testing of single or dual chamber pacing cardioverter-defibrillator pulse generator
C1722	cardioverter-defibrillator, dual chamber (implantable) or
C1721	cardioverter-defibrillator, single chamber (implantable)

Add conscious sedation codes as appropriate (see page 20)

Scenario 2.3: Possible Hospital Inpatient ICD-10-PCS Codes³

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
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
0JH60PZ	Insertion of Cardiac Rhythm Related Device into Chest Subcutaneous Tissue and Fascia, Open Approach
02H63KZ	Insertion of Defibrillator Lead into Right Atrium, Percutaneous Approach
02H64KZ	Insertion of Defibrillator Lead into Right Atrium, Percutaneous Endoscopic Approach
B5060ZZ	Plain Radiography of Right Subclavian Vein using High Osmolar Contrast
B5061ZZ	Plain Radiography of Right Subclavian Vein using Low Osmolar Contrast
B506YZZ	Plain Radiography of Right Subclavian Vein using Other Contrast
B5070ZZ	Plain Radiography of Left Subclavian Vein using High Osmolar Contrast
B5071ZZ	Plain Radiography of Left Subclavian Vein using Low Osmolar Contrast
B507YZZ	Plain Radiography of Left Subclavian Vein using Other Contrast
B5160ZZ	Fluoroscopy of Right Subclavian Vein using High Osmolar Contrast
B5161ZZ	Fluoroscopy of Right Subclavian Vein using Low Osmolar Contrast
B516YZZ	Fluoroscopy of Right Subclavian Vein using Other Contrast
B516ZZZ	Fluoroscopy of Right Subclavian Vein
B5170ZZ	Fluoroscopy of Left Subclavian Vein using High Osmolar Contrast
B5171ZZ	Fluoroscopy of Left Subclavian Vein using Low Osmolar Contrast
B517YZZ	Fluoroscopy of Left Subclavian Vein using Other Contrast
B517ZZZ	Fluoroscopy of Left Subclavian Vein

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2.4 Dual chamber pacemaker upgrade to dual chamber ICD *with capping of pacemaker leads and insertion of new right atrial and right ventricular ICD leads, with defibrillator threshold testing at the time of implant*

Scenario 2.4: Physician CPT® Codes¹

33249	Insertion or replacement of permanent implantable defibrillator system with transvenous lead(s), single or dual chamber
33233–51 ⁴	Removal of permanent pacemaker pulse generator only
93641–26/51 ⁴	Electrophysiologic evaluation of single or dual chamber pacing cardioverter- defibrillator leads including defibrillation threshold evaluation (induction of arrhythmia, evaluation of sensing and pacing for arrhythmia termination) at time of initial implantation or replacement; with testing of single or dual chamber pacing cardioverter-defibrillator pulse generator

Add conscious sedation codes as appropriate (see page 20)

Scenario 2.4: Hospital Outpatient CPT® Codes²

33249	Insertion or replacement of permanent implantable defibrillator system with transvenous lead(s), single or dual chamber
33233	Removal of permanent pacemaker pulse generator only
93641	Electrophysiologic evaluation of single or dual chamber pacing cardioverter- defibrillator leads including defibrillation threshold evaluation (induction of arrhythmia, evaluation of sensing and pacing for arrhythmia termination) at time of initial implantation or replacement; with testing of single or dual chamber pacing cardioverter-defibrillator pulse generator

C1722 cardioverter-defibrillator, dual chamber (implantable)

Add conscious sedation codes as appropriate (see page 20)

Scenario 2.4: Possible Hospital Inpatient ICD-10-PCS Codes³

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
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
0JH60PZ	Insertion of Cardiac Rhythm Related Device into Chest Subcutaneous Tissue and Fascia, Open Approach
02H63KZ	Insertion of Defibrillator Lead into Right Atrium, Percutaneous Approach
02H64KZ	Insertion of Defibrillator Lead into Right Atrium, Percutaneous Endoscopic Approach
02HK3KZ	Insertion of Defibrillator Lead into Right Ventricle, Percutaneous Approach
02HK4KZ	Insertion of Defibrillator Lead into Right Ventricle, Percutaneous Endoscopic Approach
B5060ZZ	Plain Radiography of Right Subclavian Vein using High Osmolar Contrast
B5061ZZ	Plain Radiography of Right Subclavian Vein using Low Osmolar Contrast
B506YZZ	Plain Radiography of Right Subclavian Vein using Other Contrast
B5070ZZ	Plain Radiography of Left Subclavian Vein using High Osmolar Contrast
B5071ZZ	Plain Radiography of Left Subclavian Vein using Low Osmolar Contrast
B507YZZ	Plain Radiography of Left Subclavian Vein using Other Contrast
B5160ZZ	Fluoroscopy of Right Subclavian Vein using High Osmolar Contrast
B5161ZZ	Fluoroscopy of Right Subclavian Vein using Low Osmolar Contrast
B516YZZ	Fluoroscopy of Right Subclavian Vein using Other Contrast
B516ZZZ	Fluoroscopy of Right Subclavian Vein
B5170ZZ	Fluoroscopy of Left Subclavian Vein using High Osmolar Contrast
B5171ZZ	Fluoroscopy of Left Subclavian Vein using Low Osmolar Contrast
B517YZZ	Fluoroscopy of Left Subclavian Vein using Other Contrast
B517ZZZ	Fluoroscopy of Left Subclavian Vein

2.5 Replacement of single chamber cardioverter-defibrillator lead, extraction of existing lead(s), with defibrillator threshold testing of ICD system

Scenario 2.5: Physician CPT® Codes¹

33216	Insertion of a single transvenous electrode, permanent pacemaker or implantable defibrillator
33244-51 ³	Removal of single or dual chamber implantable defibrillator electrode(s); by transvenous extraction
93641-26/51 ⁴	Electrophysiologic evaluation of single or dual chamber pacing cardioverter- defibrillator leads including defibrillation threshold evaluation (induction of arrhythmia, evaluation of sensing and pacing for arrhythmia termination) at time of initial implantation or replacement; with testing of single or dual chamber pacing cardioverter-defibrillator pulse generator

Add conscious sedation codes as appropriate (see page 20)

Scenario 2.5: Hospital Outpatient CPT® Codes²

33216	Insertion of a single transvenous electrode, permanent pacemaker or implantable defibrillator
33244	Removal of single or dual chamber implantable defibrillator electrode(s); by transvenous extraction
93641	Electrophysiologic evaluation of single or dual chamber pacing cardioverter- defibrillator leads including defibrillation threshold evaluation (induction of arrhythmia, evaluation of sensing and pacing for arrhythmia termination) at time of initial implantation or replacement; with testing of single or dual chamber pacing cardioverter-defibrillator pulse generator
C1722	cardioverter-defibrillator, single chamber (implantable)

Add conscious sedation codes as appropriate (see page 20)

Scenario 2.5: Possible Hospital Inpatient ICD-10-PCS Codes³

02HK3KZ	Insertion of Defibrillator Lead into Right Ventricle, Percutaneous Approach
02HK4KZ	Insertion of Defibrillator Lead into Right Ventricle, Percutaneous Endoscopic Approach
02PA0MZ	Removal of Cardiac Lead from Heart, Open Approach
02PA3MZ	Removal of Cardiac Lead from Heart, Percutaneous Approach
02PA4MZ	Removal of Cardiac Lead from Heart, Percutaneous Endoscopic Approach
0JH60PZ	Insertion of Cardiac Rhythm Related Device into Chest Subcutaneous Tissue and Fascia, Open Approach
0JPTOPZ	Removal of Cardiac Rhythm Related Device from Trunk Subcutaneous Tissue and Fascia, Open Approach
B5060ZZ	Plain Radiography of Right Subclavian Vein using High Osmolar Contrast
B5061ZZ	Plain Radiography of Right Subclavian Vein using Low Osmolar Contrast
B506YZZ	Plain Radiography of Right Subclavian Vein using Other Contrast
B5070ZZ	Plain Radiography of Left Subclavian Vein using High Osmolar Contrast
B5071ZZ	Plain Radiography of Left Subclavian Vein using Low Osmolar Contrast
B507YZZ	Plain Radiography of Left Subclavian Vein using Other Contrast
B5160ZZ	Fluoroscopy of Right Subclavian Vein using High Osmolar Contrast
B5161ZZ	Fluoroscopy of Right Subclavian Vein using Low Osmolar Contrast
B516YZZ	Fluoroscopy of Right Subclavian Vein using Other Contrast
B516ZZZ	Fluoroscopy of Right Subclavian Vein
B5170ZZ	Fluoroscopy of Left Subclavian Vein using High Osmolar Contrast
B5171ZZ	Fluoroscopy of Left Subclavian Vein using Low Osmolar Contrast
B517YZZ	Fluoroscopy of Left Subclavian Vein using Other Contrast
B517ZZZ	Fluoroscopy of Left Subclavian Vein

2.6 Removal of right atrial and right ventricular leads, insertion of new right atrial and ventricular leads with defibrillator threshold testing of ICD system

Scenario 2.6: Physician CPT® Codes¹

33217	Insertion of 2 transvenous electrodes, permanent pacemaker or implantable defibrillator
33244–51 ⁴	Removal of single or dual chamber pacing cardioverter-defibrillator electrode(s); by transvenous extraction
93641–26/51 ⁴	Electrophysiologic evaluation of single or dual chamber pacing cardioverter- defibrillator leads including defibrillation threshold evaluation (induction of arrhythmia, evaluation of sensing and pacing for arrhythmia termination) at time of initial implantation or replacement; with testing of single or dual chamber pacing cardioverter-defibrillator pulse generator

Add conscious sedation codes as appropriate (see page 20)

Scenario 2.6: Hospital Outpatient CPT® Codes²

33217	Insertion of 2 transvenous electrodes, permanent pacemaker or implantable defibrillator
33244	Removal of single or dual chamber pacing cardioverter-defibrillator electrode(s); by transvenous extraction
93641	Electrophysiologic evaluation of single or dual chamber pacing cardioverter- defibrillator leads including defibrillation threshold evaluation (induction of arrhythmia, evaluation of sensing and pacing for arrhythmia termination) at time of initial implantation or replacement; with testing of single or dual chamber pacing cardioverter-defibrillator pulse generator

Add conscious sedation codes as appropriate (see page 20)

Scenario 2.6: Possible Hospital Inpatient ICD-10-PCS Codes³

02H63KZ	Insertion of Defibrillator Lead into Right Atrium, Percutaneous Approach
02H64KZ	Insertion of Defibrillator Lead into Right Atrium, Percutaneous Endoscopic Approach
02HK3KZ	Insertion of Defibrillator Lead into Right Ventricle, Percutaneous Approach
02HK4KZ	Insertion of Defibrillator Lead into Right Ventricle, Percutaneous Endoscopic Approach
02PA0MZ	Removal of Cardiac Lead from Heart, Open Approach
02PA3MZ	Removal of Cardiac Lead from Heart, Percutaneous Approach
02PA4MZ	Removal of Cardiac Lead from Heart, Percutaneous Endoscopic Approach
B5060ZZ	Plain Radiography of Right Subclavian Vein using High Osmolar Contrast
B5061ZZ	Plain Radiography of Right Subclavian Vein using Low Osmolar Contrast
B506YZZ	Plain Radiography of Right Subclavian Vein using Other Contrast
B5070ZZ	Plain Radiography of Left Subclavian Vein using High Osmolar Contrast
B5071ZZ	Plain Radiography of Left Subclavian Vein using Low Osmolar Contrast
B507YZZ	Plain Radiography of Left Subclavian Vein using Other Contrast
B5160ZZ	Fluoroscopy of Right Subclavian Vein using High Osmolar Contrast
B5161ZZ	Fluoroscopy of Right Subclavian Vein using Low Osmolar Contrast
B516YZZ	Fluoroscopy of Right Subclavian Vein using Other Contrast
B516ZZZ	Fluoroscopy of Right Subclavian Vein
B5170ZZ	Fluoroscopy of Left Subclavian Vein using High Osmolar Contrast
B5171ZZ	Fluoroscopy of Left Subclavian Vein using Low Osmolar Contrast
B517YZZ	Fluoroscopy of Left Subclavian Vein using Other Contrast
B517ZZZ	Fluoroscopy of Left Subclavian Vein

2.7 Insertion of Sub-Q Array *with defibrillator threshold testing of ICD system*

Scenario 2.7: Physician CPT® Codes¹

	33999	Unlisted procedure, cardiac surgery
or	33216	Insertion of a single transvenous electrode, permanent pacemaker or implantable defibrillator The HRS Coding Guide indicates many carriers/payers will accept existing codes for Sub-Q Array; however, some carriers/payers may request use of the unlisted code. HRS recommends confirming payers' requirements prior to claim submission.⁵
	93641– 26/51 ⁴	Electrophysiologic evaluation of single or dual chamber pacing cardioverter- defibrillator leads including defibrillation threshold evaluation (induction of arrhythmia, evaluation of sensing and pacing for arrhythmia termination) at time of initial implantation or replacement; with testing of single or dual chamber pacing cardioverter-defibrillator pulse generator

Add conscious sedation codes as appropriate (see page 20)

Scenario 2.7: Hospital Outpatient CPT® Codes²

	33999	Unlisted procedure, cardiac surgery
or	33216	Insertion of a single transvenous electrode, permanent pacemaker or implantable defibrillator The HRS Coding Guide indicates many carriers/payers will accept existing codes for Sub-Q Array; however, some carriers/payers may request use of the unlisted code. HRS recommends confirming payers' requirements prior to claim submission.⁵
	93641	Electrophysiologic evaluation of single or dual chamber pacing cardioverter- defibrillator leads including defibrillation threshold evaluation (induction of arrhythmia, evaluation of sensing and pacing for arrhythmia termination) at time of initial implantation or replacement; with testing of single or dual chamber pacing cardioverter-defibrillator pulse generator

Add conscious sedation codes as appropriate (see page 20)

Scenario 2.7: Possible Hospital Inpatient ICD-10-PCS Codes³

02HK3JZ	Insertion of Pacemaker Lead into Right Ventricle, Percutaneous Approach
02HK3MZ	Insertion of Cardiac Lead into Right Ventricle, Percutaneous Approach
02HK4JZ	Insertion of Pacemaker Lead into Right Ventricle, Percutaneous Endoscopic Approach
02HK4MZ	Insertion of Cardiac Lead into Right Ventricle, Percutaneous Endoscopic Approach
02HL3JZ	Insertion of Pacemaker Lead into Left Ventricle, Percutaneous Approach
02HL3MZ	Insertion of Cardiac Lead into Left Ventricle, Percutaneous Approach
02HL4JZ	Insertion of Pacemaker Lead into Left Ventricle, Percutaneous Endoscopic Approach

2.8 Single chamber ICD *follow-up (in person) in clinic*

Scenario 2.8: Physician CPT® Codes¹

93289 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead transvenous implantable defibrillator system, including analysis of heart rhythm derived data elements

or **93282** Programming device evaluation (in person) with iterative adjustments of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; single lead transvenous implantable defibrillator system

Scenario 2.8: Hospital Outpatient CPT® Codes²

93289 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead transvenous implantable defibrillator system, including analysis of heart rhythm derived data elements

or **93282** Programming device evaluation (in person) with iterative adjustments of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; single lead transvenous implantable defibrillator system

Scenario 2.8: Possible Hospital Inpatient ICD-10-PCS Codes³

N/A

2.9 Dual chamber ICD *follow-up (in person) in clinic*

Scenario 2.9: Physician CPT® Codes¹

93289 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead transvenous implantable defibrillator system, including analysis of heart rhythm derived data elements

or **93283** Programming device evaluation (in person) with iterative adjustments of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; dual lead transvenous implantable defibrillator system

Scenario 2.9: Hospital Outpatient CPT® Codes²

93289 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead transvenous implantable defibrillator system, including analysis of heart rhythm derived data elements

or **93283** Programming device evaluation (in person) with iterative adjustments of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; dual lead transvenous implantable defibrillator system

Scenario 2.9: Possible Hospital Inpatient ICD-10-PCS Codes³

N/A

2.10 Single, dual or multi chamber ICD follow-up (remote)

Scenario 2.10: Physician CPT® Codes¹

93295	Interrogation device evaluation(s) (remote), up to 90 days single, dual, or multiple lead implantable defibrillator system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional
93296	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results

Scenario 2.10: Hospital Outpatient CPT® Codes²

93295	Interrogation device evaluation(s) (remote), up to 90 days single, dual, or multiple lead implantable defibrillator system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional
93296	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results

Scenario 2.10: Possible Hospital Inpatient ICD-10-PCS Codes³

N/A

2.11 Single, dual or multi chamber ICD follow-up (remote) with analysis of Implantable Cardiovascular Physiologic Monitor (ICPM)

Scenario 2.11: Physician CPT® Codes¹

93295	Interrogation device evaluation(s) (remote), up to 90 days single, dual, or multiple lead implantable defibrillator system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional
93296	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results
and 93297	Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular physiologic monitor system, remote data acquisition and technician review, technical support and distribution of results, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, analysis, review(s) and report(s) by a physician or other qualified health care professional

Scenario 2.11: Hospital Outpatient CPT® Codes²

93295	Interrogation device evaluation(s) (remote), up to 90 days single, dual, or multiple lead implantable defibrillator system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional
93296	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results
and 93297	Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular physiologic monitor system, remote data acquisition and technical review, technical support and distribution of results, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, analysis, review(s) and report(s) by a physician or other qualified health care professional

Scenario 2.11: Possible Hospital Inpatient ICD-10-PCS Codes³

N/A

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2. As of January 1, 2005, the Centers for Medicare and Medicaid Services (CMS) require hospitals to report all device category codes (C-codes) on Medicare outpatient claims when medical See page 4 for important information about the uses and limitations of this document. See the end of each section for Sources and Footnotes pertaining to each section. CPT ©2022 American Medical Association. All rights reserved. CPT is a registered trademark of the American Medical Association.

devices are used in conjunction with procedure(s) billed Find C-codes for CRM devices at <http://www.bostonscientific.com/en-US/reimbursement/ccode-finder.html> Also find C-codes for CRM devices and related accessories (e.g., introducers, catheters, sheaths) at <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/HospitalOutpatientPPS/Downloads/Compleet-list-DeviceCats-OPPS.pdf> .

