

Coding and payment overview: Cardiac resynchronization therapy

Commonly billed codes and associated 2024 Medicare rates

This document reflects commonly billed codes for cardiac resynchronization therapy (CRT) and the associated 2024 Medicare national reimbursement rates. This is not an all-inclusive list.

The following information reflects the Medicare national allowable amount published by CMS and does not include Medicare payment reductions resulting from sequestration adjustments to the amount payable to the provider, as mandated by the Budget Control Act of 2011. The Medtronic Customer Economics and Reimbursement teams can provide site-specific information upon request.

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Physician/Hospital Outpatient

Coding is based on specific procedures that are performed, and multiple procedure codes may be reported. This may result in multiple procedure payment reductions for physician payments. Hospital outpatient reimbursement is subject to various packaging rules, including Comprehensive APCs (C-APCs). Under C-APCs, only one payment is made for all procedures and supplies provided during the outpatient episode of care. Physician and hospital outpatient rates are effective through the 2024 calendar year.

CPT ^{®1} code	Description	2024 Medicare national unadjusted physician rate ²	APC	2024 Medicare national unadjusted APC rate ³
CRT-D system insertion				
33249	Insertion or replacement of permanent implantable defibrillator system, with transvenous lead(s), single or dual chamber	\$879	5232	\$31,379
+33225	Insertion of pacing electrode, cardiac venous system, for left ventricular pacing, at time of insertion of implantable defibrillator or pacemaker pulse generator (e.g., for upgrade to dual chamber system) (List separately in addition to code for primary procedure)	\$442	N/A	Packaged Service. No separate payment for +33225

CPT ^{®1} code	Description	2024 Medicare national unadjusted physician rate ²	APC	2024 Medicare national unadjusted APC rate ³
CRT-P system insertion (ventricular)				
33207	Insertion of new or replacement of permanent pacemaker with transvenous electrode(s); ventricular	\$461	5224	\$18,585
+33225	Insertion of pacing electrode, cardiac venous system, for left ventricular pacing, at time of insertion of implantable defibrillator or pacemaker pulse generator (e.g., for upgrade to dual chamber system) (List separately in addition to code for primary procedure)	\$442		C-APC No separate payment for +33225
CRT-P system insertion (atrial and ventricular)				
33208	Insertion of new or replacement of permanent pacemaker with transvenous electrode(s); atrial and ventricular	\$499	5224	\$18,585
+33225	Insertion of pacing electrode, cardiac venous system, for left ventricular pacing, at time of insertion of implantable defibrillator or pacemaker pulse generator (e.g., for upgrade to dual chamber system) (List separately in addition to code for primary procedure)	\$442		C-APC No separate payment for +33225
Lead insertion				
33216	Insertion of a single transvenous electrode, permanent pacemaker or implantable defibrillator	\$359	5222	\$8,103
33217	Insertion of 2 transvenous electrodes, permanent pacemaker or implantable defibrillator	\$357	5222	\$8,103
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)	\$491	5223	\$10,185
Remove and replace ICD generator				
33263	Removal of implantable defibrillator pulse generator with replacement of implantable defibrillator pulse generator; dual lead system	\$374	5231	\$22,482
33264	Removal of implantable defibrillator pulse generator with replacement of implantable defibrillator pulse generator; multiple lead system	\$390	5232	\$31,379
Remove and replace pacemaker generator				
33228	Removal of permanent pacemaker pulse generator with replacement of pacemaker pulse generator; dual lead system	\$343	5223	\$10,185
33229	Removal of permanent pacemaker pulse generator with replacement of pacemaker pulse generator; multiple lead system	\$360	5224	\$18,585
Reposition LV lead				
33226	Repositioning of previously implanted cardiac venous system (left ventricular) electrode (including removal, insertion and/or replacement of existing generator)	\$405	5183	\$3,040
CRT device analysis, interrogation, and programming evaluation - In person				
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	\$82 \$40 (26) \$42 (TC)	5741	\$36

CPT ^{®1} code	Description	2024 Medicare national unadjusted physician rate ²	APC	2024 Medicare national unadjusted APC rate ³
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	\$103 \$58 (26) \$45 (TC)	5741	\$36
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	\$55 \$20 (26) \$35 (TC)	5741	\$36
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	\$70 \$35 (26) \$35 (TC)	5741	\$36
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	\$52 \$20 (26) \$32 (TC)	5741	\$36
CRT device analysis, interrogation, and programming evaluation -Remote and TTM				
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	\$28	N/A	Physician Only
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	\$35	N/A	Physician Only
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	\$21	5741	\$36
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 healthcare professional	\$59 \$24 (26) \$35 (-TC)	N/A	Physician Only

Key

26 – Professional Component

TC – Technical Component

Inpatient Coding

ICD-10-PCS

Inpatient hospital ICD-10-PCS codes do not include system implantation codes. Each specific device-related procedure must be individually coded. The following ICD-10-PCS codes describe commonly performed cardiac resynchronization therapy procedures. This is not an all-inclusive list. These codes are only used by hospitals for reporting inpatient services.

