



Cardio Policy:

Automatic Implantable Cardioverter Defibrillator

POLICY NUMBER UM CARDIO_1080	SUBJECT Automatic Implantable Cardioverter Defibrillator	DEPT/PROGRAM UM Dept	PAGE 1 OF 4
DATES COMMITTEE REVIEWED 04/01/11, 11/07/12, 03/10/14, 05/15/15, 08/12/15, 11/28/16, 12/21/16, 10/23/17, 05/01/18, 02/13/19, 02/21/19, 04/24/19, 05/08/19, 12/11/19, 05/13/20, 05/28/21, 08/11/21, 10/13/21, 10/12/22	APPROVAL DATE October 12, 2022	EFFECTIVE DATE October 28, 2022	COMMITTEE APPROVAL DATES 04/01/11, 11/07/12, 03/10/14, 05/15/15, 08/12/15, 11/28/16, 12/21/16, 10/23/17, 05/01/18, 02/13/19, 02/21/19, 04/24/19, 05/08/19, 12/11/19, 05/13/20, 05/28/21, 08/11/21, 10/13/21, 10/12/22
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 initial implantation of Automatic Implantable Cardioverter Defibrillator.

II. DEFINITIONS

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

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. A documented episode of cardiac arrest due to ventricular fibrillation (VF). **(AUC Score 9)**^{1,2,3,4,5}
- B. A documented episode of VF or sustained VT with coronary anatomy not amenable to revascularization. **(AUC Score 9)**^{1,2,3,4,5}
- C. Documented sustained ventricular tachyarrhythmia (VT), either spontaneous or induced by an electrophysiology (EP) study, not associated with an acute myocardial infarction (MI). **(AUC Score 9)**^{1,2,3,4,5}
- D. Documented familial or inherited conditions with a high risk of life-threatening VT, such as long QT syndrome or hypertrophic cardiomyopathy, or Brugada syndrome type I with history of cardiac arrest, sustained ventricular arrhythmia, or syncope presumed due to ventricular arrhythmia. **(AUC Score 9)**^{1,2,3,4,5}
- E. Coronary artery disease with complete revascularization or not amenable for revascularization and with documented prior MI and measured left ventricular ejection fraction (LVEF) $\leq 35\%$, with inducible, sustained VT or VF at EP study and/ or stress testing **(AUC Score 8)**^{1,2,3,4,5}
 - 1. The MI must have occurred more than 40 days prior to defibrillator insertion and/or
 - 2. The EP test must be performed more than 4 weeks after the qualifying MI
- F. Patients with ischemic dilated cardiomyopathy (IDCM), documented prior MI, NYHA Class II or III heart failure, and stable on guideline directed medical therapy (GDMT) for at least 3 months and measured LVEF $\leq 35\%$. **(AUC Score 9)**^{1,2,3,4,5}
- G. Asymptomatic Non-Sustained VT(NSVT)in a re-vascularized patient with Ischemic Cardiomyopathy, ≤ 40 days post AMI with LVEF $\leq 40\%$ and with inducible VT on EP Study. **(AUC Score 7)**^{1,2,3,4,5}
- H. Patients with ischemic dilated cardiomyopathy (IDCM) documented at least 40 days' post MI, NYHA Class I heart failure, and stable on guideline directed medical therapy (GDMT)) for at least 3 months and measured LVEF $\leq 30\%$. **(AUC Score 9)**^{1,2,3,4,5}
- I. Stable Patients with non-ischemic dilated cardiomyopathy (NIDCM), NYHA Class II or III heart failure and stable on guideline directed medical therapy (GDMT) for at least 3 months and measured LVEF $\leq 35\%$. **(AUC Score 9)**^{1,2,3,4,5} If functional class I with LVEF $\leq 35\%$ **(AUC Score 7)**^{4,5}
- J. Patients with cardiomyopathy, class IV heart failure with LVEF $\leq 30\%$, stable on guideline directed medical therapy) for at least 3 months and are on waiting list for heart transplant. **(AUC Score 8)**^{1,2,3,4,5}
- K. Patients must not have
 - 1. New York Heart Association Classification: IV (bed ridden and with a likelihood of survival less than 1 year.
 - 2. Cardiogenic shock or symptomatic hypotension while in a stable baseline rhythm
 - 3. Had a coronary artery bypass graft (CABG) or percutaneous transluminal coronary angioplasty (PTCA) within past 3 months

4. Had an enzyme-positive MI within past 40 days
 5. Clinical symptoms or findings that would make them a candidate for coronary revascularization
 6. Any disease, other than cardiac disease (e.g., cancer, uremia, liver failure) and/or associated with a likelihood of survival less than 1 year.
 7. Irreversible brain damage from preexisting cerebral disease.
- L. Evidence of Lead malfunctioning/recall on recent interrogation in previously implanted device requiring repositioning/replacement/removal. **(AUC Score 7)^{1,2,3,4}**

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. In order to review a request for medical necessity, the following items must be submitted for review:
 1. Cardiologist or Electro physiologist note that prompted request
 2. Other previous monitoring tests pertinent to referral such as: holster, event monitoring device analysis, EP study report.
 3. Cardiac catheterization, MUGA, ECHO
- B. Primary codes appropriate for this service: Primary codes appropriate for this service: AICD Implantation-33249, Pocket relocation (33223), Repositioning of ICD lead- 33215,33216,33217,33218,33220, 33230,33240, Upgrade from Single to dual chamber AICD- 33241+33249, DFT testing of ICD leads - 93640, DFT testing of ICD generator- 93641. Trans venous extraction of defibrillator lead- 33244.Extraction of defibrillator lead by Thoracotomy- 33243, 75820- Venogram (prior to implantation).

V. APPROVAL AUTHORITY

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

VI. ATTACHMENTS

- A. None

VII. REFERENCES

1. Centers for Medicare and Medicaid Services. National Coverage Determinations (NCD) (20.4). Implantable Automatic Defibrillators. Retrieved from <https://www.cms.gov> April 24th, 2019.
2. Centers for Medicare and Medicaid Services. Local Coverage Determination (LCD) Biventricular Pacing/Cardiac Resynchronization Therapy (L33271). Retrieved from <https://www.cms.gov> April 24th, 2019.
3. Sana M. Al-Khatib, et al. 2017 AHA/ACC/HRS Guideline for Management of Patients With Ventricular Arrhythmias and the Prevention of Sudden Cardiac Death - A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines and the Heart Rhythm Society. Circulation. 2018; 138: e272–e391

4. Russo AM, et al. ACCF/HRS/AHA/ASE/HFSA/SCAI/SCCT/SCMR 2013 appropriate use criteria for implantable cardioverter-defibrillators and cardiac resynchronization therapy: a report of the American College of Cardiology Foundation appropriate use criteria task force, Heart Rhythm Society, American Heart Association, American Society of Echocardiography, Heart Failure Society of America, Society for Cardiovascular Angiography and Interventions, Society of Cardiovascular Computed Tomography, and Society for Cardiovascular Magnetic Resonance. Journal of the American College of Cardiology. March 2013, Volume 61, Issue 12, Pages 1318-1368.
5. Robert C. Hendel MD, FACC, FAHA, FASNC 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.
6. NCQA UM 2022 Standards and Elements.