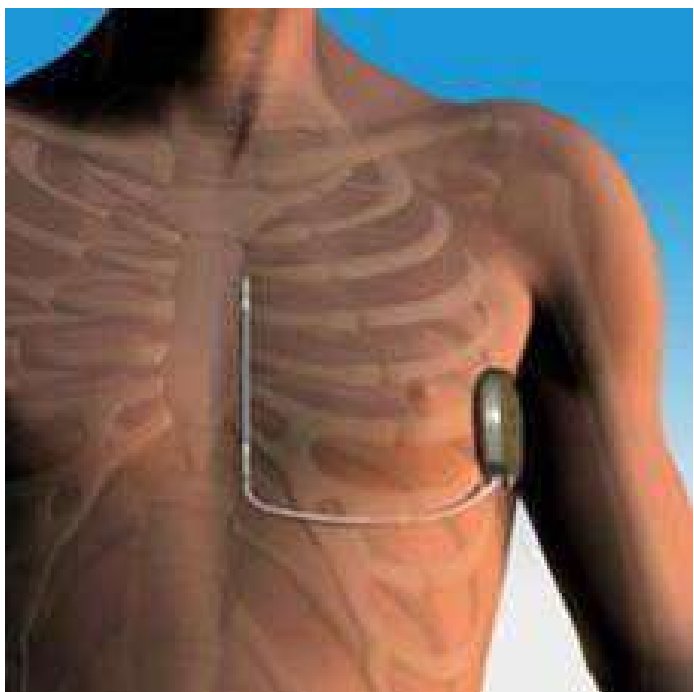
3. 2024 The Complete Official Codebook ICD-10-PCS Copyright 2023 Optum360, LLC.
4. Modifiers 26 (professional component) and 51 (multiple procedures) are for physician billing only. See the *AMA's 2023 Current Procedural Terminology* for complete descriptions. Always verify appropriate usage with payers.
5. Heart Rhythm Society 2013 Coding Guide for Heart Rhythm Procedures and Services, Washington, DC.

3 Subcutaneous Implantable Defibrillator (S-ICD®)

Subcutaneous Implantable Defibrillator
(S-ICD) Coding Overview 3-1

Commonly Billed Subcutaneous
Implantable Defibrillator (S-ICD)
Scenarios 3-2

Subcutaneous Implantable Defibrillator (S-ICD) Coding Overview



S-ICD Implant Procedure

The S-ICD System is designed to be positioned using anatomical landmarks. The device and electrode are typically implanted subcutaneously in the left thoracic region. Specifically, the S-ICD System is implanted in the vicinity of the left 5th and 6th intercostal spaces at the mid-axillary line with an electrode capable of sensing or delivering defibrillation energy running to the xiphoid and then vertically along the lateral sternal margin.

A STEP-BY-STEP DESCRIPTION OF A TYPICAL INITIAL S- ICD SYSTEM IMPLANT PROCEDURE

1. Determine the ideal location for the implanted PG by placing a demo device on the patient's skin between the 5th and 6th intercostal space in the mid-axillary line.
2. Make the device pocket incision in accordance with the ideal device location identified in step 1.
3. Locate the tip of the xiphoid process and make a 2 – 3-centimeter horizontal incision beginning at the xiphoid midline extending horizontally to the left, toward the device pocket.
4. Using an electrode insertion tool, tunnel the lead electrode from the xiphoid incision to the pocket; anchor the electrode at the xiphoid incision.
5. Complete the distal electrode insertion by tunneling to the distal tip electrode up from the xiphoid to the superior position, in parallel to the sternal midline.
6. Connect the electrode to the device header and place the device in the pocket (33270).
7. Automatic Setup of the device is performed, and the device is prepared for defibrillation testing.
8. Testing of defibrillation thresholds including arrhythmia induction, is performed.
9. The lead(s) and device are secured, and the pulse generator pocket is closed.

Note: This document is for reference purposes only and does not replace physicians' medical documentation.

Scenarios included within this document do not encompass all possible procedures.

Commonly Billed Subcutaneous Implantable Defibrillator (S-ICD) Scenarios

KEY



Add-on code

Physician CPT® Codes¹Hospital Outpatient CPT® Codes²Possible Hospital Inpatient ICD-10-PCS® Codes³

3.1 Initial S-ICD system implant, with defibrillator threshold testing at time of implant

Scenario 3.1: Physician CPT® Codes¹

33270⁴ Insertion or replacement of subcutaneous implantable defibrillator system with subcutaneous electrode, including defibrillation threshold evaluation, induction of arrhythmia, evaluation of sensing of arrhythmia termination, and programming or reprogramming of sensing or therapeutic parameters, when performed

Add conscious sedation codes as appropriate (see page 20)

Scenario 3.1: Hospital Outpatient CPT® Codes²

33270 Insertion or replacement of subcutaneous implantable defibrillator system with subcutaneous electrode, including defibrillation threshold evaluation, induction of arrhythmia, evaluation of sensing of arrhythmia termination, and programming or reprogramming of sensing or therapeutic parameters, when performed

C1722 Cardioverter-defibrillator, single chamber,(implantable)

Add conscious sedation codes as appropriate (see page 20)

Scenario 3.1: Possible Hospital Inpatient ICD-10-PCS Codes³

0JH608Z Insertion of defibrillator generator into chest subcutaneous tissue and fascia, open approach

0JH63FZ Insertion of subcutaneous defibrillator lead into chest subcutaneous tissue and fascia, percutaneous approach

3.2 Replacement of S-ICD pulse generator using existing lead with defibrillator threshold testing

Scenario 3.2: Physician CPT® Codes¹

33262 Removal of implantable defibrillator pulse generator with replacement of implantable defibrillator pulse generator only; single lead system

93644 Electrophysiologic evaluation of subcutaneous implantable defibrillator (includes defibrillation threshold evaluation, induction of arrhythmia, evaluation of sensing for arrhythmia termination, and programming or reprogramming of sensing or therapeutic parameters)

Add conscious sedation codes as appropriate (see page 20)

Scenario 3.2: Hospital Outpatient CPT® Codes²

33262 Removal of implantable defibrillator pulse generator with replacement of implantable defibrillator pulse generator only; single lead system

93644 Electrophysiologic evaluation of subcutaneous implantable defibrillator (includes defibrillation threshold evaluation, induction of arrhythmia, evaluation of sensing for arrhythmia termination, and programming or reprogramming of sensing or therapeutic parameters)

C1722 Cardioverter-defibrillator, single chamber,(implantable)

Add conscious sedation codes as appropriate (see page 20)

Scenario 3.2: Possible Hospital Inpatient ICD-10-PCS Codes³

0JPT3FZ Removal of subcutaneous defibrillator lead from trunk subcutaneous tissue and fascia, percutaneous approach

0JH608Z Insertion of defibrillator generator into chest subcutaneous tissue and fascia, open approach

3.3 Replacement and Removal of S-ICD Lead

Scenario 3.3: Physician CPT® Codes¹

33272 Removal of subcutaneous implantable defibrillator electrode

33271 Insertion of subcutaneous implantable defibrillator electrode

Scenario 3.3: Hospital Outpatient CPT® Codes²

33272 Removal of subcutaneous implantable defibrillator electrode

33271 Insertion of subcutaneous implantable defibrillator electrode

Scenario 3.3: Possible Hospital Inpatient ICD-10-PCS Codes³

0JPT0FZ Removal of Subcutaneous Defibrillator Lead from Trunk Subcutaneous Tissue and Fascia, Open Approach

0JPT3FZ Removal of Subcutaneous Defibrillator Lead from Trunk Subcutaneous Tissue and Fascia, Percutaneous Approach

0JH60FZ Insertion of Subcutaneous Defibrillator Lead from Trunk Subcutaneous Tissue and Fascia, Open Approach

0JH63FZ Insertion of Subcutaneous Defibrillator Lead from Trunk Subcutaneous Tissue and Fascia, Percutaneous Approach

3.4 Revision of S-ICD Lead only

Scenario 3.4: Physician CPT® Codes¹

33273 Repositioning of previously implanted subcutaneous implantable defibrillator electrode

Scenario 3.4: Hospital Outpatient CPT® Codes²

33273 Repositioning of previously implanted subcutaneous implantable defibrillator electrode

Scenario 3.4: Possible Hospital Inpatient ICD-10-PCS Codes³

0JWT0FZ Revision of Subcutaneous Defibrillator Lead in Trunk Subcutaneous Tissue and Fascia, Open Approach

0JWT0FZ Revision of Subcutaneous Defibrillator Lead in Trunk Subcutaneous Tissue and Fascia, Open Approach

3.5 S-ICD Follow-up (in person)

Scenario 3.5: Physician CPT® Codes¹

93261 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional includes connection, recording and disconnection per patient encounter; implantable subcutaneous lead defibrillator system

or 93260 Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; implantable subcutaneous lead defibrillator system

Scenario 3.5: Hospital Outpatient CPT® Codes²

93261 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional includes connection, recording and disconnection per patient encounter; implantable subcutaneous lead defibrillator system

or 93260 Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; implantable subcutaneous lead defibrillator system

Scenario 3.5: Possible Hospital Inpatient ICD-10-PCS Codes³

4B02XTZ Measurement of Cardiac Defibrillator, External Approach

3.6 S-ICD Follow-up (remote)

Scenario 3.6: Physician CPT® Codes¹

	93295	Interrogation device evaluation(s) (remote), up to 90 days single, dual, or multiple lead implantable defibrillator system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional
or	93296	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results

Scenario 3.6: Hospital Outpatient CPT® Codes²

	93295	Interrogation device evaluation(s) (remote), up to 90 days single, dual, or multiple lead implantable defibrillator system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional
or	93296	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results

Scenario 3.6: Possible Hospital Inpatient ICD-10-PCS Codes³

N/A

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2. As of January 1, 2005, the Centers for Medicare and Medicaid Services (CMS) require hospitals to report all device category codes (C-codes) on Medicare outpatient claims when medical devices are used in conjunction with procedure(s) billed. Find C-codes for CRM devices at <http://www.bostonscientific.com/en-US/reimbursement/ccode-finder.html>. Also find C-codes for CRM devices and related accessories (e.g., introducers, catheters, sheaths) at <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/HospitalOutpatientPPS/Downloads/Compleat-list-DeviceCats-OPPS.pdf>.
3. 2024 The Complete Official Codebook ICD-10-PCS Copyright 2023 Optum360, LLC., IL
4. 2012 AHA Coding Clinic Fourth Quarter p.104 Copyright American Medical Association (AHA) Chicago, IL

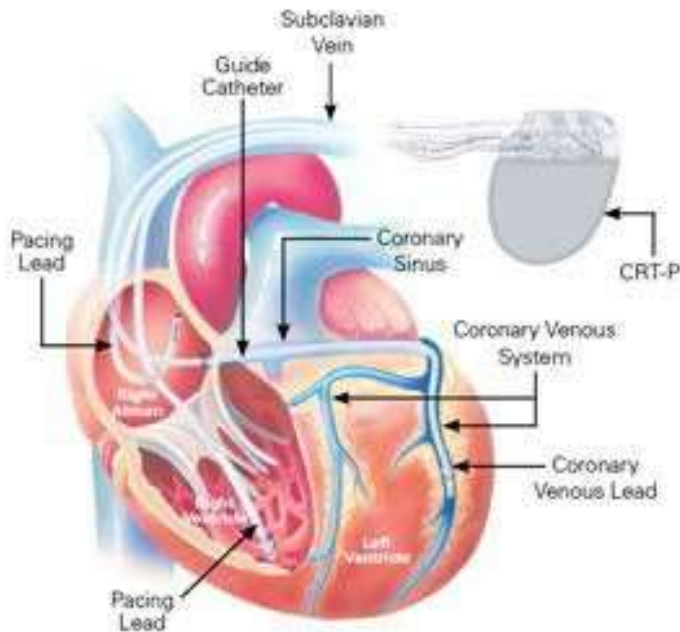


Cardiac Resynchronization Therapy Pacemakers (CRT-Ps)

Cardiac Resynchronization Therapy
Pacemaker (CRT-P) Coding Overview 4-1

Commonly Billed Cardiac
Resynchronization Therapy Pacemaker
(CRT-P) Scenarios 4-2

Cardiac Resynchronization Therapy Pacemakers (CRT-P) Coding Overview



CRT-P Implant Procedure

The implant of a CRT-P system typically requires the use of a cardiac resynchronization therapy pulse generator and three electrodes or leads. The three leads monitor and deliver electrical stimulation to the right atrium, right ventricle, and left ventricle. As in conventional pacemaker procedures, the leads are inserted through the subclavian vein and positioned in the right atrium and right ventricle. In some cases, the cephalic or internal jugular vein may be used as an alternative to the subclavian vein. In addition, a CRT-P system requires the implantation of a third lead into the coronary venous system to pace the left ventricle in order to coordinate, or resynchronize, ventricular contractions. This left ventricular lead is inserted into the subclavian vein, introduced into the coronary sinus and advanced into a coronary vein located on the exterior wall of the left ventricle.

A STEP-BY-STEP DESCRIPTION OF A TYPICAL INITIAL CRT-P SYSTEM IMPLANT PROCEDURE

1. The subclavian vein is accessed.
2. Pacing leads are inserted into the right ventricle and right atrium, under fluoroscopy.
3. A guiding catheter is inserted into the subclavian vein.
4. The coronary sinus (CS) is cannulated with the guide catheter via the coronary sinus ostium (opening).
5. In most cases, a venogram is required to visualize the coronary venous system prior to inserting the left ventricular lead.
6. A guide wire is inserted through the guide catheter, into the coronary venous system to the desired branch vein.
7. Under fluoroscopy, the left ventricular coronary venous lead is inserted (+33225) over the guide wire and advanced into a branch of the coronary venous system.
8. Lead measurement tests, including pacing and sensing thresholds and lead impedances, are performed.
9. The guide wire is removed and replaced with a finishing wire to stabilize the lead upon removal of the guide catheter.
10. The guide catheter is removed while maintaining LV lead position.
11. The finishing wire is removed, and the left ventricular coronary venous lead is secured.
12. A CRT-P pulse generator (33208) is connected to the three leads that are in place and a device pocket is formed.
13. Additional testing of all lead combinations is completed.
14. The leads and device are secured, and the pulse generator pocket is closed.

Note: This document is for reference purposes only and does not replace physicians' medical documentation. Scenarios included within this document do not encompass all possible procedures.