ICD-10-PCS	Description
Cardiac resynchronization defibrillator generator insertion	
0JH609Z	Insertion of cardiac resynchronization defibrillator pulse generator into chest subcutaneous tissue and fascia, open approach
Cardiac resynchronization pacemaker generator insertion	
0JH607Z	Insertion of cardiac resynchronization pacemaker pulse generator into chest subcutaneous tissue and fascia, open approach
Defibrillator lead insertion	
02HK3KZ	Insertion of defibrillator lead into right ventricle, percutaneous approach
and/or 02H63KZ	Insertion of defibrillator lead into right atrium, percutaneous approach
Pacemaker lead insertion	
02H63JZ	Insertion of pacemaker lead into right atrium, percutaneous approach
and/or 02HK3JZ	Insertion of pacemaker lead into right ventricle, percutaneous approach
Left ventricular lead insertion into coronary vein - Defibrillator	
02H43KZ	Insertion of defibrillator lead into coronary vein, percutaneous approach
Left ventricular lead insertion into coronary vein - Pacemaker	
02H43JZ	Insertion of pacemaker lead into coronary vein, percutaneous approach
Revision or reposition RA, RV, or LV lead	
02WA0MZ	Revision of cardiac lead in heart, open approach
Revision of device pocket	
0JW0PZ	Revision of cardiac rhythm-related device in trunk subcutaneous tissue and fascia, open approach
Cardiac rhythm-related device removal	
0JPT0PZ	Removal of cardiac rhythm-related device from trunk subcutaneous tissue and fascia, open approach
Diagnostic electrophysiology (EP) procedure	
4A023FZ	Measurement of cardiac rhythm, percutaneous approach
Device check without induction of arrhythmia	
4B02XTZ	Measurement of cardiac defibrillator, external approach
4B02XSZ	Measurement of cardiac pacemaker, external approach
Absorbable antibacterial envelope (TYRX™)	
3E0102A	Introduction of anti-infective envelope into subcutaneous tissue, open approach

Inpatient Reimbursement

Medicare reimbursement for inpatient hospital services is based on a classification system known as Medicare Severity Diagnosis Related Groups (MS-DRGs). MS-DRG assignment is determined by patient diagnoses and procedures. Only one MS-DRG is assigned per hospital admission, and one payment is made for all procedures and supplies related to that inpatient stay. MS-DRG assignment may be affected when one or more documented secondary diagnoses are included in the Major Complication or Comorbidity (MCC) or Complication or Comorbidity (CC) lists, which are maintained by CMS.

MS-DRG	Description	FY 2024 Medicare national unadjusted rate ⁴
Implantable cardioverter-defibrillator and subcutaneous implantable cardioverter-defibrillator		
275	Cardiac defibrillator implant with cardiac catheterization and MCC	\$49,262
276	Cardiac defibrillator implant with MCC	\$43,481
277	Cardiac defibrillator implant without MCC	\$33,484
245	AICD generator procedures	\$31,727
265	AICD lead procedures	\$24,744
Transvenous pacemakers		
242	Permanent cardiac pacemaker implant w/MCC	\$24,191
243	Permanent cardiac pacemaker implant w/CC	\$15,947
244	Permanent cardiac pacemaker implant w/o CC/MCC	\$12,809
258	Cardiac pacemaker device replacement w/MCC	\$18,965
259	Cardiac pacemaker device replacement w/o MCC	\$13,069

🔍 For ASC-related information, please see our coding and payment overview [here](#).

Key

MCC – Major Complication or Comorbidity

CC – Complication or Comorbidity

Frequently asked questions

Q1: Does a CRT have to be at end of life (ERI) for the changeout to be covered?

There is no policy from Medicare on device changeouts. Coverage will be based on documented medical necessity.

Q2: What diagnosis code is reported for routine generator changeouts?

For routine CRT-P generator changeouts diagnosis code Z45.010 would apply and for CRT-D generator changeouts Z45.02 would apply.

Q3: When is it appropriate to report 33224 for placement of LV lead?

Code 33224 would be reported when a LV lead is placed and connected to a previously implanted generator.

Contact us

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

References

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²The Medicare Physician Fee Schedule (MPFS) 2024 National payment rates based on information published in the MPFS final rule CMS-1784-F that was released November 2, 2023.

PFS Federal Regulation Notices. cms.gov <https://www.cms.gov/medicare/medicare-fee-service-payment/physicianfeesched/pfs-federal-regulation-notice/cms-1784-f> Accessed December 13, 2023.

PFS Relative Value Files. cms.gov <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeeSched/PFS-Relative-Value-Files>

Local physician rates will vary based on location specific factors not reflected in this document. CMS may make adjustments to any or all of the data inputs from time to time.

³The OPFS 2024 National payment rates based on information published in the OPFS/ASC final rule CMS-1786-FC and corresponding Addendum B table which was released on November 2, 2023.

Hospital Outpatient Regulations and Notices. cms.gov <https://www.cms.gov/medicare/payment/prospective-payment-systems/hospital-outpatient/regulations-notice/cms-1786-fc> Accessed November 21, 2023.

Hospital specific rates will vary based on various hospital-specific factors not reflected in this document and CMS may make adjustments to any or all of the data inputs from time to time.

⁴The IPPS FY 2024 National payment rates based on information published in the IPPS final rule CMS-1785-F.

IPPS Final Rule Home Page. cms.gov <https://www.cms.gov/medicare/acute-inpatient-pps/fy-2024-ipp-final-rule-home-page> Updated November 30, 2023. Accessed December 7, 2023.

Hospital specific rates will vary based on various hospital-specific factors not reflected in this document and CMS may make adjustments to any or all of the data inputs from time to time.

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