

# Cardiac Pacemakers



INDEPENDENT CARE HEALTH PLAN

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## Medicare Advantage Medical Coverage Policy

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#### Disclaimer

The Coverage Summaries are reviewed by the iCare Medicare Utilization Management Committee. Policies in this document may be modified by a member's coverage document. Clinical policy is not intended to preempt the judgment of the reviewing medical director or dictate to health care providers how to practice medicine. Health care providers are expected to exercise their medical judgment in rendering appropriate care. Identification of selected brand names of devices, tests and procedures in a medical coverage policy is for reference only and is not an endorsement of any one device, test, or procedure over another. Clinical technology is constantly evolving, and we reserve the right to review and update this policy periodically. References to CPT® codes or other sources are for definitional purposes only and do not imply any right to reimbursement or guarantee of claims payment. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any shape or form or by any means, electronic, mechanical, photocopying or otherwise, without permission from iCare.

## Related Medicare Advantage Medical/Pharmacy Coverage Policies

None

## Related Documents

Please refer to [CMS website](#) for the most current applicable CMS Online Manual System (IOMs)/National Coverage Determination (NCD)/ Local Coverage Determination (LCD)/Local Coverage Article (LCA)/ Transmittals.

| Type | Title | ID Number | Jurisdiction<br>Medicare<br>Administrative<br>Contractors<br>(MACs) | Applicable States/Territories |
|------|-------|-----------|---|-------------------------------|
|------|-------|-----------|---|-------------------------------|

|            |   |  |  |  |
|------------|---|--|--|--|
| NCD        | Cardiac Pacemakers:<br>Single Chamber and Dual Chamber Permanent Cardiac Pacemakers | <a href="#">20.8.3</a>                           |  |  |
| NCD        | Cardiac Pacemaker Evaluation Services   | <a href="#">20.8.1</a>                           |  |  |
| NCD        | Leadless Pacemakers   | <a href="#">20.8.4</a>                           |  |  |
| NCD        | Self-Contained Pacemaker Monitors   | <a href="#">20.8.2</a>                           |  |  |
| NCD        | Transtelephonic Monitoring of Cardiac Pacemakers                                    | <a href="#">20.8.1.1</a>                         |  |  |
| LCA        | Billing and Coding: Single Chamber and Dual Chamber Permanent Cardiac Pacemaker     | <a href="#">A54958</a>                           | J5 - Wisconsin Physicians Service Insurance Corporation<br><br>J8 - Wisconsin Physicians Service Insurance Corporation | IA, KS, MO, NE<br><br>IN, MI                               |
| LCA        | Billing and Coding: Single Chamber and Dual Chamber Permanent Cardiac Pacemaker     | <a href="#">A54961</a>                           | J15 - CGS Administrators, LLC (Part A/B MAC)   | KY, OH   |
| LCA        | Billing and Coding: Single Chamber and Dual Chamber Permanent Cardiac Pacemaker     | <a href="#">A54929</a>                           | JE - Noridian Healthcare Solutions, LLC  | CA, HI, NV, American Samoa, Guam, Northern Mariana Islands |
| LCA        | Billing and Coding: Single Chamber and Dual Chamber Permanent Cardiac Pacemaker     | <a href="#">A54931</a>                           | JF - Noridian Healthcare Solutions, LLC  | AK, AZ, ID, MT, ND, OR, SD, UT, WA, WY                     |
| LCA        | Billing and Coding: Single Chamber and Dual Chamber Permanent Cardiac Pacemaker     | <a href="#">A54982</a>                           | JH - Novitas Solutions, Inc. (Part A/B MAC)<br><br>JL - Novitas Solutions, Inc. (Part A/B MAC)                         | AR, CO, NM, OK, TX, LA, MS<br><br>DE, D.C., MD, NJ, PA     |
| LCD<br>LCA | Cardiac Rhythm Device Evaluation  | <a href="#">L34833</a><br><a href="#">A56602</a> | JH - Novitas Solutions, Inc. (Part A/B MAC)  | DE, D.C., MD, NJ, PA                                       |