Commonly Billed Cardiac Resynchronization Therapy Pacemaker (CRT-P) Scenarios

KEY	+ Add-on code	■ Physician CPT® Codes ¹	■ Hospital Outpatient CPT® Codes ²	■ Possible Hospital Inpatient ICD-10-PCS® Codes ³
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4.1 Initial CRT-P system implant *with venogram of the coronary sinus*

Scenario 4.1: Physician CPT® Codes ¹	
33208	Insertion of new or replacement of permanent pacemaker with transvenous electrodes; atrial and ventricular
+ 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) <i>(List separately in addition to code for primary procedure)</i>
<i>Add conscious sedation codes as appropriate (see page 20)</i>	
Scenario 4.1: Hospital Outpatient CPT® Codes ²	
33208	Insertion of new or replacement of permanent pacemaker with transvenous electrodes; atrial and ventricular
+ 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)
<i>Add conscious sedation codes as appropriate (see pg.20)</i>	
C2621	Pacemaker, other than single or dual chamber
Scenario 4.1: Possible Hospital Inpatient ICD-10-PCS Codes ³	
0JH607Z	Insertion of Cardiac Resynchronization Pacemaker Pulse Generator into Chest Subcutaneous Tissue and Fascia, Open Approach
0JH637Z	Insertion of Cardiac Resynchronization Pacemaker Pulse Generator into Chest Subcutaneous Tissue and Fascia, Percutaneous Approach
0JH807Z	Insertion of Cardiac Resynchronization Pacemaker Pulse Generator into Abdomen Subcutaneous Tissue and Fascia, Open Approach
0JH837Z	Insertion of Cardiac Resynchronization Pacemaker Pulse Generator into Abdomen Subcutaneous Tissue and Fascia, Percutaneous Approach
02HK3JZ	Insertion of Pacemaker Lead into Right Ventricle, Percutaneous Approach
02HK4JZ	Insertion of Pacemaker Lead into Right Ventricle, Percutaneous Endoscopic Approach
02HL3JZ	Insertion of Pacemaker Lead into Left Ventricle, Percutaneous Approach
02HL4JZ	Insertion of Pacemaker Lead into Left Ventricle, Percutaneous Endoscopic Approach
02H43JZ	Insertion of Pacemaker Lead into Coronary Vein, Percutaneous Approach
02H44JZ	Insertion of Pacemaker Lead into Coronary Vein, Percutaneous Endoscopic Approach
02H63JZ	Insertion of Pacemaker Lead into Right Atrium, Percutaneous Approach
02H64JZ	Insertion of Pacemaker Lead into Right Atrium, Percutaneous Endoscopic Approach
B5060ZZ	Plain Radiography of Right Subclavian Vein using High Osmolar Contrast
B5061ZZ	Plain Radiography of Right Subclavian Vein using Low Osmolar Contrast
B506YZZ	Plain Radiography of Right Subclavian Vein using Other Contrast
B5070ZZ	Plain Radiography of Left Subclavian Vein using High Osmolar Contrast
B5071ZZ	Plain Radiography of Left Subclavian Vein using Low Osmolar Contrast
B507YZZ	Plain Radiography of Left Subclavian Vein using Other Contrast
B5160ZZ	Fluoroscopy of Right Subclavian Vein using High Osmolar Contrast
B5161ZZ	Fluoroscopy of Right Subclavian Vein using Low Osmolar Contrast
B516YZZ	Fluoroscopy of Right Subclavian Vein using Other Contrast
B516ZZZ	Fluoroscopy of Right Subclavian Vein
B5170ZZ	Fluoroscopy of Left Subclavian Vein using High Osmolar Contrast
B5171ZZ	Fluoroscopy of Left Subclavian Vein using Low Osmolar Contrast
B517YZZ	Fluoroscopy of Left Subclavian Vein using Other Contrast
B517ZZZ	Fluoroscopy of Left Subclavian Vein
B51V0ZZ	Fluoroscopy of Veins, other, using High Osmolar Contrast
B51V1ZZ	Fluoroscopy of Veins, other, using Low Osmolar Contrast

4.2 Upgrade of dual chamber pacemaker to CRT-P system (using existing RA and RV leads), insertion of LV lead with venogram of the coronary sinus

Scenario 4.2: Physician CPT® Codes¹

33228	Removal of permanent pacemaker pulse generator with replacement of pacemaker pulse generator; multiple lead system
+ 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)

Scenario 4.2: Hospital Outpatient CPT® Codes²

33228	Removal of permanent pacemaker pulse generator with replacement of pacemaker pulse generator; multiple lead system
+ 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) <i>Add conscious sedation codes as appropriate</i>
C2621	Pacemaker, other than single or dual chamber

Scenario 4.2: Possible Hospital Inpatient ICD-10-PCS Codes³

0JH607Z	Insertion of Cardiac Resynchronization Pacemaker Pulse Generator into Chest Subcutaneous Tissue and Fascia, Open Approach
0JH637Z	Insertion of Cardiac Resynchronization Pacemaker Pulse Generator into Chest Subcutaneous Tissue and Fascia, Percutaneous Approach
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
0JH807Z	Insertion of Cardiac Resynchronization Pacemaker Pulse Generator into Abdomen Subcutaneous Tissue and Fascia, Open Approach
0JH837Z	Insertion of Cardiac Resynchronization Pacemaker Pulse Generator into Abdomen Subcutaneous Tissue and Fascia, Percutaneous Approach
02H43JZ	Insertion of Pacemaker Lead into Coronary Vein, Percutaneous Approach
02PA4MZ	Removal of Cardiac Lead from Heart, Percutaneous Endoscopic Approach
02PA0MZ	Removal of Cardiac Lead from Heart, Open Approach
02PA3MZ	Removal of Cardiac Lead from Heart, Percutaneous Approach
B5060ZZ	Plain Radiography of Right Subclavian Vein using High Osmolar Contrast
B5061ZZ	Plain Radiography of Right Subclavian Vein using Low Osmolar Contrast
B506YZZ	Plain Radiography of Right Subclavian Vein using Other Contrast
B5070ZZ	Plain Radiography of Left Subclavian Vein using High Osmolar Contrast
B5071ZZ	Plain Radiography of Left Subclavian Vein using Low Osmolar Contrast
B507YZZ	Plain Radiography of Left Subclavian Vein using Other Contrast
B5160ZZ	Fluoroscopy of Right Subclavian Vein using High Osmolar Contrast
B5161ZZ	Fluoroscopy of Right Subclavian Vein using Low Osmolar Contrast
B516YZZ	Fluoroscopy of Right Subclavian Vein using Other Contrast
B516ZZZ	Fluoroscopy of Right Subclavian Vein
B5170ZZ	Fluoroscopy of Left Subclavian Vein using High Osmolar Contrast
B5171ZZ	Fluoroscopy of Left Subclavian Vein using Low Osmolar Contrast
B517YZZ	Fluoroscopy of Left Subclavian Vein using Other Contrast
B517ZZZ	Fluoroscopy of Left Subclavian Vein
B51V0ZZ	Fluoroscopy of Veins, other, using High Osmolar Contrast
B51V1ZZ	Fluoroscopy of Veins, other, using Low Osmolar Contrast

4.3 Replacement of CRT-P pulse generator only utilizing existing right atrial lead, right ventricular lead and left ventricular lead

Scenario 4.3: Physician CPT® Codes¹

33229 Removal of permanent pacemaker pulse generator with replacement of pacemaker pulse generator; multiple lead system

Add conscious sedation codes as appropriate (see page 20)

Scenario 4.3: Hospital Outpatient CPT® Codes²

33229 Removal of permanent pacemaker pulse generator with replacement of pacemaker pulse generator; multiple lead system

C2621 Pacemaker, other than single or dual chamber

Add conscious sedation codes as appropriate (see page 20)

Scenario 4.3: Possible Hospital Inpatient ICD-10-PCS Codes³

0JH607Z Insertion of Cardiac Resynchronization Pacemaker Pulse Generator into Chest Subcutaneous Tissue and Fascia, Open Approach

0JH637Z Insertion of Cardiac Resynchronization Pacemaker Pulse Generator into Chest Subcutaneous Tissue and Fascia, Percutaneous Approach

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

0JH807Z Insertion of Cardiac Resynchronization Pacemaker Pulse Generator into Abdomen Subcutaneous Tissue and Fascia, Open Approach

0JH837Z Insertion of Cardiac Resynchronization Pacemaker Pulse Generator into Abdomen Subcutaneous Tissue and Fascia, Percutaneous Approach

4.4 Single chamber pacemaker upgrade to CRT-P, with insertion of right atrial lead, and insertion of left ventricular lead with coronary sinus venogram

Scenario 4.4: Physician CPT® Codes¹

- 33214** Upgrade of implanted pacemaker system, conversion of single chamber system to dual chamber system (includes removal of previously placed pulse generator, testing of existing lead, insertion of new lead, insertion of new pulse 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)

Add conscious sedation codes as appropriate

Scenario 4.4: Hospital Outpatient CPT® Codes²

- 33214** Upgrade of implanted pacemaker system, conversion of single chamber system to dual chamber system (includes removal of previously placed pulse generator, testing of existing lead, insertion of new lead, insertion of new pulse 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)
Add conscious sedation codes as appropriate (see pg.16)
- C2621** Pacemaker, other than single or dual chamber

Scenario 4.4: Possible Hospital Inpatient ICD-10-PCS Codes³

- 0JH607Z** Insertion of Cardiac Resynchronization Pacemaker Pulse Generator into Chest Subcutaneous Tissue and Fascia, Open Approach
- 0JH637Z** Insertion of Cardiac Resynchronization Pacemaker Pulse Generator into Chest Subcutaneous Tissue and Fascia, Percutaneous Approach
- 0JH807Z** Insertion of Cardiac Resynchronization Pacemaker Pulse Generator into Abdomen Subcutaneous Tissue and Fascia, Open Approach
- 0JH837Z** Insertion of Cardiac Resynchronization Pacemaker Pulse Generator into Abdomen Subcutaneous Tissue and Fascia, Percutaneous Approach
- 02HL3JZ** Insertion of Pacemaker Lead into Left Ventricle, Percutaneous Approach
- 02HL4JZ** Insertion of Pacemaker Lead into Left Ventricle, Percutaneous Endoscopic Approach
- 02H43JZ** Insertion of Pacemaker Lead into Coronary Vein, Percutaneous Approach
- 02H44JZ** Insertion of Pacemaker Lead into Coronary Vein, Percutaneous Endoscopic Approach
- 02H63JZ** Insertion of Pacemaker Lead into Right Atrium, Percutaneous Approach
- 02H64JZ** Insertion of Pacemaker Lead into Right Atrium, Percutaneous Endoscopic Approach
- 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
- B5060ZZ** Plain Radiography of Right Subclavian Vein using High Osmolar Contrast
- B5061ZZ** Plain Radiography of Right Subclavian Vein using Low Osmolar Contrast
- B506YZZ** Plain Radiography of Right Subclavian Vein using Other Contrast
- B5070ZZ** Plain Radiography of Left Subclavian Vein using High Osmolar Contrast
- B5071ZZ** Plain Radiography of Left Subclavian Vein using Low Osmolar Contrast
- B507YZZ** Plain Radiography of Left Subclavian Vein using Other Contrast
- B5160ZZ** Fluoroscopy of Right Subclavian Vein using High Osmolar Contrast
- B5161ZZ** Fluoroscopy of Right Subclavian Vein using Low Osmolar Contrast
- B516YZZ** Fluoroscopy of Right Subclavian Vein using Other Contrast
- B516ZZZ** Fluoroscopy of Right Subclavian Vein
- B5170ZZ** Fluoroscopy of Left Subclavian Vein using High Osmolar Contrast
- B5171ZZ** Fluoroscopy of Left Subclavian Vein using Low Osmolar Contrast
- B517YZZ** Fluoroscopy of Left Subclavian Vein using Other Contrast
- B517ZZZ** Fluoroscopy of Left Subclavian Vein
- B51V0ZZ** Fluoroscopy of Veins, other, using High Osmolar Contrast
- B51V1ZZ** Fluoroscopy of Veins, other, using Low Osmolar Contrast

4.5 CRT-P *follow-up (in person) in clinic*

Scenario 4.5: Physician CPT® Codes¹

	93288	Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead pacemaker system
or	93281	Programming device evaluation (in person) with iterative adjustments of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; multiple lead pacemaker system

Scenario 4.5: Hospital Outpatient CPT® Codes²

	93288	Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead pacemaker system
or	93281	Programming device evaluation (in person) with iterative adjustments of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; multiple lead pacemaker system

Scenario 4.5: Possible Hospital Inpatient ICD-10-PCS Codes³

N/A

4.6 CRT-P *follow-up (remote)*

Scenario 4.6: Physician CPT® Codes¹

	93294	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional
and	93296	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results

Scenario 4.6: Hospital Outpatient CPT® Codes²

	93294	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional
and	93296	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results

Scenario 4.6: Possible Hospital Inpatient ICD-10-PCS Codes³

N/A

4.7 CRT-P follow-up (remote) with analysis of Implantable Cardiovascular Physiologic Monitor (ICPM) data

Scenario 4.7: Physician CPT® Codes¹

	93294	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional
	93296	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results
and	93297	Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular physiologic monitor system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, analysis, review(s) and report(s) by a physician or other qualified health care professional

Scenario 4.7: Hospital Outpatient CPT® Codes²

	93294	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional
	93296	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results
and	93297	Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular physiologic monitor system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, analysis, review(s) and report(s) by a physician or other qualified health care professional

Scenario 4.7: Possible Hospital Inpatient ICD-10-PCS Codes³

N/A

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- 2024 The Complete Official Codebook ICD-10-PCS Copyright 2023 Optum360, LLC. 4. Modifiers 26 (professional component) and 51 (multiple procedures) are for physician billing only. See the AMA's *2023 Current Procedural Terminology* for complete descriptions. Always verify appropriate usage with payers.

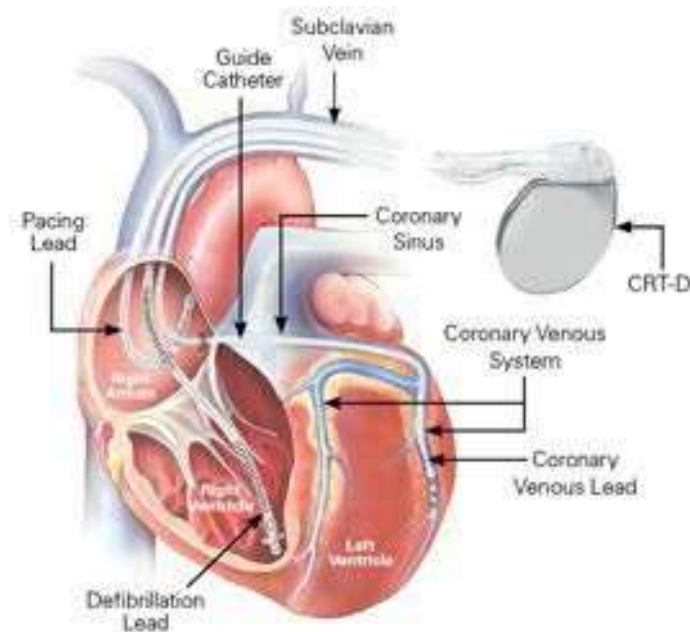


Cardiac Resynchronization Therapy Defibrillators (CRT-Ds)

Cardiac Resynchronization Therapy
Defibrillator (CRT-D) Coding Overview 5-1

Commonly Billed Cardiac
Resynchronization Therapy Defibrillator
(CRT-D) Scenarios 5-2

Cardiac Resynchronization Therapy Defibrillators (CRT-Ds) Coding Overview



CRT-D Implant Procedure

The implant of a CRT-D system typically requires the use of a cardiac resynchronization therapy pulse generator and three electrodes or leads. The three leads monitor and deliver electrical stimulation to the right atrium, right ventricle, and left ventricle. As in conventional implantable cardioverter-defibrillator (ICD) procedures, a defibrillation lead is inserted into the subclavian vein and positioned in the right ventricle. In some cases, the cephalic or internal jugular vein may be used as an alternative to the subclavian vein. In a similar manner, a pacing lead is positioned in the right atrium. In addition, a CRT-D system requires the implantation of a third lead into the coronary venous system of the left ventricle to coordinate, or resynchronize, ventricular contractions. This left ventricular lead is inserted into the subclavian vein, introduced into the coronary sinus, and advanced into a coronary vein located on the exterior wall of the left ventricle.

A STEP-BY-STEP DESCRIPTION OF A TYPICAL INITIAL CRT-D SYSTEM IMPLANT PROCEDURE

1. The subclavian vein is accessed.
2. A pacing lead is inserted into the right atrium, and the defibrillation lead is inserted into the right ventricle, under fluoroscopy.
3. A guide catheter is inserted into the subclavian vein.
4. The coronary sinus (CS) is cannulated with the guide catheter via the coronary sinus ostium (opening).
5. In most cases a venogram is required in order to visualize the coronary venous system prior to inserting the left ventricular lead.
6. A guide wire is inserted through the guide catheter, into the coronary venous system to the desired branch vein.
7. Under fluoroscopy the left ventricular lead (+33225) is positioned over the guide wire and into a branch of the coronary venous system.
8. Lead measurement tests, including pacing and sensing thresholds and lead impedances, are performed.
9. The guide wire is removed and replaced with a finishing wire to stabilize the lead upon removal of the guide catheter.
10. The guide catheter is removed, maintaining LV lead position.
11. The finishing wire is removed, and the left ventricular lead is secured.
12. A CRT-D pulse generator (33249) is connected to the three leads that are in place and a pulse generator pocket is formed.
13. Testing of defibrillation thresholds (93641), including arrhythmia induction, is conducted.
14. Additional testing of all lead combinations is completed.
15. The leads and device are secured, and the pulse generator pocket is closed.

Note: This document is for reference purposes only and does not replace physicians' medical documentation. Scenarios included within this document do not encompass all possible procedures.

