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Local Coverage Article: Single Chamber and Dual Chamber Permanent Cardiac Pacemakers – Coding and Billing (A54831)

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Contractor Information

CONTRACTOR NAME	CONTRACT TYPE	CONTRACT NUMBER	JURISDICTION	STATE(S)
Palmetto GBA	A and B and HHH MAC	11201 - MAC A	J - M	South Carolina
Palmetto GBA	A and B and HHH MAC	11202 - MAC B	J - M	South Carolina
Palmetto GBA	A and B and HHH MAC	11301 - MAC A	J - M	Virginia
Palmetto GBA	A and B and HHH MAC	11302 - MAC B	J - M	Virginia
Palmetto GBA	A and B and HHH MAC	11401 - MAC A	J - M	West Virginia
Palmetto GBA	A and B and HHH MAC	11402 - MAC B	J - M	West Virginia
Palmetto GBA	A and B and HHH MAC	11501 - MAC A	J - M	North Carolina
Palmetto GBA	A and B and HHH MAC	11502 - MAC B	J - M	North Carolina

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Article Information

General Information

Article ID
A54831

Article Title
Single Chamber and Dual Chamber Permanent Cardiac Pacemakers – Coding and Billing

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Article Guidance

Article Text:

Abstract:

The National Coverage Determination (NCD) 20.8.3, Single Chamber and Dual Chamber Permanent Cardiac Pacemakers were revised with an effective date of August 13, 2013. The CMS A/B Medicare Administrative Contractors (MACs) have been instructed to implement the NCD at the local level. The following provides coding and billing instructions for the implementation of NCD 20.8.3. (CMS policy language is in *italics*.) The NCD "Item/Service Description" and "Indications and Limitations" are repeated here.

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 other 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.)

Please note: The “Decision Memo for Cardiac Pacemakers: Single-Chamber and Dual-Chamber Permanent Cardiac Pacemaker (CAG-00063R3)” states:

CMS initiated this current national coverage analysis to reconsider coverage indications for single chamber and dual chamber cardiac pacemakers. The scope of this reconsideration and this decision memorandum does not address biventricular pacemakers, pacemakers that stimulate more than two heart chambers, those devices used to treat tachyarrhythmias and cardiac dyssynchrony, cardiac resynchronization therapy, cardiac pacemaker evaluation services, or self-contained pacemaker monitors.

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.

The coding and billing guidelines only apply to those CPT codes for the initial insertion of cardiac pacemakers:

- 33206 Insertion of new or replacement of permanent pacemaker with transvenous electrode(s); atrial
- 33207 ventricular
- 33208 atrial and ventricular

The NCD does not address replacement of pacemaker generators. CPT codes 33227, 33228 and 32229 or 33233 are therefore not addressed in this coding article.

CMS NCD Covered Conditions and Diagnosis Codes – Group I

Clinical Conditions:

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

Diagnosis Codes (ICD-9-CM /ICD-10-CM) (Attest with Modifier - KX):

- Atrioventricular (AV) block (426.0 / I44.2)
- Mobitz (type II) AV block (426.12 / I44.1)
- Other second degree AV block (426.13 / I44.1)
- Sinoatrial node dysfunction/Sick sinus syndrome (427.81 / I49.5)
- Congenital heart block (746.86 / Q24.6)

Contractor (Additional) Diagnosis Codes (ICD-9-CM /ICD-10-CM) Allowed by the NCD – Group II (Attest with Modifier - KX)

- Atrioventricular block, unspecified (Symptomatic) (426.10 / I44.30)
- First-degree atrioventricular block (Symptomatic with PR interval more than 300 milliseconds) (426.11 / I44.0)
- Left bundle branch block, other or unspecified (426.3 / I44.7)
- Right bundle branch block, unspecified or other (426.4 / I45.10 / I45.19)
- Bundle branch block, unspecified (426.50 / I44.30 or I44.39)

- Right bundle branch block and left posterior fascicular block (426.51 / I45.2)
- Right bundle branch block and left anterior fascicular block (426.52 / I45.2)
    - Other bilateral bundle branch block (426.53 / I45.2)
    - Bifascicular block (I45.2)
    - Trifascicular block (426.54 / I45.3)
- Supraventricular tachycardias in which a pacemaker is specifically for control of the tachycardia (427.0 / I47.1)
- Paroxysmal supraventricular tachycardia/supraventricular tachycardia (SVT that is reproducibly terminated by pacing when catheter ablation and/or drugs fail to control the arrhythmia or produce intolerable side effects) (427.0/427.2 / I47.1/I47.9)
- Atrial fibrillation/atrial fibrillation, persistent; unspecified atrial fibrillation (427.31 / I48.1/I48.91) with symptomatic bradycardia due to necessary medical therapy
- Atrial flutter/atrial flutter, typical/atypical/unspecified (427.32 / I48.3/I48.4/I48.92 with symptomatic bradycardia due to necessary medical therapy
- Hypersensitive carotid sinus syndrome and neurocardiogenic syncope (Syncope without clear, provocative events and with a hypersensitive cardioinhibitory response of 3 seconds or longer or for significantly symptomatic neurocardiogenic syncope associated with bradycardia documented spontaneously or at the time of tilt-table testing (337.01 / G90.01)