|     |  |                        |  |  |
|-----|--|------------------------|--|--|
|     | Billing and Coding: Cardiac Rhythm Device Evaluation                             |                        | JL - Novitas Solutions, Inc. (Part A/B MAC)  | DE, D.C., MD, NJ, PA                     |
| LCA | Billing and Coding: Single Chamber and Dual Chamber Permanent Cardiac Pacemaker  | <a href="#">A54831</a> | JJ - Palmetto GBA (Part A/B MAC)<br>JM - Palmetto GBA (Part A/B MAC)   | AL, GA, TN<br>NC, SC, VA, WV             |
| LCA | Billing and Coding: Single Chamber and Dual Chamber Permanent Cardiac Pacemaker  | <a href="#">A54909</a> | J6 - National Government Services, Inc. (Part A/B MAC)<br>JK - National Government Services, Inc. (Part A/B MAC) | IL, MN, WI<br>CT, NY, ME, MA, NH, RI, VT |
| LCA | Billing and Coding: Single Chamber and Dual Chamber Permanent Cardiac Pacemakers | <a href="#">A54926</a> | JN - First Coast Service Options, Inc. (Part A/B MAC)  | FL, PR, U.S. VI                          |

## Description

### Permanent Pacemakers

Permanent cardiac pacemakers are self-contained, battery-operated devices that send electrical stimulation to the heart through one or more implanted leads. Single chamber pacemakers use a single atrial or ventricular lead to deliver electrical stimulation. Dual chamber pacemakers stimulate both the atrium and the ventricle with a lead in both chambers.

Cardiac arrhythmias occur when the heart beats irregularly, too slow or too fast. These arrhythmias develop due to dysfunction in the generation and/or conduction of signals in the electrical system of the heart. Symptoms of bradycardia (heart rate less than 60 beats per minute) attributable to electrical system dysfunction include confusion, congestive heart failure, dizziness, seizures and/or syncope. Pacemakers treat bradycardia arising from sinus node dysfunction or atrioventricular block by delivering electrical stimulation to the cardiac muscle to pace activity in the absence of intrinsic (natural) pacing and to sense the heart's intrinsic signals to pace accordingly.

The implantation procedure is typically performed under local anesthesia. 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 pulse generator (pacemaker). The pocket is then closed with stitches.

### **Leadless Pacemakers**

A single-chamber leadless cardiac pacemaker is a small, battery-operated electrical device placed in the right ventricle of the heart that is reported to aid in maintaining a regular heart rhythm. The device is delivered directly to the ventricle through a catheter inserted into the femoral vein and attaches to the cardiac tissue with fixation tines or coils. Unlike traditional pacemakers, leadless cardiac pacemakers do not require intravascular leads. Examples of single-chamber leadless cardiac pacemakers approved by the US Food & Drug Administration (FDA) include, but may not be limited to, Aveir VR Leadless System and Micra Transcatheter Pacing System (Micra AV2, Micra VR2).

Leadless pacemakers are also available as dual-chamber devices which purportedly regulate the heart rate synchronously between leadless pacemakers placed in the right ventricle and the right atrium. The Aveir DR Dual Chamber Leadless Pacemaker System is an example of an FDA-approved dual-chamber leadless pacemaker.

Purported benefits of a leadless cardiac pacemaker include elimination of lead failure or migration and reduction of blood clots or infection that may occur with conventional transvenous pacemakers. A pacemaker is generally indicated for a symptomatic individual experiencing conditions including, but not limited to, bradycardia and/or atrial fibrillation.

All pacemakers require routine in-person or telephonic checks by a cardiologist every 3 to 6 months to ensure they are working as intended. Batteries for both permanent and leadless pacemakers are intended to last for 5 to 17 years.