Commonly Billed Cardiac Resynchronization Therapy Defibrillator (CRT-D) Scenarios

KEY	+ Add-on code	■ Physician CPT® Codes ¹	■ Hospital Outpatient CPT® Codes ²	■ Possible Hospital Inpatient ICD-10-PCS® Codes ³
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5.1 Initial CRT-D system implant with coronary sinus venogram, with defibrillator threshold testing at the time of implant

Scenario 5.1: Physician CPT® Codes ¹	
33249	Insertion or replacement of permanent implantable defibrillator system with transvenous lead(s), single or dual chamber
+ 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) <i>(List separately in addition to code for primary procedure)</i>
93641-26/51 ⁴	Electrophysiologic evaluation of single or dual chamber pacing cardioverter- defibrillator leads including defibrillation threshold evaluation (induction of arrhythmia, evaluation of sensing and pacing for arrhythmia termination) at time of initial implantation or replacement; with testing of single or dual chamber pacing cardioverter-defibrillator pulse generator <i>Add conscious sedation codes as appropriate (see page 20)</i>
Scenario 5.1: Hospital Outpatient CPT® Codes ²	
33249	Insertion or replacement of permanent implantable defibrillator system with transvenous lead(s), single or dual chamber
+ 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) <i>(List separately in addition to code for primary procedure)</i>
93641	Electrophysiologic evaluation of single or dual chamber pacing cardioverter- defibrillator leads including defibrillation threshold evaluation (induction of arrhythmia, evaluation of sensing and pacing for arrhythmia termination) at time of initial implantation or replacement; with testing of single or dual chamber pacing cardioverter-defibrillator pulse generator
C1882	Cardioverter-defibrillator, other than single or dual chamber <i>Add conscious sedation codes as appropriate (see page 20)</i>
Scenario 5.1: Possible Hospital Inpatient ICD-10-PCS Codes ³	
0JH609Z	Insertion of Cardiac Resynchronization Defibrillator Pulse Generator into Chest Subcutaneous Tissue and Fascia, Open Approach
0JH639Z	Insertion of Cardiac Resynchronization Defibrillator Pulse Generator into Chest Subcutaneous Tissue and Fascia, Percutaneous Approach
0JH809Z	Insertion of Cardiac Resynchronization Defibrillator Pulse Generator into Abdomen Subcutaneous Tissue and Fascia, Open Approach
0JH839Z	Insertion of Cardiac Resynchronization Defibrillator Pulse Generator into Abdomen Subcutaneous Tissue and Fascia, Percutaneous Approach
02HK3KZ	Insertion of Defibrillator Lead into Right Ventricle, Percutaneous Approach
02HK4KZ	Insertion of Defibrillator Lead into Right Ventricle, Percutaneous Endoscopic Approach
02HL3KZ	Insertion of Defibrillator Lead into Left Ventricle, Percutaneous Approach
02HL4KZ	Insertion of Defibrillator Lead into Left Ventricle, Percutaneous Endoscopic Approach
B5060ZZ	Plain Radiography of Right Subclavian Vein using High Osmolar Contrast
B5061ZZ	Plain Radiography of Right Subclavian Vein using Low Osmolar Contrast
B506YZZ	Plain Radiography of Right Subclavian Vein using Other Contrast
B5070ZZ	Plain Radiography of Left Subclavian Vein using High Osmolar Contrast
B5071ZZ	Plain Radiography of Left Subclavian Vein using Low Osmolar Contrast
B507YZZ	Plain Radiography of Left Subclavian Vein using Other Contrast
B5160ZZ	Fluoroscopy of Right Subclavian Vein using High Osmolar Contrast
B5161ZZ	Fluoroscopy of Right Subclavian Vein using Low Osmolar Contrast
B516YZZ	Fluoroscopy of Right Subclavian Vein using Other Contrast
B516ZZZ	Fluoroscopy of Right Subclavian Vein
B5170ZZ	Fluoroscopy of Left Subclavian Vein using High Osmolar Contrast
B5171ZZ	Fluoroscopy of Left Subclavian Vein using Low Osmolar Contrast
B517YZZ	Fluoroscopy of Left Subclavian Vein using Other Contrast
B517ZZZ	Fluoroscopy of Left Subclavian Vein
B51V0ZZ	Fluoroscopy of Veins, other, using High Osmolar Contrast
B51V1ZZ	Fluoroscopy of Veins, other, using Low Osmolar Contrast

5.2 Initial CRT-D implant with atrial and ventricular lead insertion, inability to place LV lead, with defibrillator threshold testing at the time of implant

Scenario 5.2: Physician CPT® Codes¹

33249	Insertion or replacement of permanent implantable defibrillator system with transvenous lead(s), single or dual chamber
+ 33225-53 ⁴	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) <i>(List separately in addition to code for primary procedure)</i>
93641-26/51 ⁴	Electrophysiologic evaluation of single or dual chamber pacing cardioverter- defibrillator leads including defibrillation threshold evaluation (induction of arrhythmia, evaluation of sensing and pacing for arrhythmia termination) at time of initial implantation or replacement; with testing of single or dual chamber pacing cardioverter-defibrillator pulse generator

Add conscious sedation codes as appropriate (see page 20)

Scenario 5.2: Hospital Outpatient CPT® Codes²

33249	Insertion or replacement of permanent implantable defibrillator system with transvenous lead(s), single or dual chamber
+ 33225-53 ⁴	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) <i>(List separately in addition to code for primary procedure)</i>
93641	Electrophysiologic evaluation of single or dual chamber pacing cardioverter- defibrillator leads including defibrillation threshold evaluation (induction of arrhythmia, evaluation of sensing and pacing for arrhythmia termination) at time of initial implantation or replacement; with testing of single or dual chamber pacing cardioverter-defibrillator pulse generator
C1882	Cardioverter-defibrillator, other than single or dual chamber

Add conscious sedation codes as appropriate (see page 20)

Scenario 5.2: Possible Hospital Inpatient ICD-10-PCS Codes³

B5060ZZ	Plain Radiography of Right Subclavian Vein using High Osmolar Contrast
B5061ZZ	Plain Radiography of Right Subclavian Vein using Low Osmolar Contrast
B506YZZ	Plain Radiography of Right Subclavian Vein using Other Contrast
B5070ZZ	Plain Radiography of Left Subclavian Vein using High Osmolar Contrast
B5071ZZ	Plain Radiography of Left Subclavian Vein using Low Osmolar Contrast
B507YZZ	Plain Radiography of Left Subclavian Vein using Other Contrast
B5160ZZ	Fluoroscopy of Right Subclavian Vein using High Osmolar Contrast
B5161ZZ	Fluoroscopy of Right Subclavian Vein using Low Osmolar Contrast
B516YZZ	Fluoroscopy of Right Subclavian Vein using Other Contrast
B516ZZZ	Fluoroscopy of Right Subclavian Vein
B5170ZZ	Fluoroscopy of Left Subclavian Vein using High Osmolar Contrast
B5171ZZ	Fluoroscopy of Left Subclavian Vein using Low Osmolar Contrast
B517YZZ	Fluoroscopy of Left Subclavian Vein using Other Contrast
B517ZZZ	Fluoroscopy of Left Subclavian Vein
0JH609Z	Insertion of Cardiac Resynchronization Defibrillator Pulse Generator into Chest Subcutaneous Tissue and Fascia, Open Approach
0JH639Z	Insertion of Cardiac Resynchronization Defibrillator Pulse Generator into Chest Subcutaneous Tissue and Fascia, Percutaneous Approach
0JH809Z	Insertion of Cardiac Resynchronization Defibrillator Pulse Generator into Abdomen Subcutaneous Tissue and Fascia, Open Approach
0JH839Z	Insertion of Cardiac Resynchronization Defibrillator Pulse Generator into Abdomen Subcutaneous Tissue and Fascia, Percutaneous Approach
02HK3KZ	Insertion of Defibrillator Lead into Right Ventricle, Percutaneous Approach
02HK4KZ	Insertion of Defibrillator Lead into Right Ventricle, Percutaneous Endoscopic Approach
02HL3KZ	Insertion of Defibrillator Lead into Left Ventricle, Percutaneous Approach
02HL4KZ	Insertion of Defibrillator Lead into Left Ventricle, Percutaneous Endoscopic Approach

5.3 Replacement of dual lead CRT-D pulse generator with defibrillator threshold testing at the time of implant

Scenario 5.3: Physician CPT® Codes¹

33263	Removal of implantable defibrillator pulse generator with replacement of implantable defibrillator pulse generator; dual lead system
93641-26/51 ⁴	Electrophysiologic evaluation of single or dual chamber pacing cardioverter- defibrillator leads including defibrillation threshold evaluation (induction of arrhythmia, evaluation of sensing and pacing for arrhythmia termination) at time of initial implantation or replacement; with testing of single or dual chamber pacing cardioverter-defibrillator pulse generator

Add conscious sedation codes as appropriate (see page 20)

Scenario 5.3: Hospital Outpatient CPT® Codes²

33263	Removal of implantable defibrillator pulse generator with replacement of implantable defibrillator pulse generator; dual lead system
93641	Electrophysiologic evaluation of single or dual chamber pacing cardioverter- defibrillator leads including defibrillation threshold evaluation (induction of arrhythmia, evaluation of sensing and pacing for arrhythmia termination) at time of initial implantation or replacement; with testing of single or dual chamber pacing cardioverter-defibrillator pulse generator

C1882 Cardioverter-defibrillator, other than single or dual chamber

Add conscious sedation codes as appropriate (see page 20)

Scenario 5.3: Possible Hospital Inpatient ICD-10-PCS Codes³

0JH609Z	Insertion of Cardiac Resynchronization Defibrillator Pulse Generator into Chest Subcutaneous Tissue and Fascia, Open Approach
0JH639Z	Insertion of Cardiac Resynchronization Defibrillator Pulse Generator into Chest Subcutaneous Tissue and Fascia, Percutaneous Approach
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
0JH809Z	Insertion of Cardiac Resynchronization Defibrillator Pulse Generator into Abdomen Subcutaneous Tissue and Fascia, Open Approach
0JH839Z	Insertion of Cardiac Resynchronization Defibrillator Pulse Generator into Abdomen Subcutaneous Tissue and Fascia, Percutaneous Approach

5.4 Single or dual chamber ICD upgrade to CRT-D (capping previous RA/RV leads, placing a new RA and/or RV lead(s), left ventricular lead insertion, with coronary sinus venogram with defibrillator threshold testing at the time of implant)

Scenario 5.4: Physician CPT® Codes¹

	33249	Insertion or replacement of permanent implantable defibrillator system with transvenous lead(s), single or dual chamber
+	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) <i>(List separately in addition to code for primary procedure)</i>
	33241-51 ⁴	Removal of implantable defibrillator pulse generator only
	93641-26/51 ⁴	Electrophysiologic evaluation of single or dual chamber pacing cardioverter- defibrillator leads including defibrillation threshold evaluation (induction of arrhythmia, evaluation of sensing and pacing for arrhythmia termination) at time of initial implantation or replacement; with testing of single or dual chamber pacing cardioverter-defibrillator pulse generator

Add conscious sedation codes as appropriate (see page 16)

Scenario 5.4: Hospital Outpatient CPT® Codes²

	33249	Insertion or replacement of permanent implantable defibrillator system with transvenous lead(s), single or dual chamber
+	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) <i>(List separately in addition to code for primary procedure)</i>
	33241	Removal of implantable defibrillator pulse generator only
	93641	Electrophysiologic evaluation of single or dual chamber pacing cardioverter- defibrillator leads including defibrillation threshold evaluation (induction of arrhythmia, evaluation of sensing and pacing for arrhythmia termination) at time of initial implantation or replacement; with testing of single or dual chamber pacing cardioverter-defibrillator pulse generator

C1882 Cardioverter-defibrillator, other than single or dual chamber

Add conscious sedation codes as appropriate (see page 16)

Scenario 5.4: Possible Hospital Inpatient ICD-10-PCS Codes³

0JH609Z	Insertion of Cardiac Resynchronization Defibrillator Pulse Generator into Chest Subcutaneous Tissue and Fascia, Open Approach
0JH639Z	Insertion of Cardiac Resynchronization Defibrillator Pulse Generator into Chest Subcutaneous Tissue and Fascia, Percutaneous Approach
0JH809Z	Insertion of Cardiac Resynchronization Defibrillator Pulse Generator into Abdomen Subcutaneous Tissue and Fascia, Open Approach
0JH839Z	Insertion of Cardiac Resynchronization Defibrillator Pulse Generator into Abdomen Subcutaneous Tissue and Fascia, Percutaneous Approach
02HK3KZ	Insertion of Defibrillator Lead into Right Ventricle, Percutaneous Approach
02HK4KZ	Insertion of Defibrillator Lead into Right Ventricle, Percutaneous Endoscopic Approach
02HL3KZ	Insertion of Defibrillator Lead into Left Ventricle, Percutaneous Approach
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
B5060ZZ	Plain Radiography of Right Subclavian Vein using High Osmolar Contrast
B5061ZZ	Plain Radiography of Right Subclavian Vein using Low Osmolar Contrast
B506YZZ	Plain Radiography of Right Subclavian Vein using Other Contrast
B5070ZZ	Plain Radiography of Left Subclavian Vein using High Osmolar Contrast
B5071ZZ	Plain Radiography of Left Subclavian Vein using Low Osmolar Contrast
B507YZZ	Plain Radiography of Left Subclavian Vein using Other Contrast
B5160ZZ	Fluoroscopy of Right Subclavian Vein using High Osmolar Contrast
B5161ZZ	Fluoroscopy of Right Subclavian Vein using Low Osmolar Contrast
B516YZZ	Fluoroscopy of Right Subclavian Vein using Other Contrast
B516ZZZ	Fluoroscopy of Right Subclavian Vein
B5170ZZ	Fluoroscopy of Left Subclavian Vein using High Osmolar Contrast
B5171ZZ	Fluoroscopy of Left Subclavian Vein using Low Osmolar Contrast
B517YZZ	Fluoroscopy of Left Subclavian Vein using Other Contrast
B517ZZZ	Fluoroscopy of Left Subclavian Vein
B51V0ZZ	Fluoroscopy of Veins, other, using High Osmolar Contrast
B51V1ZZ	Fluoroscopy of Veins, other, using Low Osmolar Contrast

5.5 Dual chamber ICD upgrade to CRT-D (using existing RA and RV leads) with left ventricular lead insertion, coronary sinus venogram with defibrillator threshold testing at the time of implant

Scenario 5.5: Physician CPT® Codes¹

33264	Removal of implantable defibrillator pulse generator with replacement of implantable defibrillator pulse generator; multiple lead system
+ 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) <i>(List separately in addition to code for primary procedure)</i>
93641-26/51 ⁴	Electrophysiologic evaluation of single or dual chamber pacing cardioverter- defibrillator leads including defibrillation threshold evaluation (induction of arrhythmia, evaluation of sensing and pacing for arrhythmia termination) at time of initial implantation or replacement; with testing of single or dual chamber pacing cardioverter-defibrillator pulse generator

Add conscious sedation codes as appropriate (see page 20)

Scenario 5.5: Hospital Outpatient CPT® Codes²

33264	Removal of implantable defibrillator pulse generator with replacement of implantable defibrillator pulse generator; multiple lead system
+ 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) <i>(List separately in addition to code for primary procedure)</i>
93641	Electrophysiologic evaluation of single or dual chamber pacing cardioverter- defibrillator leads including defibrillation threshold evaluation (induction of arrhythmia, evaluation of sensing and pacing for arrhythmia termination) at time of initial implantation or replacement; with testing of single or dual chamber pacing cardioverter-defibrillator pulse generator

C1882 Cardioverter-defibrillator, other than single or dual chamber

Add conscious sedation codes as appropriate (see page 20)

