



Cardio Policy: Automatic Implantable Cardioverter Defibrillator Battery Replacement

POLICY NUMBER UM CARDIO_1144	SUBJECT Automatic Implantable Cardioverter Defibrillator Battery Replacement		DEPT/PROGRAM UM Dept	PAGE 1 OF 3
DATES COMMITTEE REVIEWED 08/03/11, 12/12/12, 08/22/13, 06/28/14, 08/12/15, 11/28/16, 12/21/16, 10/31/17, 03/13/19, 12/11/19, 08/12/20, 08/11/21, 01/12/22, 02/09/22, 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, 06/28/14, 08/12/15, 11/28/16, 12/21/16, 10/31/17, 03/13/19, 12/11/19, 08/12/20, 08/11/21, 01/12/22, 02/09/22, 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 automatic implantable Cardioverter defibrillator (AICD) Battery Replacement.

II. DEFINITIONS

The automatic implantable cardioverter defibrillator (AICD) is an electronic device designed to detect and treat life-threatening tachyarrhythmia's or Brady arrhythmias. The device consists of a pulse generator and electrodes for sensing, pacing, and defibrillation.

The AICD 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 defibrillator 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. AICD/S-ICD implantation for Primary prevention of Sudden Cardiac Death with recent interrogation showing no clinically relevant Ventricular Arrhythmias but with battery voltage at ERI or Battery voltage less than 2.7v or EOL and LVEF less than or equal to 35%. **(AUC Score 9)**^{1,2,3}
- B. AICD/S-ICD implantation for Primary prevention of Sudden Cardiac Death with recent interrogation showing clinically relevant Ventricular Arrhythmias since implant and with battery voltage at ERI or Battery voltage less than 2.7v or EOL with LVEF greater than or equal to 35%. **(AUC Score 9)**^{1,2,3}
- C. AICD/S-ICD implanted for secondary prevention with no Ventricular arrhythmia since implant and recent interrogation showed no Ventricular Arrhythmia since implant and battery voltage at ERI or Battery voltage less than 2.7v or EOL **(AUC Score 9)**^{1,2,3}
- D. AICD/S-ICD implanted for secondary prevention and recent interrogation Ventricular arrhythmia since implant showed Ventricular arrhythmia since implant and battery voltage at ERI or Battery voltage less than 2.7v or EOL. **(AUC Score 9)**^{1,2,3}
- E. Lead repositioning/replacement/removal may be performed in the presence of evidence of lead malfunctioning on recent interrogation or if a lead recall has been issued. **(AUC Score 7)**^{1,2}
- F. Repositioning/relocation of the skin pocket for the device may be performed in the presence of infection, the development of overlying skin erosion/tissue necrosis, if any other anatomical factor prevents the device from properly functioning, or if device migration has resulted in significant patient discomfort. **(AUC Score 7)**^{3,4}

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. 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
 3. Most recent Echocardiogram
- B. Primary codes appropriate for this service: 33262 - Single lead, 33263 - Dual lead, 33264 - Multiple leads, 33241- Removal of Generator only, 33244 - Removal of single or dual ICD electrode(s), 33215 - Repositioning of PM or ICD lead, 33216 - Insertion of single lead, 33217 - Insertion of 2 leads PM or ICD, 33218 - Repair single lead PM or ICD, 33220 - Repair 2 leads for PM or ICD, 93640 - Electrophysiologic eval of single or dual ICD leads including defibrillation threshold prior to being connected to device, 93641 - Electrophysiologic eval of single or dual ICD

leads including defibrillation threshold after being connected to device, 33223 - Relocation of skin pocket for device.

V. APPROVAL AUTHORITY

- A. Review – Utilization Management Department
- B. Final Approval – Utilization Management Committee

VI. ATTACHMENTS

- A. None

VII. REFERENCES

1. Russo AM, et al. ACCF/HRS/AHA/ASE/HFSA/SCAI/SCCT/SCMR 2013 appropriate use criteria for implantable cardioverter-defibrillators and cardiac resynchronization therapy. *Journal of the American College of Cardiology*. March 2013. Volume 61, Issue 12, Pages 1318-68.
2. Epstein AE, et al. ACC/AHA/HRS 2008 Guidelines for Device-Based Therapy of Cardiac Rhythm Abnormalities: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (Writing Committee to Revise the ACC/AHA/NASPE 2002 Guideline Update for Implantation of Cardiac Pacemakers and Antiarrhythmia Devices) developed in collaboration with the American Association for Thoracic Surgery and Society of Thoracic Surgeons. *Journal of the American College of Cardiology*. May 2008. Volume 51, Issue 21, Pages e1-62.
3. 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.
4. Ranasinghe I., et al. Long-Term Risk for Device-Related Complications and Reoperations after Implantable Cardioverter-Defibrillator Implantation: An Observational Cohort Study. *Ann Intern Med* 2016 (from the National Cardiovascular Data Registry).
5. NCQA UM 2022 Standards and Elements.