## **Coverage Determination**

*iCare follows the CMS requirements that only allows coverage and payment for services that are reasonable and necessary for the diagnosis and treatment of illness or injury or to improve the functioning of a malformed body member except as specifically allowed by Medicare.*

Please refer to the above CMS guidance for **permanent cardiac pacemakers, leadless pacemakers and pacemaker monitoring.**

*In interpreting or supplementing the criteria above and in order to determine medical necessity consistently, iCare may consider [InterQual guidelines](#)*

*The use of the criteria in this Medicare Advantage Medical Coverage Policy provides clinical benefits highly likely to outweigh any clinical harms. Services that do not meet the criteria above are not medically necessary and thus do not provide a clinical benefit. Medically unnecessary services carry risks of adverse outcomes and may interfere with the pursuit of other treatments which have demonstrated efficacy.*

## **Coverage Limitations**

[US Government Publishing Office. Electronic code of federal regulations: part 411 – 42 CFR § 411.15 - Particular services excluded from coverage](#)

## Coding Information

Any codes listed on this policy are for informational purposes only. Do not rely on the accuracy and inclusion of specific codes. Inclusion of a code does not guarantee coverage and/or reimbursement for a service or procedure.

| CPT® Code(s) | Description   | Comments |
|--------------|---|----------|
| 33210        | Insertion or replacement of temporary transvenous single chamber cardiac electrode or pacemaker catheter (separate procedure)   |          |
| 33211        | Insertion or replacement of temporary transvenous dual chamber pacing electrodes (separate procedure)   |          |
| 33212        | Insertion of pacemaker pulse generator only; with existing single lead  |          |
| 33213        | Insertion of pacemaker pulse generator only; with existing dual leads   |          |
| 33221        | Insertion of pacemaker pulse generator only; with existing multiple leads   |          |
| 33227        | Removal of permanent pacemaker pulse generator with replacement of pacemaker pulse generator; single lead system  |          |
| 33228        | Removal of permanent pacemaker pulse generator with replacement of pacemaker pulse generator; dual lead system  |          |
| 33229        | Removal of permanent pacemaker pulse generator with replacement of pacemaker pulse generator; multiple lead system  |          |
| 33233        | Removal of permanent pacemaker pulse generator only   |          |
| 33235        | Removal of transvenous pacemaker electrode(s); dual lead system   |          |
| 33274        | Transcatheter insertion or replacement of permanent leadless pacemaker, right ventricular, including imaging guidance (eg, fluoroscopy, venous ultrasound, ventriculography, femoral venography) and device evaluation (eg, interrogation or programming), when performed |          |
| 33275        | Transcatheter removal of permanent leadless pacemaker, right ventricular, including imaging guidance (eg, fluoroscopy, venous ultrasound, ventriculography, femoral venography), when performed   |          |

| CPT® Category III Code(s) | Description   | Comments |
|---------------------------|---|----------|
| 0795T                     | Transcatheter insertion of permanent dual-chamber leadless pacemaker, including imaging guidance (eg, fluoroscopy, venous ultrasound, right atrial angiography, right ventriculography, femoral venography) and device evaluation (eg, interrogation or programming), when performed; complete system (ie, right atrial and right ventricular pacemaker components)   |          |
| 0796T                     | Transcatheter insertion of permanent dual-chamber leadless pacemaker, including imaging guidance (eg, fluoroscopy, venous ultrasound, right atrial angiography, right ventriculography, femoral venography) and device evaluation (eg, interrogation or programming), when performed; right atrial pacemaker component (when an existing right ventricular single leadless pacemaker exists to create a dual-chamber leadless pacemaker system) |          |
| 0797T                     | Transcatheter insertion of permanent dual-chamber leadless pacemaker, including imaging guidance (eg, fluoroscopy, venous ultrasound, right atrial angiography, right ventriculography, femoral venography) and device evaluation (eg, interrogation or programming), when performed; right ventricular pacemaker component (when part of a dual-chamber leadless pacemaker system)   |          |
| 0798T                     | Transcatheter removal of permanent dual-chamber leadless pacemaker, including imaging guidance (eg, fluoroscopy, venous ultrasound, right atrial angiography, right ventriculography, femoral venography), when performed; complete system (ie, right atrial and right ventricular pacemaker components)  |          |
| 0799T                     | Transcatheter removal of permanent dual-chamber leadless pacemaker, including imaging guidance (eg, fluoroscopy, venous ultrasound, right atrial angiography, right ventriculography, femoral venography), when performed; right atrial pacemaker component   |          |
| 0800T                     | Transcatheter removal of permanent dual-chamber leadless pacemaker, including imaging guidance (eg, fluoroscopy, venous ultrasound, right atrial angiography, right ventriculography, femoral venography), when performed; right ventricular pacemaker component (when part of a dual-chamber leadless pacemaker system)  |          |