Scenario 5.5: Possible Hospital Inpatient ICD-10-PCS Codes³

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
0JH609Z	Insertion of Cardiac Resynchronization Defibrillator Pulse Generator into Chest Subcutaneous Tissue and Fascia, Open Approach
0JH639Z	Insertion of Cardiac Resynchronization Defibrillator Pulse Generator into Chest Subcutaneous Tissue and Fascia, Percutaneous Approach
0JH809Z	Insertion of Cardiac Resynchronization Defibrillator Pulse Generator into Abdomen Subcutaneous Tissue and Fascia, Open Approach
0JH839Z	Insertion of Cardiac Resynchronization Defibrillator Pulse Generator into Abdomen Subcutaneous Tissue and Fascia, Percutaneous Approach
02HK3KZ	Insertion of Defibrillator Lead into Right Ventricle, Percutaneous Approach
02HK4KZ	Insertion of Defibrillator Lead into Right Ventricle, Percutaneous Endoscopic Approach
02HL3KZ	Insertion of Defibrillator Lead into Left Ventricle, Percutaneous Approach
02HL4KZ	Insertion of Defibrillator Lead into Left Ventricle, Percutaneous Endoscopic Approach
B5060ZZ	Plain Radiography of Right Subclavian Vein using High Osmolar Contrast
B5061ZZ	Plain Radiography of Right Subclavian Vein using Low Osmolar Contrast
B506YZZ	Plain Radiography of Right Subclavian Vein using Other Contrast
B5070ZZ	Plain Radiography of Left Subclavian Vein using High Osmolar Contrast
B5071ZZ	Plain Radiography of Left Subclavian Vein using Low Osmolar Contrast
B507YZZ	Plain Radiography of Left Subclavian Vein using Other Contrast
B5160ZZ	Fluoroscopy of Right Subclavian Vein using High Osmolar Contrast
B5161ZZ	Fluoroscopy of Right Subclavian Vein using Low Osmolar Contrast
B516YZZ	Fluoroscopy of Right Subclavian Vein using Other Contrast
B516ZZZ	Fluoroscopy of Right Subclavian Vein
B5170ZZ	Fluoroscopy of Left Subclavian Vein using High Osmolar Contrast
B5171ZZ	Fluoroscopy of Left Subclavian Vein using Low Osmolar Contrast
B517YZZ	Fluoroscopy of Left Subclavian Vein using Other Contrast
B517ZZZ	Fluoroscopy of Left Subclavian Vein
B51V0ZZ	Fluoroscopy of Veins, other, using High Osmolar Contrast
B51V1ZZ	Fluoroscopy of Veins, other, using Low Osmolar Contrast

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5.6 Insertion of left ventricular *transvenous pacing lead only, with coronary sinus venogram, LV lead inserted into previously placed CRT-D device*

Scenario 5.6: Physician CPT® Codes¹

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)

Add conscious sedation codes as appropriate (see page 20)

Scenario 5.6: Hospital Outpatient CPT® Codes²

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)

Add conscious sedation codes as appropriate (see page 20)

Scenario 5.6: Possible Hospital Inpatient ICD-10-PCS Codes³

02H43JZ Insertion of Pacemaker Lead into Coronary Vein, Percutaneous Approach

02PA4MZ Removal of Cardiac Lead from Heart, Percutaneous Endoscopic Approach

02PA0MZ Removal of Cardiac Lead from Heart, Open Approach

02PA3MZ Removal of Cardiac Lead from Heart, Percutaneous Approach

B5060ZZ Plain Radiography of Right Subclavian Vein using High Osmolar Contrast

B5061ZZ Plain Radiography of Right Subclavian Vein using Low Osmolar Contrast

B506YZZ Plain Radiography of Right Subclavian Vein using Other Contrast

B5070ZZ Plain Radiography of Left Subclavian Vein using High Osmolar Contrast

B5071ZZ Plain Radiography of Left Subclavian Vein using Low Osmolar Contrast

B507YZZ Plain Radiography of Left Subclavian Vein using Other Contrast

B5160ZZ Fluoroscopy of Right Subclavian Vein using High Osmolar Contrast

B5161ZZ Fluoroscopy of Right Subclavian Vein using Low Osmolar Contrast

B516YZZ Fluoroscopy of Right Subclavian Vein using Other Contrast

B516ZZZ Fluoroscopy of Right Subclavian Vein

B5170ZZ Fluoroscopy of Left Subclavian Vein using High Osmolar Contrast

B5171ZZ Fluoroscopy of Left Subclavian Vein using Low Osmolar Contrast

B517YZZ Fluoroscopy of Left Subclavian Vein using Other Contrast

B517ZZZ Fluoroscopy of Left Subclavian Vein

B51V0ZZ Fluoroscopy of Veins, other, using High Osmolar Contrast

B51V1ZZ Fluoroscopy of Veins, other, using Low Osmolar Contrast

5.7 CRT-D (3-leads) follow-up (in person)

Scenario 5.7: Physician CPT® Codes¹

93289 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead transvenous implantable defibrillator system, including analysis of heart rhythm derived data elements

or **93284** Programming device evaluation (in person) with iterative adjustments of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; multiple lead transvenous implantable defibrillator system

Scenario 5.7: Hospital Outpatient CPT® Codes²

93289 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead transvenous implantable defibrillator system, including analysis of heart rhythm derived data elements

or **93284** Programming device evaluation (in person) with iterative adjustments of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; multiple lead transvenous implantable defibrillator system

Scenario 5.7: Possible Hospital Inpatient ICD-10-PCS Codes³

4B02XTZ Measurement of Cardiac Defibrillator, External Approach

5.8 CRT-D follow-up (remote)

Scenario 5.8: Physician CPT® Codes¹

93295 Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead implantable defibrillator system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional

93296 Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results

Scenario 5.8: Hospital Outpatient CPT® Codes²

93295 Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead implantable defibrillator system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional

93296 Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results

Scenario 5.8: Possible Hospital Inpatient ICD-10-PCS Codes³

N/A

5.9 CRT-D follow-up (remote) with analysis of Implantable Cardiovascular Physiologic Monitor (ICPM) data

Scenario 5.9: Physician CPT® Codes¹

	93295	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead implantable defibrillator system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional
	93296	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results
and	93297	Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular monitor system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, analysis, review(s) and report(s) by a physician or other qualified health care professional

Scenario 5.9: Hospital Outpatient CPT® Codes²

	93295	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead implantable defibrillator system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional
	93296	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results
and	93297	Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular monitor system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, analysis, review(s) and report(s) by a physician or other qualified health care professional

Scenario 5.9: Possible Hospital Inpatient ICD-10-PCS Codes³

N/A

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6 Subcutaneous Cardiac Rhythm Monitor

Subcutaneous Cardiac Rhythm Monitor
Coding Overview 6-1

Commonly Billed Cardiac Rhythm Monitor
Scenarios 6-5

Subcutaneous Cardiac Rhythm Monitor (SCRM) Coding Overview







The subcutaneous cardiac rhythm monitor is a small, leadless electronic device that monitors, records and transmits data related to cardiac arrhythmias using electrodes on the body of the device to monitor the patient's ECG data. The device continuously monitors the patient's heart rhythm activity automatically recording when specific arrhythmias are detected or when the patient initiates or triggers the device to record. The physician implants the device by making a small incision, dissecting down into the subcutaneous tissue over the left pectoral region, and inserting the device using the manufacturer provided equipment. Proper sensing performance is verified prior to closing the incision. Programming of the device is included in this service.

A STEP-BY-STEP DESCRIPTION OF A TYPICAL SCRM IMPLANT PROCEDURE







1. Select an insertion site, usually on the left pectoral region, and prepare the area using local anesthetic and aseptic procedures.
2. Make a small incision and dissect under the surface of the skin into the subcutaneous tissue to create a pocket for the monitor.
3. Use the manufacturer provided equipment to insert the monitor into the subcutaneous tissue pocket.
4. Verify R-wave sensing performance requirements are met. Reposition the monitor if sensing performance requirements are not met.
5. Close the incision.

Note: This document is for reference purposes only and does not replace physicians' medical documentation. Scenarios included within this document do not encompass all possible procedures.







Commonly Billed Subcutaneous Cardiac Rhythm Monitor Scenarios

KEY	 Add-on code Codes³	 Physician CPT® Codes¹	 Hospital Outpatient CPT® Codes²	 Possible Hospital Inpatient ICD-10-PCS®








6.1 Insertion of Subcutaneous Cardiac Rhythm Monitor

	Scenario 6.1: Physician CPT® Codes¹
	33285 Insertion, subcutaneous cardiac rhythm monitor, including programming E0616 Implantable cardiac event recorder with memory, activator, and programmer
	Scenario 6.1: Hospital Outpatient CPT® Codes²
	33285 Insertion, subcutaneous cardiac rhythm monitor, including programming C1764 Event recorder, cardiac (implantable)
	Scenario 6.1: Possible Hospital Inpatient ICD-10-PCS Codes³
	0JH632Z Insertion of Monitoring Device into Chest Subcutaneous Tissue and Fascia, Percutaneous Approach

6.2 Removal of Subcutaneous Cardiac Rhythm Monitor

	Scenario 6.1: Physician CPT® Codes¹
	33286 Removal, subcutaneous cardiac rhythm monitor
	Scenario 6.1: Hospital Outpatient CPT® Codes²
	33286 Removal, subcutaneous cardiac rhythm monitor
	Scenario 6.1: Possible Hospital Inpatient ICD-10-PCS Codes³
	0JPT32Z Removal of Monitoring Device from Trunk Subcutaneous Tissue and Fascia, Percutaneous Approach

6.2 Replacement of Subcutaneous Cardiac Rhythm Monitor

	Scenario 6.2: Physician CPT® Codes¹
	33286 59 Removal, subcutaneous cardiac rhythm monitor, including programming
with	 33285 Insertion, subcutaneous cardiac rhythm monitor system, includes programming
	Scenario 6.2: Hospital Outpatient CPT® Codes²
	33286 59 Removal, subcutaneous cardiac rhythm monitor,
with	 33285 Insertion, subcutaneous cardiac rhythm monitor system, includes programming
	Scenario 6.2: Possible Hospital Inpatient ICD-10-PCS Codes³
	NA

63 **SCRM** *In-person analysis off Subcutaneous Cardiovascular Rhythm Monitor (SCRM)*

Scenario 6.3: Physician CPT® Codes¹

- 93285 Programming device evaluation, (in person) with iterative adjustment of the device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; implantable cardiovascular physiologic monitor system

- or 93291 Interrogation device evaluation, (in-person) with analysis, review and report by a physician or other qualified health care professional; implantable cardiovascular physiologic monitor system

Scenario 6.3: Hospital Outpatient CPT® Codes²

- 93285 Programming device evaluation, (in person) with iterative adjustment of the device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional

- or 93291 Interrogation device evaluation, (in-person) with analysis, review and report by a physician or other qualified health care professional; implantable cardiovascular physiologic monitor system

Scenario 6.3: Possible Hospital Inpatient ICD-10-PCS Codes³

N/A

64 **SCRM** *Remote analysis of Subcutaneous Cardiovascular Rhythm Monitor (SCRM)*

Scenario 6.4: Physician CPT® Codes¹

- 93298 Interrogation device evaluation(s), (remote) up to 30 days; subcutaneous cardiac rhythm monitor system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results including analysis of recorded heart rhythm data, analysis, review(s) and report(s) by a physician or other qualified health care professional

Scenario 6.4: Hospital Outpatient CPT® Codes²

- 93298 Interrogation device evaluation(s), (remote) up to 30 days; subcutaneous cardiac rhythm monitor system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results including analysis of recorded heart rhythm data, analysis, review(s) and report(s) by a physician or other qualified health care professional

Scenario 6.4: Possible Hospital Inpatient ICD-10-PCS Codes³

N/A

65 **SCRM** *Remote Programming of Subcutaneous Cardiovascular Rhythm Monitor (SCRM)***Scenario 6.5: Physician CPT® Codes¹**

0650T Programming device evaluation, (remote) of subcutaneous cardiac rhythm monitor system, with iterative adjustment of the implantable device to test the function of the device and select optimal permanently programmed values with analysis, review and report by a physician or other qualified health care professional

Scenario 6.5: Hospital Outpatient CPT® Codes²

0650T Programming device evaluation, (remote) of subcutaneous cardiac rhythm monitor system, with iterative adjustment of the implantable device to test the function of the device and select optimal permanently programmed values with analysis, review and report by a physician or other qualified health care professional

Scenario 6.5: Possible Hospital Inpatient ICD-10-PCS Codes³

N/A

*The new Category III CPT® code will be effective July 1, 2021. The existence of a Category III CPT® code does not guarantee payment. Individual payers will determine coverage and payment.

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Find C-codes for CRM devices at <http://www.bostonscientific.com/en-US/reimbursement/ccode-finder.html>. Also find C-codes for CRM devices and related accessories (e.g., introducers, catheters, sheaths) at <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/HospitalOutpatientPPS/Downloads/Compleat-list-DeviceCats-OPPS.pdf>.
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- Modifiers 26 (professional component) and 51 (multiple procedures) are for physician billing only. See the AMA's *2024 Current Procedural Terminology* for complete descriptions. Always verify appropriate usage with payers.

7 Intracardiac Electrophysiology and Related Scenarios

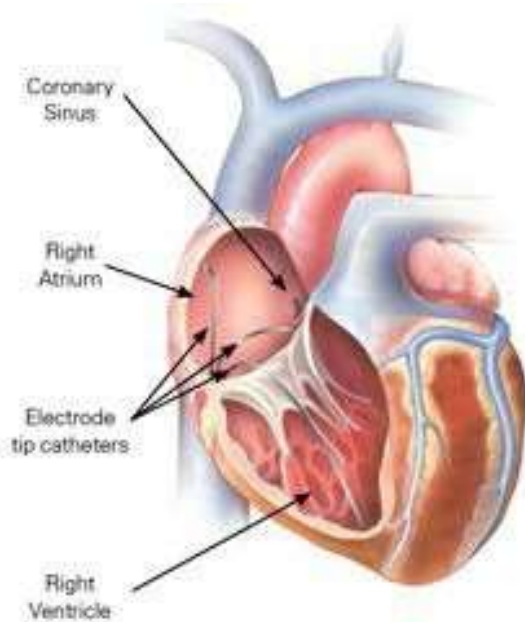
Intracardiac Electrophysiology Study
Coding Overview 7-1

Commonly Billed Intracardiac
Electrophysiology Study Scenarios 7-2

Intracardiac Catheter Ablation Coding
Overview 7-7

Commonly Billed Intracardiac Catheter
Ablation Scenarios 7-8

Intracardiac Electrophysiology Study Coding Overview



Electrophysiology (EP) Studies

Electrophysiology (EP) studies are done to assess a patient's cardiac arrhythmias. These studies are invasive diagnostic medical procedures requiring the insertion of several electrode catheters. EP studies are done to determine if an arrhythmia is the cause of the patient's clinical symptoms and to assess the mechanism of the cardiac arrhythmia.

EP studies "include the insertion and repositioning of electrode catheters, recording of electrograms before and during pacing or programmed stimulation of multiple locations in the heart, analysis of recorded information, and report of the procedure.

Electrophysiology studies are most often performed with three or more electrode catheters."¹

The studies are performed using ECG, blood pressure, and pulse oximetry monitoring. Signal processing and amplification equipment to display and assess the intracardiac electrical recordings are used.

Intracardiac electrophysiology studies are coded using a variety of CPT® codes in the 93600-93662 CPT® code range.

A STEP-BY-STEP DESCRIPTION OF A TYPICAL COMPREHENSIVE INTRACARDIAC ELECTROPHYSIOLOGY STUDY

1. Introducer sheaths are inserted in the femoral vein.
2. Multiple electrode catheters are inserted into the sheaths and, under fluoroscopic guidance, are advanced into the right atrium, His bundle region, and right ventricle.
3. Once in position, the electrode catheters are attached to a monitor allowing display of the intracardiac electrograms obtained from the catheter.
4. Right atrial pacing and recording, His bundle recording, and right ventricular pacing and recording are performed. The catheters may be repositioned numerous times and pacing and recording are done at various areas within the heart.
5. If an arrhythmia is induced, it may be terminated by rapidly pacing the heart or by defibrillation or cardioversion.
6. Once all pacing and recording is completed, the catheters are withdrawn, and the introducer sheaths are removed.
7. The physician documents the procedure and results of the study along with any recommendations for treatment.

Note: This document is for reference purposes only and does not replace physicians' medical documentation.

Scenarios included within this document do not encompass all possible procedures.

