

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.

Disclaimer

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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 Packaged Service. |
| +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 | 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 C-APC No separate payment for +33225 |
| +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 | | |
| 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 C-APC No separate payment for +33225 |
| +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 | | |
| 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)upto30days;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 and/or 02H63KZ | Insertion of defibrillator lead into right ventricle, percutaneous approach Insertion of defibrillator lead into right atrium, percutaneous approach |
| Pacemaker lead insertion | |
| 02H63JZ and/or 02HK3JZ | Insertion of pacemaker lead into right atrium, percutaneous approach 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 | |
| 0JWT0PZ | 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. For questions or for more information, please contact Reimbursement Customer Support at 1-866-877-4102 (8 a.m. to 5 p.m. CT, Monday- Friday) or rs.healthcareeconomics@medtronic.com.

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-notices/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 OPPS 2024 National payment rates based on information published in the OPPS/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-notices/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-ipps-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.

Medtronic
710 Medtronic Parkway
Minneapolis, MN 55432-5604 USA

Toll-free in USA: 800.633.8766
Worldwide: +1.763.514.4000

[medtronic.com](https://www.medtronic.com)

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