|       |   |  |
|-------|---|--|
| 0801T | Transcatheter removal and replacement of permanent dual-chamber leadless pacemaker, including imaging guidance (eg, fluoroscopy, venous ultrasound, right atrial angiography, right ventriculography, femoral venography) and device evaluation (eg, interrogation or programming), when performed; dual-chamber system (ie, right atrial and right ventricular pacemaker components)             |  |
| 0802T | Transcatheter removal and replacement of permanent dual-chamber leadless pacemaker, including imaging guidance (eg, fluoroscopy, venous ultrasound, right atrial angiography, right ventriculography, femoral venography) and device evaluation (eg, interrogation or programming), when performed; right atrial pacemaker component  |  |
| 0803T | Transcatheter removal and replacement of permanent dual-chamber leadless pacemaker, including imaging guidance (eg, fluoroscopy, venous ultrasound, right atrial angiography, right ventriculography, femoral venography) and device evaluation (eg, interrogation or programming), when performed; right ventricular pacemaker component (when part of a dual-chamber leadless pacemaker system) |  |
| 0804T | Programming device evaluation (in person) with iterative adjustment of implantable device to test the function of device and to select optimal permanent programmed values, with analysis, review, and report, by a physician or other qualified health care professional, leadless pacemaker system in dual cardiac chambers   |  |
| 0823T | Transcatheter insertion of permanent single-chamber leadless pacemaker, right atrial, including imaging guidance (eg, fluoroscopy, venous ultrasound, right atrial angiography and/or right ventriculography, femoral venography, cavography) and device evaluation (eg, interrogation or programming), when performed  |  |
| 0824T | Transcatheter removal of permanent single-chamber leadless pacemaker, right atrial, including imaging guidance (eg, fluoroscopy, venous ultrasound, right atrial angiography and/or right ventriculography, femoral venography, cavography), when performed   |  |

| 0825T         | Transcatheter removal and replacement of permanent single-chamber leadless pacemaker, right atrial, including imaging guidance (eg, fluoroscopy, venous ultrasound, right atrial angiography and/or right ventriculography, femoral venography, cavography) and device evaluation (eg, interrogation or programming), when performed |          |
|---------------|--|----------|
| 0826T         | 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, leadless pacemaker system in single-cardiac chamber     |          |
| HCPSC Code(s) | Description  | Comments |
| C1779         | Lead, pacemaker, transvenous VDD single pass   |          |
| C1785         | Pacemaker, dual chamber, rate-responsive (implantable)   |          |
| C1786         | Pacemaker, single chamber, rate-responsive (implantable)   |          |
| C1898         | Lead, pacemaker, other than transvenous VDD single pass  |          |
| C1900         | Lead, left ventricular coronary venous system  |          |
| C2619         | Pacemaker, dual chamber, nonrate-responsive (implantable)  |          |
| C2620         | Pacemaker, single chamber, nonrate-responsive (implantable)  |          |
| C2621         | Pacemaker, other than single or dual chamber (implantable)   |          |

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13. Centers for Medicare & Medicaid Services (CMS). National Coverage Determination (NCD). Self-contained pacemaker monitors (20.8.2). <https://www.cms.gov>. Published January 1, 1966. Accessed November 15, 2023.
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## Change Summary

- 01/01/2024 New Policy.
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