Commonly Billed Intracardiac Electrophysiology Study Scenarios

KEY



Add-on code

Physician CPT® Codes¹Hospital Outpatient CPT® Codes²Possible Hospital Inpatient ICD-10-PCS® Codes³

7.1 Comprehensive EP Study *with induction or attempted induction of arrhythmia*

Scenario 7.1: Physician CPT® Codes¹

93620-26⁴ Comprehensive electrophysiologic evaluation including insertion and repositioning of multiple electrode catheters with induction or attempted induction of arrhythmia; with right atrial pacing and recording, right ventricular pacing and recording, His bundle recording

Add conscious sedation codes as appropriate (see page 20)

Scenario 7.1: Hospital Outpatient CPT® Codes²

93620 Comprehensive electrophysiologic evaluation including insertion and repositioning of multiple electrode catheters with induction or attempted induction of arrhythmia; with right atrial pacing and recording, right ventricular pacing and recording, His bundle recording

Add conscious sedation codes as appropriate (see page 20)

Scenario 7.1: Possible Hospital Inpatient ICD-10-PCS Codes³

02K80ZZ Map Conduction Mechanism, Open Approach

02K83ZZ Map Conduction Mechanism, Percutaneous Approach

02K84ZZ Map Conduction Mechanism, Percutaneous Endoscopic Approach

4A023FZ Measurement and monitoring, cardiac, percutaneous, electrical activity

7.2 Comprehensive EP Study *with induction or attempted induction of arrhythmia and dual chamber ICD implant with defibrillation threshold testing at implant*

Scenario 7.2: Physician CPT® Codes¹

33249 Insertion or replacement of permanent implantable defibrillator system with transvenous lead(s), single or dual chamber

93641-26/51⁴ Electrophysiologic evaluation of single or dual chamber pacing cardioverter- defibrillator leads including defibrillation threshold evaluation (induction of arrhythmia, evaluation of sensing and pacing for arrhythmia termination) at time of initial implantation or replacement; with testing of single or dual chamber pacing cardioverter-defibrillator pulse generator

93620-51⁴ Comprehensive electrophysiologic evaluation including insertion and repositioning of multiple electrode catheters with induction or attempted induction of arrhythmia; with right atrial pacing and recording, right ventricular pacing and recording, His bundle recording

Add conscious sedation codes as appropriate (see page 20)

Scenario 7.2: Hospital Outpatient CPT® Codes²

33249 Insertion or replacement of permanent implantable defibrillator system with transvenous lead(s), single or dual chamber

93641 Electrophysiologic evaluation of single or dual chamber pacing cardioverter- defibrillator leads including defibrillation threshold evaluation (induction of arrhythmia, evaluation of sensing and pacing for arrhythmia termination) at time of initial implantation or replacement; with testing of single or dual chamber pacing cardioverter-defibrillator pulse generator

93620 Comprehensive electrophysiologic evaluation including insertion and repositioning of multiple electrode catheters with induction or attempted induction of arrhythmia; with right atrial pacing and recording, right ventricular pacing and recording, His bundle recording

Add conscious sedation codes as appropriate (see page 20)

Scenario 7.2: Possible Hospital Inpatient ICD-10-PCS Codes³

02H63KZ	Insertion of Defibrillator Lead into Right Atrium, Percutaneous Approach
02H64KZ	Insertion of Defibrillator Lead into Right Atrium, Percutaneous Endoscopic Approach
02HK3KZ	Insertion of Defibrillator Lead into Right Ventricle, Percutaneous Approach
02HK4KZ	Insertion of Defibrillator Lead into Right Ventricle, Percutaneous Endoscopic Approach
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
02K80ZZ	Map Conduction Mechanism, Open Approach
02K83ZZ	Map Conduction Mechanism, Percutaneous Approach
02K84ZZ	Map Conduction Mechanism, Percutaneous Endoscopic Approach
4A023FZ	Measurement and monitoring, cardiac, percutaneous, electrical activity
B5060ZZ	Plain Radiography of Right Subclavian Vein using High Osmolar Contrast
B5061ZZ	Plain Radiography of Right Subclavian Vein using Low Osmolar Contrast
B506YZZ	Plain Radiography of Right Subclavian Vein using Other Contrast
B5070ZZ	Plain Radiography of Left Subclavian Vein using High Osmolar Contrast
B5071ZZ	Plain Radiography of Left Subclavian Vein using Low Osmolar Contrast
B507YZZ	Plain Radiography of Left Subclavian Vein using Other Contrast
B5160ZZ	Fluoroscopy of Right Subclavian Vein using High Osmolar Contrast
B5161ZZ	Fluoroscopy of Right Subclavian Vein using Low Osmolar Contrast
B516YZZ	Fluoroscopy of Right Subclavian Vein using Other Contrast
B516ZZZ	Fluoroscopy of Right Subclavian Vein
B5170ZZ	Fluoroscopy of Left Subclavian Vein using High Osmolar Contrast
B5171ZZ	Fluoroscopy of Left Subclavian Vein using Low Osmolar Contrast
B517YZZ	Fluoroscopy of Left Subclavian Vein using Other Contrast
B517ZZZ	Fluoroscopy of Left Subclavian Vein

7.3 Comprehensive EP Study *with pacing and recording of multiple sites in the right atrium, right ventricle, His bundle and left atrium with induction of arrhythmia*

Scenario 7.3: Physician CPT® Codes¹

93620-26 ⁴	Comprehensive electrophysiologic evaluation including insertion and repositioning of multiple electrode catheters with induction or attempted induction of arrhythmia; with right atrial pacing and recording, right ventricular pacing and recording, His bundle recording
+ 93621-26 ⁴	Comprehensive electrophysiologic evaluation including insertion and repositioning of multiple electrode catheters with induction or attempted induction of arrhythmia; with left atrial pacing and recording from coronary sinus or left atrium <i>(List separately in addition to code for primary procedure)</i>

Add conscious sedation codes as appropriate (see page 20)

Scenario 7.3: Hospital Outpatient CPT® Codes²

93620	Comprehensive electrophysiologic evaluation including insertion and repositioning of multiple electrode catheters with induction or attempted induction of arrhythmia; with right atrial pacing and recording, right ventricular pacing and recording, His bundle recording
+ 93621	Comprehensive electrophysiologic evaluation including insertion and repositioning of multiple electrode catheters with induction or attempted induction of arrhythmia; with left atrial pacing and recording from coronary sinus or left atrium <i>(List separately in addition to code for primary procedure)</i>

Add conscious sedation codes as appropriate (see page 20)

Scenario 7.3: Possible Hospital Inpatient ICD-10-PCS Codes³

02K80ZZ	Map Conduction Mechanism, Open Approach
02K83ZZ	Map Conduction Mechanism, Percutaneous Approach
02K84ZZ	Map Conduction Mechanism, Percutaneous Endoscopic Approach
4A023FZ	Measurement and monitoring, cardiac, percutaneous, electrical activity

7.4 Partial (limited) EP Study *pacing and recording in the RA and His bundle***Scenario 7.4: Physician CPT® Codes¹**

93600-26 ⁴	Bundle of His recording
93602-26 ⁴	Intra-atrial recording
93610-26 ⁴	Intra-atrial pacing

Add conscious sedation codes as appropriate (see page 20)

Scenario 7.4: Hospital Outpatient CPT® Codes²

93600	Bundle of His recording
93602	Intra-atrial recording
93610	Intra-atrial pacing

Add conscious sedation codes as appropriate (see page 20)

Scenario 7.4: Possible Hospital Inpatient ICD-10-PCS Codes³

4A023FZ	Measurement of Cardiac Rhythm, Percutaneous Approach
02K80ZZ	Map Conduction Mechanism, Open Approach
02K83ZZ	Map Conduction Mechanism, Percutaneous Approach
02K84ZZ	Map Conduction Mechanism, Percutaneous Endoscopic Approach

7.5 Follow-up EP Study *with attempted induction of arrhythmia to assess the efficacy of medication for suppression of arrhythmia***Scenario 7.5: Physician CPT® Codes¹**

93624-26 ⁴	Electrophysiologic follow-up study with pacing and recording to test effectiveness of therapy, including induction or attempted induction of arrhythmia
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Add conscious sedation codes as appropriate (see page 20)

Scenario 7.5: Hospital Outpatient CPT® Codes²

93624	Electrophysiologic follow-up study with pacing and recording to test effectiveness of therapy, including induction or attempted induction of arrhythmia
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Add conscious sedation codes as appropriate (see page 20)

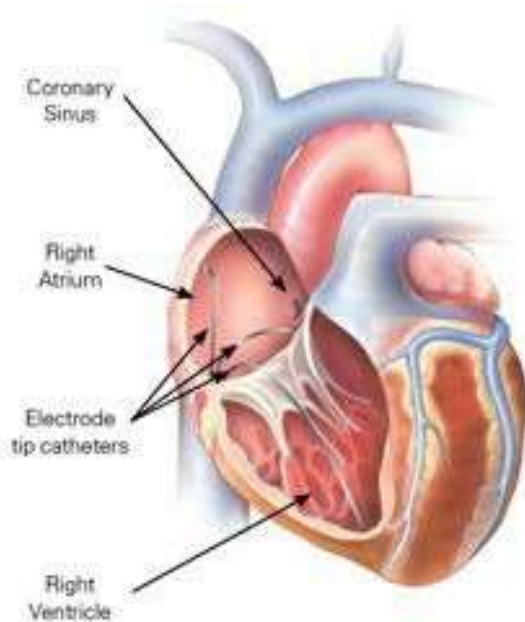
Scenario 7.5: Possible Hospital Inpatient ICD-10-PCS Codes³

4A023FZ	Measurement of Cardiac Rhythm, Percutaneous Approach
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Note: Some of the codes presented above may be used to code for a variety of procedures (diagnostic and therapeutic) employed in the field of electrophysiology, including atrial fibrillation, atrial flutter, AV Node, SVT and VT ablations.

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2. As of January 1, 2005, the Centers for Medicare and Medicaid Services (CMS) require hospitals to report all device category codes (C-codes) on Medicare outpatient claims when medical devices are used in conjunction with procedure(s) billed.
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Intracardiac Catheter Ablation Coding Overview



Intracardiac Catheter Ablation

Intracardiac catheter ablation is a procedure in which electrode tip catheters are placed in the heart and energy is delivered through the catheter to destroy cardiac tissue that is either causing an arrhythmia or allowing an arrhythmia to perpetuate.

The ablation catheter is placed adjacent to the cardiac tissue responsible for the arrhythmia, and the tissue is destroyed using radiofrequency electrical energy, microwave, or extreme cold temperatures (cryoablation). The ablation creates a block through which the electrical impulses can no longer cross and is intended to restore the normal electrical pathways of the heart, allowing it to beat normally again. Arrhythmias arising in the:

- » Right atrium or right ventricle are ablated with catheters placed transvenously in the appropriate cardiac chamber
- » Left atrium can be ablated using a catheter placed via a retrograde aortic approach (through the aorta, across the aortic valve, and through the mitral valve) or, more commonly, via a transseptal approach¹ (across the intra-atrial septum).

A STEP-BY-STEP DESCRIPTION OF A TYPICAL CATHETER ABLATION

1. Introducer sheaths are placed in the femoral vein.
2. Under fluoroscopic guidance, multiple electrode catheters are advanced through the sheaths into the heart.
3. The catheters are attached to a recording device allowing display of the intracardiac electrograms obtained from the catheter tip.
4. An arrhythmia is induced (or attempted), and the origin of the tachycardia is confirmed and localized
5. The ablation catheter tip is moved to the arrhythmogenic focus or pathway guided by the electrical recordings and fluoroscopy.
6. Radiofrequency electrical energy, microwave energy, or cryoablation is applied to the cardiac tissue, ablating the focus or pathway.
7. Post-ablation testing is performed to verify that the tachycardia cannot be induced.
8. The catheters and sheaths are withdrawn.

Note: This document is for reference purposes only and does not replace physicians' medical documentation. Scenarios included within this document do not encompass all possible procedures.

Commonly Billed Intracardiac Catheter Ablation Scenarios

KEY	+ Add-on code	■ Physician CPT® Codes ¹	■ Hospital Outpatient CPT® Codes ²	■ Possible Hospital Inpatient ICD-10-PCS® Codes ³
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7.6 Comprehensive EP Study *with induction of arrhythmia, mapping, AV node ablation and insertion of dual chamber pacemaker*

Scenario 7.6: Physician CPT® Codes¹

93620-26 ⁴	Comprehensive electrophysiologic evaluation including insertion and repositioning of multiple electrode catheters with induction or attempted induction of arrhythmia; with right atrial pacing and recording, right ventricular pacing and recording, His bundle recording
+ 93609-26 ⁴	Intraventricular and/or intra-atrial mapping of tachycardia site(s) with catheter manipulation to record from multiple sites to identify origin of tachycardia <i>(List separately in addition to code for primary procedure)</i>
93650	Intracardiac catheter ablation of atrioventricular node function, atrioventricular conduction for creation of complete heart block, with or without temporary pacemaker placement
33208-51 ⁴	Insertion of new or replacement of permanent pacemaker with transvenous electrodes; atrial and ventricular

Add conscious sedation codes as appropriate (see page 20)

Scenario 6.6: Hospital Outpatient CPT® Codes²

93620	Comprehensive electrophysiologic evaluation including insertion and repositioning of multiple electrode catheters with induction or attempted induction of arrhythmia; with right atrial pacing and recording, right ventricular pacing and recording, His bundle recording
+ 93609	Intraventricular and/or intra-atrial mapping of tachycardia site(s) with catheter manipulation to record from multiple sites to identify origin of tachycardia <i>(List separately in addition to code for primary procedure)</i>
93650	Intracardiac catheter ablation of atrioventricular node function, atrioventricular conduction for creation of complete heart block, with or without temporary pacemaker placement
33208	Insertion of new or replacement of permanent pacemaker with transvenous electrodes; atrial and ventricular

Add conscious sedation codes as appropriate (see page 20)

Scenario 7.6: Possible Hospital Inpatient ICD-10-PCS Codes³

4A023FZ	Measurement of Cardiac Rhythm, Percutaneous Approach
02K80ZZ	Map Conduction Mechanism, Open Approach
02K83ZZ	Map Conduction Mechanism, Percutaneous Approach
02K84ZZ	Map Conduction Mechanism, Percutaneous Endoscopic Approach
02H64JZ	Insertion of Pacemaker Lead into Right Atrium, Percutaneous Endoscopic Approach
02HK4JZ	Insertion of Pacemaker Lead into Right Ventricle, Percutaneous Endoscopic Approach
02HK3JZ	Insertion of Pacemaker Lead into Right Ventricle, Percutaneous Approach
02HK4JZ	Insertion of Pacemaker Lead into Right Ventricle, Percutaneous Endoscopic Approach
0JH606Z	Insertion of Pacemaker, Dual Chamber into Chest Subcutaneous Tissue and Fascia, Open Approach
0JH636Z	Insertion of Pacemaker, Dual Chamber into Chest Subcutaneous Tissue and Fascia, Percutaneous Approach
0JH806Z	Insertion of Pacemaker, Dual Chamber into Abdomen Subcutaneous Tissue and Fascia, Open Approach
0JH836Z	Insertion of Pacemaker, Dual Chamber into Abdomen Subcutaneous Tissue and Fascia, Percutaneous Approach

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7.7 AV node ablation with CRT-D implant and DFT testing

Scenario 7.7: Physician CPT® Codes¹

33249	Insertion or replacement of permanent implantable defibrillator system with transvenous lead(s), single or dual chamber
+ 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) <i>(List separately in addition to code for primary procedure)</i>
93641-26/51 ⁴	Electrophysiologic evaluation of single or dual chamber pacing cardioverter- defibrillator leads including defibrillation threshold evaluation (induction of arrhythmia, evaluation of sensing and pacing for arrhythmia termination) at time of initial implantation or replacement; with testing of single or dual chamber pacing cardioverter-defibrillator pulse generator
93650	Intracardiac catheter ablation of atrioventricular node function, atrioventricular conduction for creation of complete heart block, with or without temporary pacemaker placement

Add conscious sedation codes as appropriate (see page 20)

Scenario 7.7: Hospital Outpatient CPT® Codes²

33249	Insertion or replacement of permanent implantable defibrillator system with transvenous lead(s), single or dual chamber
+ 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) <i>(List separately in addition to code for primary procedure)</i>
93641	Electrophysiologic evaluation of single or dual chamber pacing cardioverter- defibrillator leads including defibrillation threshold evaluation (induction of arrhythmia, evaluation of sensing and pacing for arrhythmia termination) at time of initial implantation or replacement; with testing of single or dual chamber pacing cardioverter-defibrillator pulse generator
93650	Intracardiac catheter ablation of atrioventricular node function, atrioventricular conduction for creation of complete heart block, with or without temporary pacemaker placement

Add conscious sedation codes as appropriate (see page 20)

Scenario 7.7: Possible Hospital Inpatient ICD-10-PCS Codes³

0JH609Z	Insertion of Cardiac Resynchronization Defibrillator Pulse Generator into Chest Subcutaneous Tissue and Fascia, Open Approach
0JH639Z	Insertion of Cardiac Resynchronization Defibrillator Pulse Generator into Chest Subcutaneous Tissue and Fascia, Percutaneous Approach
0JH809Z	Insertion of Cardiac Resynchronization Defibrillator Pulse Generator into Abdomen Subcutaneous Tissue and Fascia, Open Approach
0JH839Z	Insertion of Cardiac Resynchronization Defibrillator Pulse Generator into Abdomen Subcutaneous Tissue and Fascia, Percutaneous Approach
02HK3KZ	Insertion of Defibrillator Lead into Right Ventricle, Percutaneous Approach
02HK4KZ	Insertion of Defibrillator Lead into Right Ventricle, Percutaneous Endoscopic Approach
02HL3KZ	Insertion of Defibrillator Lead into Left Ventricle, Percutaneous Approach
02HL4KZ	Insertion of Defibrillator Lead into Left Ventricle, Percutaneous Endoscopic Approach
B5060ZZ	Plain Radiography of Right Subclavian Vein using High Osmolar Contrast
B5061ZZ	Plain Radiography of Right Subclavian Vein using Low Osmolar Contrast
B506YZZ	Plain Radiography of Right Subclavian Vein using Other Contrast
B5070ZZ	Plain Radiography of Left Subclavian Vein using High Osmolar Contrast
B5071ZZ	Plain Radiography of Left Subclavian Vein using Low Osmolar Contrast
B507YZZ	Plain Radiography of Left Subclavian Vein using Other Contrast
B5160ZZ	Fluoroscopy of Right Subclavian Vein using High Osmolar Contrast
B5161ZZ	Fluoroscopy of Right Subclavian Vein using Low Osmolar Contrast
B516YZZ	Fluoroscopy of Right Subclavian Vein using Other Contrast
B516ZZZ	Fluoroscopy of Right Subclavian Vein
B5170ZZ	Fluoroscopy of Left Subclavian Vein using High Osmolar Contrast
B5171ZZ	Fluoroscopy of Left Subclavian Vein using Low Osmolar Contrast
B517YZZ	Fluoroscopy of Left Subclavian Vein using Other Contrast
B517ZZZ	Fluoroscopy of Left Subclavian Vein
02583ZZ	Destruction of conduction mechanism, percutaneous approach