Other Conditions Not Addressed by the NCD or by the Contractor - Group III include but are not limited to the following (Attest with Modifier - SC):

- Cardiac resynchronization therapy
- Obstructive hypertrophic cardiomyopathy
- Pacing in children, adolescents, and patients with congenital heart disease
- Pacemaker or generator replacements
- Sustained pause-dependent ventricular tachycardia, with or without QT prolongation

Modifier Usage:

Modifier – KX (Requirements specified in the medical policy have been met) must be used as an attestation by the practitioner and/or provider of the service that documentation is on file verifying the patient has a symptomatic arrhythmia or a high potential for progression of the rhythm disturbance requiring a permanent pacemaker for **Groups I and II**. Bradycardia that is the consequence of essential long-term drug therapy of a type and dose for which there is no acceptable alternative **does not exclude** the use of modifier – KX.

In addition, use of modifier – KX may be used in patients without symptoms in Groups I and II in the following situations:

- Awake, symptom–free patients in sinus rhythm, with documented periods of asystole greater than or equal to 3.0 seconds or any escape rate less than 40 beats per minute (bpm), or with an escape rhythm that is below the AV node
- Awake, symptom-free patients with atrial fibrillation and bradycardia with one or more pauses of at least 5 seconds or longer
- Catheter ablation of the AV junction
- Postoperative AV block that is not expected to resolve after cardiac surgery
- Patients with neuromuscular diseases, e.g., myotonic muscular dystrophy, Kearns-Sayre syndrome, Erb dystrophy, and peroneal muscular atrophy, with third-degree and advanced second-degree AV block at any anatomic level
- Asymptomatic persistent third-degree AV block at any anatomic site with average awake ventricular rates of 40 bpm or faster if cardiomegaly or LV dysfunction is present or if the site of block is below the AV node
- Second or third-degree AV block during exercise in the absence of myocardial ischemia
- Persistent third-degree AV block with an escape rate greater than 40 bpm in asymptomatic adult patients without cardiomegaly
- Asymptomatic second-degree AV block at intra-or infra-His levels found at electrophysiological study
- First- or second-degree AV block with symptoms similar to those of pacemaker syndrome or hemodynamic compromise
- Asymptomatic type II second-degree AV block with a narrow QRS. Second-degree AV block with a wide QRS including isolated right bundle-branch block

For medically necessary pacemaker insertion in conditions not addressed by the NCD or this article, **Group III**, use **modifier - SC** (Medically necessary service or supply).

Modifiers –GA and –GZ:

Modifier –GA (Waiver of liability statement issued as required by payer policy, individual case) should be used when the provider wants to indicate that he/she anticipates that Medicare will deny a specific service as not reasonable and necessary, an Advanced Beneficiary Notice (ABN) Form CMS-R-131 has been signed by the beneficiary and is on file. Modifier –GA may also be used on assigned claims when a patient refuses to sign the ABN and the latter is properly witnessed. For claims submitted to the Part A MAC, occurrence code 32 and the date of the ABN are required.

Modifier –GZ should be used when the provider wants to indicate that it is expected that Medicare will deny the specific services as not reasonable and necessary and the beneficiary was not asked to sign an ABN.

Claims for pacemaker claims that do not meet the criteria for modifier –KX or –SC should have modifier –GA or –GZ appended depending on the ABN status and will be denied.

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Coding Information

Bill Type Codes:

Contractors may specify Bill Types to help providers identify those Bill Types typically used to report this service. Absence of a Bill Type does not guarantee that the article does not apply to that Bill Type. Complete absence of all Bill Types indicates that coverage is not influenced by Bill Type and the article should be assumed to apply equally to all claims.

013x	Hospital Outpatient
085x	Critical Access Hospital

Revenue Codes:

Contractors may specify Revenue Codes to help providers identify those Revenue Codes typically used to report this service. In most instances Revenue Codes are purely advisory. Unless specified in the article, services reported under other Revenue Codes are equally subject to this coverage determination. Complete absence of all Revenue Codes indicates that coverage is not influenced by Revenue Code and the article should be assumed to apply equally to all Revenue Codes.

