



Cardio Policy: Pacemaker Battery and Lead(s) Replacement

POLICY NUMBER UM CARDIO_1145	SUBJECT Pacemaker Battery and Lead(s) Replacement		DEPT/PROGRAM UM Dept	PAGE 1 OF 3
DATES COMMITTEE REVIEWED 08/03/11, 12/12/12, 08/22/13, 06/30/14, 08/12/15, 11/28/16, 12/21/16, 11/03/17, 11/08/18, 03/13/19, 12/11/19, 05/13/20, 05/28/21, 08/11/21, 07/13/22, 01/11/23	APPROVAL DATE January 11, 2023	EFFECTIVE DATE January 27, 2023	COMMITTEE APPROVAL DATES 08/03/11, 12/12/12, 08/22/13, 06/30/14, 08/12/15, 11/28/16, 12/21/16, 11/03/17, 11/08/18, 03/13/19, 12/11/19, 05/13/20, 05/28/21, 08/11/21, 07/13/22, 01/11/23	
PRIMARY BUSINESS OWNER: UM		COMMITTEE/BOARD APPROVAL Utilization Management Committee		
URAC STANDARDS HUM v8: UM 1-2; UM 2-1	NCQA STANDARDS UM 2		ADDITIONAL AREAS OF IMPACT	
CMS REQUIREMENTS	STATE/FEDERAL REQUIREMENTS		APPLICABLE LINES OF BUSINESS Commercial, Exchange, Medicaid	

I. PURPOSE

Indications for determining medical necessity for Pacemaker Battery and Lead(s) Replacement.

II. DEFINITIONS

A pacemaker is a medical device which uses electrical impulses, delivered by electrodes contacting the heart muscles, to regulate the beating of the heart. The primary purpose of a pacemaker is to maintain an adequate heart rate, either because the heart's native pacemaker is not fast enough, or there is a block in the heart's electrical conduction system.

The pacemaker is checked periodically, amongst other parameters, for battery voltage. Once its longevity is reaching effective replacement index (ERI) or once it has reached end of life (EOL) the pacemaker will create an alert for replacement.

An appropriate diagnostic or therapeutic procedure is one in which the expected clinical benefit exceeds the risks or negative consequences of the procedure by a sufficiently wide margin such that the procedure is generally considered acceptable or reasonable care. The ultimate objective of AUC is to improve patient care and health outcomes in a cost-effective manner but is not intended to ignore ambiguity and nuance intrinsic to clinical decision making.

Appropriate Care- Median Score 7-9

May be Appropriate Care- Median Score 4-6

Rarely Appropriate Care- Median Score 1-3

III. POLICY

Indications for approving a request for medical necessity are:

- A. Recent interrogation shows battery voltage at ERI or Battery voltage less than 2.7v or at EOL. **(AUC Score 9)^{1,2}**
- B. The patient is pacemaker dependent (greater than 50% of Ventricular Pacing) and/or recent pacemaker interrogation showed battery voltage at 2.7v or ERI or EOL. **(AUC Score 8)^{1,2}**
- C. Evidence of Lead malfunctioning/recall on recent interrogation in previously implanted device requiring repositioning/replacement/removal. **(AUC Score 7)^{1,2}**

Limitations

- A. Requests for services that are part of a surveillance protocol for patients who are involved in a clinical trial are considered out of scope (OOS) for New Century Health and cannot be reviewed.

IV. PROCEDURE

- A. In order to review a request for medical necessity, the following items must be submitted for review:
 - 1. Progress note that prompted request
 - 2. Device analysis data that triggered battery replacement
- B. Primary codes appropriate for this service: 33227 (Single lead), 33228 (Dual lead), 33229 (Multiple leads) Additional codes: 33210 - Insertion or replacement of temporary transvenous single chamber cardiac electrode or pacemaker catheter, 33211 - Insertion or replacement of temporary transvenous dual chamber pacing electrodes, 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). 33215 - Repositioning of previously implanted transvenous pacemaker or implantable defibrillator (right atrial or right ventricular) electrode. 33216- Insertion of a single transvenous electrode, permanent pacemaker, or implantable defibrillator. 33217- Insertion of 2 transvenous electrodes, permanent pacemaker, or implantable defibrillator. 33218 - Repair of single transvenous electrode, permanent pacemaker, or implantable defibrillator. 33220 - Repair of 2 transvenous electrodes for permanent pacemaker or implantable defibrillator. 33222 - Relocation of skin pocket for pacemaker. 33233 - Removal of permanent pacemaker pulse generator only. 33234 - Removal of transvenous pacemaker electrode(s); single lead system, atrial or ventricular. 33235 - Removal of transvenous pacemaker electrode(s); dual lead system. 33236 - Removal of permanent epicardial pacemaker and electrodes by thoracotomy; single lead system, atrial or ventricular. 33237 - Removal of permanent epicardial pacemaker and electrodes by thoracotomy; dual lead system. 33238 - Removal of permanent transvenous electrode(s) by thoracotomy.

V. APPROVAL AUTHORITY

- A. Review – Utilization Management Department

B. Final Approval – Utilization Management Committee

VI. ATTACHMENTS

A. None

VII. REFERENCES

1. Epstein AE, et al. 2012 ACCF/AHA/HRS focused update incorporated into the ACCF/AHA/HRS 2008 guidelines for device-based therapy of cardiac rhythm abnormalities: a report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines and the Heart Rhythm Society. *Journal of the American College of Cardiology*. Jan 2013. Volume 61, Issue 3, Pages e6-75.
2. Robert C. Hendel MD, FACC, FAHA, et al. Appropriate use of cardiovascular technology: 2013 ACCF appropriate use criteria methodology update: a report of the American College of Cardiology Foundation appropriate use criteria task force. *Journal of the American College of Cardiology*. March 2013, Volume 61, Issue 12, Pages 1305-1317.
3. NCQA UM 2022 Standards and Elements.