7.8 Comprehensive Electrophysiology Study with Ablation for AVNRT (SVT Ablation)

Scenario 7.8: Physician CPT® Codes¹

93653	Comprehensive electrophysiologic evaluation including insertion and repositioning of multiple electrode catheters with induction or attempted induction of an arrhythmia with right atrial pacing and recording, and intracardiac catheter ablation of arrhythmogenic focus including intracardiac 3D mapping, right ventricular pacing and recording, left atrial pacing and recording from the coronary sinus or left atrium and His bundle recording (when performed); with treatment of supraventricular tachycardia (SVT) by ablation of fast or slow atrioventricular pathway, accessory atrioventricular connection, cavo-tricuspid isthmus or other single atrial focus or source of atrial re-entry
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Add conscious sedation codes as appropriate (see page 20)

Scenario 7.8: Hospital Outpatient CPT® Codes²

93653	Comprehensive electrophysiologic evaluation including insertion and repositioning of multiple electrode catheters with induction or attempted induction of an arrhythmia with right atrial pacing and recording, and intracardiac catheter ablation of arrhythmogenic focus including intracardiac 3D mapping, right ventricular pacing and recording, left atrial pacing and recording from the coronary sinus or left atrium and His bundle recording (when performed); with treatment of supraventricular tachycardia (SVT) by ablation of fast or slow atrioventricular pathway, accessory atrioventricular connection, cavo-tricuspid isthmus or other single atrial focus or source of atrial re-entry
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Add conscious sedation codes as appropriate (see page 20)

Scenario 7.8: Possible Hospital Inpatient ICD-10-PCS Codes³

4A023FZ	Measurement of Cardiac Rhythm, Percutaneous Approach
02583ZZ	Destruction of Conduction Mechanism, Percutaneous Approach
02583ZF	Destruction of Conduction Mechanism, using irreversible electroporation, percutaneous approach
02K80ZZ	Map Conduction Mechanism, Open Approach
02K83ZZ	Map Conduction Mechanism, Percutaneous Approach
02K84ZZ	Map Conduction Mechanism, Percutaneous Endoscopic Approach

7.9 Comprehensive EP study and ablation of single accessory pathway (SVT ablation)

Scenario 7.9: Physician CPT® Codes¹

93653 Comprehensive electrophysiologic evaluation including insertion and repositioning of multiple electrode catheters with induction or attempted induction of an arrhythmia with right atrial pacing and recording, and intracardiac catheter ablation of arrhythmogenic focus including intracardiac 3D mapping, right ventricular pacing and recording, left atrial pacing and recording from the coronary sinus or left atrium and His bundle recording (when performed); with treatment of supraventricular tachycardia (SVT) by ablation of fast or slow atrioventricular pathway, accessory atrioventricular connection, cavo-tricuspid isthmus or other single atrial focus or source of atrial re-entry

Add conscious sedation codes as appropriate(see page 20)

Scenario 7.9: Hospital Outpatient CPT® Codes²

93653 Comprehensive electrophysiologic evaluation including insertion and repositioning of multiple electrode catheters with induction or attempted induction of an arrhythmia with right atrial pacing and recording, and intracardiac catheter ablation of arrhythmogenic focus including intracardiac 3D mapping, right ventricular pacing and recording, left atrial pacing and recording from the coronary sinus or left atrium and His bundle recording (when performed); with treatment of supraventricular tachycardia (SVT) by ablation of fast or slow atrioventricular pathway, accessory atrioventricular connection, cavo-tricuspid isthmus or other single atrial focus or source of atrial re-entry

Add conscious sedation codes as appropriate(see page 20)

Scenario 7.9: Possible Hospital Inpatient ICD-10-PCS Codes³

4A023FZ	Measurement of Cardiac Rhythm, Percutaneous Approach
02583ZZ	Destruction of conduction mechanism, percutaneous approach
02583ZF	Destruction of conduction mechanism using irreversible electroporation,percutaneous approach Effective 4/1/2024
02K80ZZ	Map Conduction Mechanism, Open Approach
02K83ZZ	Map Conduction Mechanism, Percutaneous Approach
02K84ZZ	Map Conduction Mechanism, Percutaneous Endoscopic Approach

7.10 SVT ablation with comprehensive EP study, mapping and intracardiac echocardiography (ICE)

Scenario 7.10: Physician CPT® Codes¹

93653	Comprehensive electrophysiologic evaluation including insertion and repositioning of multiple electrode catheters with induction or attempted induction of an arrhythmia with right atrial pacing and recording, and intracardiac catheter ablation of arrhythmogenic focus including intracardiac 3D mapping, right ventricular pacing and recording, left atrial pacing and recording from the coronary sinus or left atrium and His bundle recording (when performed); with treatment of supraventricular tachycardia (SVT) by ablation of fast or slow atrioventricular pathway, accessory atrioventricular connection, cavo-tricuspid isthmus or other single atrial focus or source of atrial re-entry
+ 93662-26 ⁴	Intracardiac echocardiography during therapeutic/diagnostic intervention, including imaging supervision and interpretation (List separately in addition to code for primary procedure)

Add conscious sedation codes as appropriate (see page 20)

Scenario 7.10: Hospital Outpatient CPT® Codes²

93653	Comprehensive electrophysiologic evaluation including insertion and repositioning of multiple electrode catheters with induction or attempted induction of an arrhythmia with right atrial pacing and recording, and intracardiac catheter ablation of arrhythmogenic focus including intracardiac 3D mapping, right ventricular pacing and recording, left atrial pacing and recording from the coronary sinus or left atrium and His bundle recording (when performed); with treatment of supraventricular tachycardia (SVT) by ablation of fast or slow atrioventricular pathway, accessory atrioventricular connection, cavo-tricuspid isthmus or other single atrial focus or source of atrial re-entry
+ 93662	Intracardiac echocardiography during therapeutic/diagnostic intervention, including imaging supervision and interpretation (List separately in addition to code for primary procedure)

Add conscious sedation codes as appropriate (see page 20)

Scenario 7.10: Possible Hospital Inpatient ICD-10-PCS Codes³

4A023FZ	Measurement of Cardiac Rhythm, Percutaneous Approach
02K80ZZ	Map Conduction Mechanism, Open Approach
02K83ZZ	Map Conduction Mechanism, Percutaneous Approach
02K84ZZ	Map Conduction Mechanism, Percutaneous Endoscopic Approach
B244YZZ	Ultrasonography of Right Heart using Other Contrast
B244ZZZ	Ultrasonography of Right Heart
B245YZZ	Ultrasonography of Left Heart using Other Contrast
B245ZZZ	Ultrasonography of Left Heart
B246YZZ	Ultrasonography of Right and Left Heart using Other Contrast
B246ZZZ	Ultrasonography of Right and Left Heart
02583ZZ	Destruction of conduction mechanism, percutaneous approach
02583ZF	Destruction of conduction mechanism using irreversible electroporation, percutaneous approach

7.11 VT ablation with 3D mapping and intracardiac echocardiography (ICE)

Scenario 7.11: Physician CPT® Codes¹

93654 Comprehensive electrophysiologic evaluation including insertion and repositioning of multiple electrode catheters, induction or attempted induction of an arrhythmia with right atrial pacing and recording, and catheter ablation of arrhythmogenic focus, including intracardiac 3D mapping, right ventricular pacing and recording, left atrial pacing and recording from coronary sinus or left atrium, and His bundle recording (when performed); with treatment of ventricular tachycardia or focus of ventricular ectopy including left ventricular pacing and recording (when performed)

+ **93662-26⁴** Intracardiac echocardiography during therapeutic/diagnostic intervention, including imaging supervision and interpretation (*List separately in addition to code for primary procedure*)

Add conscious sedation codes as appropriate (see page 20)

Scenario 7.11: Hospital Outpatient CPT® Codes²

93654 Comprehensive electrophysiologic evaluation including insertion and repositioning of multiple electrode catheters, induction or attempted induction of an arrhythmia with right atrial pacing and recording, and catheter ablation of arrhythmogenic focus, including intracardiac 3D mapping, right ventricular pacing and recording, left atrial pacing and recording from coronary sinus or left atrium, and His bundle recording (when performed); with treatment of ventricular tachycardia or focus of ventricular ectopy including left ventricular pacing and recording (when performed)

+ **93662** Intracardiac echocardiography during therapeutic/diagnostic intervention, including imaging supervision and interpretation (*List separately in addition to code for primary procedure*)

Add conscious sedation codes as appropriate (see page 20)

Scenario 7.11: Possible Hospital Inpatient ICD-10-PCS Codes³

4A023FZ Measurement of Cardiac Rhythm, Percutaneous Approach

02K80ZZ Map Conduction Mechanism, Open Approach

02K83ZZ Map Conduction Mechanism, Percutaneous Approach

02K84ZZ Map Conduction Mechanism, Percutaneous Endoscopic Approach

B244YZZ Ultrasonography of Right Heart using Other Contrast

B244ZZZ Ultrasonography of Right Heart

B245YZZ Ultrasonography of Left Heart using Other Contrast

B245ZZZ Ultrasonography of Left Heart

B246YZZ Ultrasonography of Right and Left Heart using Other Contrast

B246ZZZ Ultrasonography of Right and Left Heart

02583ZZ Destruction of conduction mechanism, percutaneous approach

02583ZF Destruction of conduction mechanism using irreversible electroporation, percutaneous approach

7.12 Intracardiac catheter ablation of atrial fibrillation by pulmonary vein isolation *with comprehensive electrophysiologic evaluation and additional linear or focal intracardiac ablation of left or right atrium for treatment of atrial fibrillation remaining after completion of pulmonary vein isolation*

Scenario 7.12: Physician CPT® Codes¹

93656-26 ⁴	Comprehensive electrophysiologic evaluation including transseptal catheterizations, insertion and repositioning of multiple electrode catheters with intracardiac ablation of atrial fibrillation by pulmonary vein isolation, including intracardiac 3D mapping, intracardiac echocardiography including imaging supervision and interpretation, induction or attempted induction of an arrhythmia including left or right atrial pacing/recording, right ventricular pacing/recording and His bundle recording (when performed)
+ 93657-26 ⁴	Additional linear or focal intracardiac catheter ablation of the left or right atrium for treatment of atrial fibrillation remaining after completion of pulmonary vein isolation (List separately in addition to code for primary procedure) up to 2 units

Add conscious sedation codes as appropriate (see page 20)

Scenario 7.12: Hospital Outpatient CPT® Codes²

93656-26 ⁴	Comprehensive electrophysiologic evaluation including transseptal catheterizations, insertion and repositioning of multiple electrode catheters with intracardiac ablation of atrial fibrillation by pulmonary vein isolation, including intracardiac 3D mapping, intracardiac echocardiography including imaging supervision and interpretation, induction or attempted induction of an arrhythmia including left or right atrial pacing/recording, right ventricular pacing/recording and His bundle recording (when performed)
+ 93657-26 ⁴	Additional linear or focal intracardiac catheter ablation of the left or right atrium for treatment of atrial fibrillation remaining after completion of pulmonary vein isolation (List separately in addition to code for primary procedure) (up to 2 units) (List separately in addition to code for primary procedure)

Add conscious sedation codes as appropriate (see page 20)

Scenario 7.12: Possible Hospital Inpatient ICD-10-PCS Codes³

4A023FZ	Measurement of Cardiac Rhythm, Percutaneous Approach
02K80ZZ	Map Conduction Mechanism, Open Approach
02K83ZZ	Map Conduction Mechanism, Percutaneous Approach
02K84ZZ	Map Conduction Mechanism, Percutaneous Endoscopic Approach
02H64JZ	Insertion of Pacemaker Lead into Right Atrium, Percutaneous Endoscopic Approach
02HK4JZ	Insertion of Pacemaker Lead into Right Ventricle, Percutaneous Endoscopic Approach
02HK3JZ	Insertion of Pacemaker Lead into Right Ventricle, Percutaneous Approach
02HK4JZ	Insertion of Pacemaker Lead into Right Ventricle, Percutaneous Endoscopic Approach
02563ZZ	Destruction of Right Atrium, Percutaneous Approach
02573ZZ	Destruction of Left Atrium, Percutaneous Approach
02583ZZ	Destruction of conduction mechanism, percutaneous approach
02583ZF	Destruction of conduction mechanism using irreversible electroporation, percutaneous approach

Notes: For transseptal puncture, use code 93462 Left heart catheterization by transseptal puncture through intact septum or by transapical puncture. List separately in addition to code for primary procedure.

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- As of January 1, 2005, the Centers for Medicare and Medicaid Services (CMS) require hospitals to report all device category codes (C-codes) on Medicare outpatient claims when medical devices are used in conjunction with procedure(s) billed. Find C-codes for CRM devices at <http://www.bostonscientific.com/en-US/reimbursement/ccode-finder.html>. Also find C-codes for CRM devices and related accessories (e.g., introducers, catheters, sheaths) at <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/HospitalOutpatientPPS/Downloads/Compleat-list-DeviceCats-OPPS.pdf>.
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- Modifiers 26 (professional component) and 51 (multiple procedures) are for physician billing only. See the AMA's *2023 Current Procedural Terminology* for complete descriptions. Always verify appropriate usage with payers.

Ablation Coding Bundling changes
Effective 1/1/2022

	SVT Ablation (93653)			VT Ablation (93654)			AF Ablation (93656)		
	Inherent	Bundled	Not Bundled sometimes performed	Inherent	Bundled	Not Bundled sometimes performed	Inherent	Bundled	Not Bundled sometimes performed
Procedure/Services included with Ablations									
Insert/reposition multiple catheters	X			X			X		
Intracardiac ablation of arrhythmia	X			X			X		
Induction or attempted induction of arrhythmia with RA pacing and recording	X			X				X	
RV Pacing and recording		X			X			X	
Intra atrial pacing		X			X			X	
Intracardiac 3D mapping (93613)		X			X			X	
LA pacing and recording from coronary sinus or LA (93621)		X			X			X	
HIS bundle Recording		X			X			X	
LV pacing and recording					X				
Intracardiac Echo (+93662)			X			X		X	
Transeptal Catheterization/puncture (93462)			X			X	X		
Programmed stimulation after IV drug infusion (+93623)			X			X			X
Add on ablation of discrete mechanism of arrhythmia (+93655) up to 2			X			X			
Additional linear or focal ablation of LA/RA/AFIB after PVI (+93657) up to 2									X

8 Cardiac Device Monitoring

Commonly Billed Cardiac Device
Monitoring Scenarios 8-18

Commonly Billed Cardiac Device Monitoring Scenarios

KEY	+ Add-on code	■ Physician CPT® Codes ¹	■ Hospital Outpatient CPT® Codes ²	■ Possible Hospital Inpatient ICD-10-PCS® Codes ³
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8.1 Dual chamber *pacemaker follow-up (in person)*

Scenario 8.1: Physician CPT® Codes¹

93288 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead pacemaker system, or leadless pacemaker system

or **93280** Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent values with analysis, review and report by a physician or other qualified health care professional; dual lead pacemaker system

Scenario 8.1: Hospital Outpatient CPT® Codes²

93288 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead pacemaker system, or leadless pacemaker system

or **93280** Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent values with analysis, review and report by a physician or other qualified health care professional; dual lead pacemaker system

Scenario 8.1: Possible Hospital Inpatient ICD-10-PCS Codes³

4B02XSZ Measurement of Cardiac Pacemaker, External Approach

8.2 Dual chamber *pacemaker follow-up (remote)*

Scenario 8.2: Physician CPT® Codes¹

93294 Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional

and **93296** Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results

Scenario 8.2: Hospital Outpatient CPT® Codes²

93294 Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional

and **93296** Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results

Scenario 8.2: Possible Hospital Inpatient ICD-10-PCS Codes³

4B02XSZ Measurement of Cardiac Pacemaker, External Approach

8.3 Single chamber *ICD follow-up (in person)*

Scenario 8.3: Physician CPT® Codes¹

93289 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead transvenous implantable defibrillator system, including analysis of heart rhythm derived data elements

or **93282** Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; single lead transvenous implantable defibrillator system