0480	Cardiology - General Classification

CPT/HCPCS Codes

Group 1 Paragraph:
N/A

Group 1 Codes:

33206	INSERTION OF NEW OR REPLACEMENT OF PERMANENT PACEMAKER WITH TRANSVENOUS ELECTRODE(S); ATRIAL
33207	INSERTION OF NEW OR REPLACEMENT OF PERMANENT PACEMAKER WITH TRANSVENOUS ELECTRODE(S); VENTRICULAR
33208	INSERTION OF NEW OR REPLACEMENT OF PERMANENT PACEMAKER WITH TRANSVENOUS ELECTRODE(S); ATRIAL AND VENTRICULAR

Group 2 Paragraph:
N/A

Group 2 Codes:

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

ICD-10 Codes that are Covered

Group 1 Paragraph:

426.0	ATRIOVENTRICULAR BLOCK COMPLETE
426.12	MOBITZ (TYPE) II ATRIOVENTRICULAR BLOCK
426.13	OTHER SECOND DEGREE ATRIOVENTRICULAR BLOCK

427.81	SINOATRIAL NODE DYSFUNCTION
746.86	CONGENITAL HEART BLOCK

Group 1 Codes:

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Description Group 1 ICD-10 Codes that are Covered radio button
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ICD-10 CODE	DESCRIPTION
I44.1	Atrioventricular block, second degree
I44.2	Atrioventricular block, complete
I49.5	Sick sinus syndrome
Q24.6	Congenital heart block

Showing 1 to 4 of 4 entries in Group 1

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Group 2 Paragraph:

337.01	CAROTID SINUS SYNDROME
426.10	ATRIOVENTRICULAR BLOCK UNSPECIFIED
426.11	FIRST DEGREE ATRIOVENTRICULAR BLOCK
426.3	OTHER LEFT BUNDLE BRANCH BLOCK
426.4	RIGHT BUNDLE BRANCH BLOCK
426.50	BUNDLE BRANCH BLOCK UNSPECIFIED
426.51	RIGHT BUNDLE BRANCH BLOCK AND LEFT POSTERIOR FASCICULAR BLOCK
426.52	RIGHT BUNDLE BRANCH BLOCK AND LEFT ANTERIOR FASCICULAR BLOCK
426.53	OTHER BILATERAL BUNDLE BRANCH BLOCK
426.54	TRIFASCICULAR BLOCK
427.0	PAROXYSMAL SUPRAVENTRICULAR TACHYCARDIA
427.2	PAROXYSMAL TACHYCARDIA UNSPECIFIED
427.31	ATRIAL FIBRILLATION
427.32	ATRIAL FLUTTER

Group 2 Codes:

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Description
Search Group 2 ICD-10 Codes that are Covered Submit button SEARCH GROUP **Search Group 2 ICD-10 Codes that are Covered Clear button** CLEAR SEARCH

ICD-10 CODE	DESCRIPTION
G90.01	Carotid sinus syncope
I44.0	Atrioventricular block, first degree
I44.30	Unspecified atrioventricular block
I44.39	Other atrioventricular block
I44.7	Left bundle-branch block, unspecified
I45.10	Unspecified right bundle-branch block
I45.19	Other right bundle-branch block
I45.2	Bifascicular block
I45.3	Trifascicular block
I47.1	Supraventricular tachycardia
I47.9	Paroxysmal tachycardia, unspecified
I48.1	Persistent atrial fibrillation
I48.3	Typical atrial flutter
I48.4	Atypical atrial flutter
I48.91	Unspecified atrial fibrillation
I48.92	Unspecified atrial flutter

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ICD-10 Codes that are Not Covered

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- Revision History Information

REVISION HISTORY DATE	REVISION HISTORY NUMBER	REVISION HISTORY EXPLANATION

05/01/2016	R1	Under ***Article Text*** the titles of all sections were revised. Under ***Group I*** and ***Group II Diagnosis Codes*** added appropriate ICD-9-CM and ICD-10-CM codes. Under ***Group II*** deleted the third bullet and deleted the following verbiage included within this section, "…if accompanied by left anterior or posterior at the level of the Bundle of His or lower" and "…if at the level of the Bundle of His or lower". Under ***Group II*** additional verbiage was added to the bullets on paroxysmal supraventricular tachycardia/supraventricular tachycardia and atrial flutter. Under ***Group III*** deleted the fifth bullet related to devices. Under ***Modifier Usage*** additional verbiage was added in the first sentence of the first paragraph, in the first sentence of the second paragraph and in the first sentence of the last paragraph. The section titled ***Modifiers-GA and –GZ*** was added. Under ***Article Text*** the following sections were deleted: ***Documentation Requirements, CPT/HCPCS Codes, Part B Services,*** and ***Part A Services***. Under ***Bill Type Codes*** added bill types. Under ***Revenue Codes*** added the applicable revenue code. Under ***CPT/HCPCS Codes*** deleted ***Group 2: Paragraph*** and ***Group 2: Codes***. Under ***Group 1: Paragraph and Group 2: Paragraph*** added the applicable ICD-9 codes to correspond to the appropriate ICD-10 Codes.

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Associated Documents

Related Local Coverage Document(s)
N/A

Related National Coverage Document(s)
N/A

Statutory Requirements URL(s)
N/A

Rules and Regulations URL(s)
N/A

CMS Manual Explanations URL(s)
CMS Internet-Only Manual, Pub. 100-03, Chapter 1, Section 20.8.3

Other URL(s)
N/A

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Keywords

- Pacemakers
- Pacemaker
- Single Chamber
- Dual Chamber

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