



Common pacemaker procedure coding scenarios

This document is a reference tool that can be used to assist with selection of codes for the most common procedures for pacemakers. This is not an all-inclusive list, nor does it replace the coding advice from your coding department. Documentation needs to support the codes reported. The responsibility for correct coding lies with the provider of service. Each header shaded in light blue is an individual scenario and all codes listed under that header would be reported for the scenario described in the header.

Pacemaker implant procedures

CPT® ¹ code	Description
Implant of pacemaker and atrial lead	
33206	Insertion of new or replacement of permanent pacemaker with transvenous electrode(s); atrial
Implant of pacemaker and ventricular lead	
33207	Insertion of new or replacement of permanent pacemaker with transvenous electrode(s); ventricular
Implant of pacemaker with atrial and ventricular leads	
33208	Insertion of new or replacement of permanent pacemaker with transvenous electrode(s); atrial and ventricular
Implant of leadless pacemaker	
33274	Transcatheter insertion or replacement of permanent leadless pacemaker, right ventricular, including imaging guidance (e.g., fluoroscopy, venous ultrasound, ventriculography, femoral venography) and device evaluation (e.g., interrogation or programming), when performed
⚠	
Implant of CRT-P system (pacemaker generator with atrial, right ventricular, and left ventricular leads)	
33208	Insertion of new or replacement of permanent pacemaker with transvenous electrode(s); 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) (List separately in addition to code for primary procedure)

⚠ Medicare policy requires specific additional information on claims. See instructions [here](#).

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Pacemaker upgrade procedures

CPT® ¹ code	Description
Upgrade a single lead pacemaker system to a dual lead pacemaker system	
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)
Upgrade a dual pacemaker to CRT-P system (changeout generator and place left ventricular lead)	
33229	Removal of permanent pacemaker pulse generator with replacement of pacemaker pulse generator; multiple lead
+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)
Upgrade a single lead pacemaker to a CRT-P system (change generator and adding RA or RV and LV leads)	
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) (List separately in addition to code for primary procedure)

Pacemaker generator only changeouts

CPT® ¹ code	Description
Generator only changeout of single lead pacemaker	
33227	Removal of permanent pacemaker pulse generator with replacement of pacemaker pulse generator; single lead system
Generator only changeout of dual lead pacemaker	
33228	Removal of permanent pacemaker pulse generator with replacement of pacemaker pulse generator; dual lead system
Generator only changeout of multiple lead pacemaker	
33229	Removal of permanent pacemaker pulse generator with replacement of pacemaker pulse generator; multiple lead system

Pacemaker system changeouts

CPT® ¹ code	Description
Changeout of pacemaker generator with placement of new atrial lead	
33233	Removal of permanent pacemaker pulse generator only
33206	Insertion of new or replacement of permanent pacemaker with transvenous electrode(s); atrial
Changeout of pacemaker generator with placement of new ventricular lead	
33233	Removal of permanent pacemaker pulse generator only
33207	Insertion of new or replacement of permanent pacemaker with transvenous electrode(s); ventricular
Changeout of pacemaker generator with placement of new atrial and ventricular leads	
33233	Removal of permanent pacemaker pulse generator only

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

CPT® ¹ code	Description
Insertion of new lead with a pacemaker system (no new generator placement)	
33216	Insertion of a single transvenous electrode, permanent pacemaker or implantable defibrillator
Insertion of 2 new leads with a pacemaker system (no new generator placed)	
33217	Insertion of 2 transvenous electrodes, permanent pacemaker or implantable defibrillator

Lead repositioning procedure

CPT® ¹ code	Description
Repositioning of a lead with a pacemaker system	
33215	Repositioning of previously implanted transvenous pacemaker or implantable defibrillator (right atrial or right ventricular) electrode

Left ventricular (or CS) lead procedures

CPT® ¹ code	Description
Insertion of left ventricular lead only (not at time of generator implant or replacement)	
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)
Repositioning of left ventricular lead	
33226	Repositioning of previously implanted cardiac venous system (left ventricular) electrode (including removal, insertion and/or replacement of existing generator)

Generator removal procedures

CPT® ¹ code	Description
Removal of pacemaker generator	
33233	Removal of permanent pacemaker pulse generator only
Removal of leadless pacemaker	
33275	Transcatheter removal of permanent leadless pacemaker, right ventricular

Lead removal procedures

CPT® ¹ code	Description
Removal of lead from a single lead pacemaker system	
33234	Removal of transvenous pacemaker electrode(s); single lead system, atrial or ventricular
Removal of lead (or leads) from a dual lead pacemaker system	
33235	Removal of transvenous pacemaker electrode(s); dual lead system

Coding, coverage, and reimbursement information is available at: [medtronic.com/crhfreimbursement](https://www.medtronic.com/crhfreimbursement).

For questions or for more information, please contact Medtronic Reimbursement Customer Support at 1-866-877-4102 (8:00 a.m. to 5:00 p.m. CT, Monday-Friday) or rs.healthcareeconomics@medtronic.com.

References

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