Scenario 8.3: Hospital Outpatient CPT® Codes²

93289 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead transvenous implantable defibrillator system, including analysis of heart rhythm derived data elements

or **93282** Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; single lead transvenous implantable defibrillator system

Scenario 8.3: Possible Hospital Inpatient ICD-10-PCS Codes³

4B02XTZ Measurement of Cardiac Defibrillator, External Approach

8.4 Dual chamber *ICD follow-up (in person)*

Scenario 8.4: Physician CPT® Codes¹

93289 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead transvenous implantable defibrillator system, including analysis of heart rhythm derived data elements

and **93283** Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; dual lead transvenous implantable defibrillator system

Scenario 8.4: Hospital Outpatient CPT® Codes²

93289 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead transvenous implantable defibrillator system, including analysis of heart rhythm derived data elements

and **93283** Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; dual lead transvenous implantable defibrillator system

Scenario 8.4: Possible Hospital Inpatient ICD-10-PCS Codes³

N/A

8.5 ICD follow-up (remote)

Scenario 8.5: Physician CPT® Codes¹

93295 Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead implantable defibrillator system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional

and 93296 Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results

Scenario 8.5: Hospital Outpatient CPT® Codes²

93295 Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead implantable defibrillator system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional

and 93296 Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results

Scenario 8.5: Possible Hospital Inpatient ICD-10-PCS Codes³

N/A

8.6 ICD follow-up (remote) with analysis of Implantable Cardiovascular Physiologic Monitor (ICPM)

Scenario 8.6: Physician CPT® Codes¹

93295 Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead implantable defibrillator system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional

93296 Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results

and 93297 Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular monitor system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, analysis, review(s) and report(s) by a physician or other qualified health care professional

Scenario 8.6: Hospital Outpatient CPT® Codes²

93295 Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead implantable defibrillator system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional

93296 Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results

and 93297 Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular monitor system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, analysis, review(s) and report(s) by a physician or other qualified health care professional

Scenario 8.6: Possible Hospital Inpatient ICD-10-PCS Codes³

N/A

8.7 SICD ICD follow-up (in person)

Scenario 8.7: Physician CPT® Codes¹

93261 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; implantable subcutaneous defibrillator lead system

or 93260 Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; implantable subcutaneous defibrillator lead system

Scenario 8.7: Hospital Outpatient CPT® Codes²

93261 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; implantable subcutaneous defibrillator lead system

or 93260 Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; implantable subcutaneous defibrillator lead system

Scenario 8.7: Possible Hospital Inpatient ICD-10-PCS Codes³

4B02XTZ Measurement of Cardiac Defibrillator, External Approach

8.8 SICD follow-up (remote)

Scenario 8.8: Physician CPT® Codes¹

93295 Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead implantable defibrillator system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional

and 93296 Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results

Scenario 8.8: Hospital Outpatient CPT® Codes²

93295 Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead implantable defibrillator system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional

and 93296 Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results

Scenario 8.8: Possible Hospital Inpatient ICD-10-PCS Codes³

N/A

8.9 CRT-P (3 leads) follow-up (in person)

Scenario 8.9: Physician CPT® Codes¹

	93288	Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead pacemaker system
or	93281	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; multiple lead pacemaker system

Scenario 8.9: Hospital Outpatient CPT® Codes²

	93288	Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead pacemaker system
or	93281	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; multiple lead pacemaker system

Scenario 8.9: Possible Hospital Inpatient ICD-10-PCS Codes³

4B02XSZ	Measurement of Cardiac Pacemaker, External Approach
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8.9 CRT-P follow-up (remote)

Scenario 8.9: Physician CPT® Codes¹

	93294	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system, or leadless pacemaker system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional
and	93296	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system, leadless pacemaker system, or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results

Scenario 8.9: Hospital Outpatient CPT® Codes²

	93294	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional
and	93296	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system, leadless pacemaker system, or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results

Scenario 8.9: Possible Hospital Inpatient ICD-10-PCS Codes³

N/A

810 CRT-P follow-up (remote) with analysis of Implantable Cardiovascular Physiologic Monitor (ICPM) data

Scenario 8.10: Physician CPT® Codes¹

	93294	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system, or leadless pacemaker system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional
	93296	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system, leadless pacemaker system, or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results
and	93297	Interrogation device evaluation(s) (remote), up to 30 days; implantable cardiovascular physiologic monitor system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, analysis, review(s) and report(s) by a physician or other qualified healthcare professional

Scenario 8.10: Hospital Outpatient CPT® Codes²

	93294	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system, or leadless pacemaker system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional
	93296	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system, leadless pacemaker system, or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results
and	93297	Interrogation device evaluation(s) (remote) up to 30-days, implantable cardiovascular physiologic monitor system, remote data acquisition(s), receipt of transmissions and technical review, technical support and distribution of results, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, analysis, review(s) and report(s) by a physician or other qualified healthcare professional

Scenario 8.10: Possible Hospital Inpatient ICD-10-PCS Codes³

N/A

811 CRT-D (3 leads) follow-up (in person)

Scenario 8.11: Physician CPT® Codes¹

	93289	Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead transvenous implantable defibrillator system, including analysis of heart rhythm derived data elements
or	93284	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; multiple lead transvenous implantable defibrillator system

Scenario 8.11: Hospital Outpatient CPT® Codes²

	93289	Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead transvenous implantable defibrillator system, including analysis of heart rhythm derived data elements
or	93284	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; multiple lead transvenous implantable defibrillator system

Scenario 8.11: Possible Hospital Inpatient ICD-10-PCS Codes³

4B02XSZ Measurement of Cardiac Pacemaker, External Approach

8.12 CRT-D follow-up (remote)

Scenario 8.12: Physician CPT® Codes¹

	93295	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead implantable defibrillator system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional
and	93296	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results

Scenario 8.12: Hospital Outpatient CPT® Codes²

	93295	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead implantable defibrillator system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional
and	93296	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results

Scenario 8.12: Possible Hospital Inpatient ICD-10-PCS Codes³

N/A

8.13 CRT-D follow-up (remote) with analysis of implantable cardiovascular physiologic monitor (ICPM)

Scenario 8.13: Physician CPT® Codes¹

	93295	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead implantable defibrillator system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional
	93296	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results
and	93297	Interrogation device evaluation(s) (remote), up to 30 days; implantable cardiovascular physiologic monitor system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, analysis, review(s) and report(s) by a physician or other qualified healthcare professional

Scenario 8.13: Hospital Outpatient CPT® Codes²

	93295	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead implantable defibrillator system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional
	93296	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results
and	93297	Interrogation device evaluation(s) (remote), up to 30 days; implantable cardiovascular physiologic monitor system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, analysis, review(s) and report(s) by a physician or other qualified healthcare professional

Scenario 8.13: Possible Hospital Inpatient ICD-10-PCS Codes³

N/A

8.14 ICPM *In-person analysis of Implantable Cardiovascular Physiologic Monitor (ICPM)*

Scenario 8.14: Physician CPT® Codes¹

93290

Interrogation device evaluation, (in-person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording, and disconnection per patient encounter; implantable cardiovascular physiologic monitor system, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, **DO NOT REPORT if the patient is remotely monitored**

Scenario 8.14: Hospital Outpatient CPT® Codes²

93290

Interrogation device evaluation, (in-person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording, and disconnection per patient encounter; implantable cardiovascular physiologic monitor system, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, **DO NOT REPORT if the patient is remotely monitored**

Scenario 8.14: Possible Hospital Inpatient ICD-10-PCS Codes³

N/A

8.15 ICPM *Remote analysis of Implantable Cardiovascular Physiologic Monitor (ICPM)*

Scenario 8.15: Physician CPT® Codes¹

93297

Interrogation device evaluation(s) (remote), up to 30 days; implantable cardiovascular physiologic monitor system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, analysis, review(s) and report(s) by a physician or other qualified healthcare professional

and

Scenario 8.15: Hospital Outpatient CPT® Codes²

93297

Interrogation device evaluation(s) (remote), up to 30 days; implantable cardiovascular physiologic monitor system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, analysis, review(s) and report(s) by a physician or other qualified healthcare professional

and

Scenario 8.15: Possible Hospital Inpatient ICD-10-PCS Codes³

N/A

8.16 SCRM *In-person analysis of Subcutaneous Cardiovascular Rhythm Monitor (SCRM)***Scenario 8.16: Physician CPT® Codes¹**

93285	Programming device evaluation, (in person) with iterative adjustment of the device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; implantable cardiovascular physiologic monitor system
or	
93291	Interrogation device evaluation, (in-person) with analysis, review and report by a physician or other qualified health care professional; implantable cardiovascular physiologic monitor system

Scenario 8.16: Hospital Outpatient CPT® Codes²

93285	Programming device evaluation, (in person) with iterative adjustment of the device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional
or	
93291	Interrogation device evaluation, (in-person) with analysis, review and report by a physician or other qualified health care professional; implantable cardiovascular physiologic monitor system

Scenario 8.16: Possible Hospital Inpatient ICD-10-PCS Codes³

N/A

8.17 SCRM *Remote analysis of Subcutaneous Cardiovascular Rhythm Monitor (SCRM)***Scenario 8.17: Physician CPT® Codes¹**

93298	Interrogation device evaluation(s), (remote) up to 30 days; subcutaneous cardiac rhythm monitor system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results, including analysis of recorded heart rhythm data, analysis, review(s) and report(s) by a physician or other qualified health care professional
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Scenario 8.17: Hospital Outpatient CPT® Codes²

93298	Interrogation device evaluation(s), (remote) up to 30 days; subcutaneous cardiac rhythm monitor system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results, including analysis of recorded heart rhythm data, analysis, review(s) and report(s) by a physician or other qualified health care professional
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Scenario 8.17: Possible Hospital Inpatient ICD-10-PCS Codes³

N/A

818 SCRM Remote Programming of Subcutaneous Cardiovascular Rhythm Monitor (SCRM)

Scenario 8.18: Physician CPT® Codes¹

0650T	Programming device evaluation, (remote) of subcutaneous cardiac rhythm monitor system, with iterative adjustment of the implantable device to test the function of the device and select optimal permanently programmed values with analysis, review and report by a physician or other qualified health care professional
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Scenario 8.18: Hospital Outpatient CPT® Codes²

0650T	Programming device evaluation, (remote) of subcutaneous cardiac rhythm monitor system, with iterative adjustment of the implantable device to test the function of the device and select optimal permanently programmed values with analysis, review and report by a physician or other qualified health care professional
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Scenario 8.18: Possible Hospital Inpatient ICD-10-PCS Codes³

N/A

*The new Category III CPT® code will be effective July 1, 2021. The existence of a Category III CPT® code does not guarantee payment. Individual payers will determine coverage and payment.

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2. As of January 1, 2005, the Centers for Medicare and Medicaid Services (CMS) require hospitals to report all device category codes (C-codes) on Medicare outpatient claims when medical devices are used in conjunction with procedure(s) billed. Find C codes for Boston Scientific RM devices at <http://www.bostonscientific.com/en-US/reimbursement/c-code-finder.html>. Find C codes for Boston Scientific RM devices at <http://www.bostonscientific.com/en-US/reimbursement/c-code-finder.html>. Also find C-codes for CRM devices and related accessories (e.g., introducers, catheters, sheaths) at <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/HospitalOutpatientPPS/Downloads/Comple-ist-DeviceCats-OPPS.pdf>.
3. 2024 The Complete Official Codebook ICD-10-PCS Copyright 2023 Optum360, LLC.
4. Modifiers 26 (professional component) and 51 (multiple procedures) are for physician billing only. See the AMA's *2024 Current Procedural Terminology* for complete descriptions. Always verify appropriate usage with payers.

9 C-Codes

C-Codes

To obtain C codes, please access the Boston Scientific website C-Code Finder at <http://www.bostonscientific.com/en-US/reimbursement/ccode-finder.html>

Pulse Generators:

- C1721-Cardioverter-defibrillator, dual chamber (implantable)
- C1722-Cardioverter-defibrillator, single chamber (implantable)
- C1722-Cardioverter-defibrillator, single chamber (SICD)
- C1785-Pacemaker, Dual chamber, (implantable)
- C1786-Pacemaker, Single chamber (implantable)
- C1882-Cardioverter-defibrillator, other than single or dual (CRT-D)
- C2621-Pacemaker, other than single or dual (CRT-P)

Leads:

- C1777-Lead, cardioverter-defibrillator endocardial single coil
- C1895-Lead cardioverter-defibrillator endocardial dual coil
- C1896-Lead cardioverter-defibrillator (SICD)
- C1898-Lead, Pacemaker VDD Single
- C1900-Lead Left Ventricular (LV)

Catheters:

- C1730-EP Diagnostic other than 3-D mapping, 19 or fewer electrodes
- C1731-EP Diagnostic other than 3-D mapping, 20 or more electrodes
- C1732-EP Diagnostic, 3-D mapping, 19 or fewer electrodes
- C1733-EP Diagnostic/ablation other than 3-D, other than cool tip
- C1887-EP Catheter Guiding
- C2630-EP Catheter diagnostic/ablation other than 3-D, cool tip
- C1889-EP Implantable/insertable device, not otherwise classified

Implantable Cardiac Rhythm Monitor

- C1764-Cardiac event recorder (implantable)

Other:

- C1769-Guidewire
- C1894-Introducer/sheath other than guiding, intracardiac EP non-laser
- C1890-No implantable/insertable device used with a device-intensive procedure(s)

Appendix

CPT® Modifiers

CPT® Modifiers

The list below provides modifiers applicable to CPT® 2024 codes. See the AMA's *2024 Current Procedural Terminology Professional Edition Appendix A* for full definitions.¹

- 22 Increased Procedural Services
- 23 Unusual Anesthesia
- 24 Unrelated Evaluation and Management Service by the Same Physician or Other Qualified Health Care Professional During a Postoperative Period
- 25 Significant, Separately Identifiable Evaluation and Management Service by the Same Physician or Other Qualified Health Care Professional on the Same Day of the Procedure or Other Service
- 26 Professional Component
- 32 Mandated Services
- 33 Preventive Services
- 47 Anesthesia by Surgeon
- 50 Bilateral Procedure
- 51 Multiple Procedures
- 52 Reduced Services
- 53 Discontinued Procedure
- 54 Surgical Care Only
- 55 Postoperative Management Only
- 56 Preoperative Management Only
- 57 Decision for Surgery
- 58 Staged or Related Procedure or Service by the Same Physician or Other Qualified Health Care Professional During the Postoperative Period
- 59 Distinct Procedural Service
- 62 Two Surgeons
- 63 Procedure Performed on Infants less than 4 kg
- 66 Surgical Team
- 76 Repeat Procedure or Service by Same Physician or Other Qualified Health Care Professional
- 77 Repeat Procedure by Another Physician or Other Qualified Health Care Professional
- 78 Unplanned Return to the Operating/Procedure Room by the Same Physician or Other Qualified Health Care Professional Following Initial Procedure for a Related Procedure During the Postoperative Period
- 79 Unrelated Procedure or Service by the Same Physician or Other Qualified Health Care Professional During the Postoperative Period
- 80 Assistant Surgeon
- 81 Minimum Assistant Surgeon
- 82 Assistant Surgeon (when qualified resident surgeon not available)
- 90 Reference (Outside) Laboratory
- 91 Repeat Clinical Diagnostic Laboratory Test
- 92 Alternative Laboratory Platform Testing
- 95 Synchronous Telemedicine Service Rendered Via a Real-time Interactive Audio and Video Telecommunications System
- 99 Multiple Modifiers

CPT® Modifiers for Ambulatory Surgery Center (ASC) Hospital Outpatient Use

- 25 Significant, Separately Identifiable Evaluation, and Management Service by the Same Physician or Other Qualified Health Care Professional on the Same Day of the Procedure or Other Service
- 27 Multiple Outpatient Hospital E/M Encounters on the Same Date
- 33 Preventive Services
- 50 Bilateral Procedure
- 52 Reduced Service
- 58 Staged or Related Procedure or Service by the Same Physician or Other Qualified Health Care Professional During the Postoperative Period
- 59 Distinct Procedural Service
- 73 Discontinued Out Hospital/Ambulatory Surgery Center (ASC) Procedure Prior to the Administration of Anesthesia
- 74 Discontinued Outpatient Hospital/Ambulatory Surgery Center (ASC) Procedure After Administration of Anesthesia
- 76 Repeat Procedure or Service by Same Physician or Other Qualified Health Care Professional
- 77 Repeat Procedure by Another Physician or Other Qualified Health Care Professional
- 78 Unplanned Return to the Operating/Procedure Room by the Same Physician or Other Qualified Health Care Professional Following Initial Procedure for a Related Procedure During the Postoperative Period
- 79 Unrelated Procedure or Service by the Same Physician or Other Qualified Health Care Professional During the Postoperative Period
- 91 Repeat Clinical Diagnostic Laboratory Test

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