

Medical Policy:

Automatic External Defibrillators

POLICY NUMBER	LAST REVIEW
MG.MM.DM.10dC9	June 9, 2023

Medical Guideline Disclaimer Property of EmblemHealth. All rights reserved.

The treating physician or primary care provider must submit to EmblemHealth, or ConnectiCare, as applicable (hereinafter jointly referred to as “EmblemHealth”), the clinical evidence that the member meets the criteria for the treatment or surgical procedure. Without this documentation and information, EmblemHealth will not be able to properly review the request preauthorization or post-payment review. The clinical review criteria expressed below reflects how EmblemHealth determines whether certain services or supplies are medically necessary. This clinical policy is not intended to pre-empt the judgment of the reviewing medical director or dictate to health care providers how to practice medicine. Health care providers are expected to exercise their medical judgment in rendering appropriate care. Health care providers are expected to exercise their medical judgment in rendering appropriate care.

EmblemHealth established the clinical review criteria based upon a review of currently available clinical information (including clinical outcome studies in the peer reviewed published medical literature, regulatory status of the technology, evidence-based guidelines of public health and health research agencies, evidence-based guidelines and positions of leading national health professional organizations, views of physicians practicing in relevant clinical areas, and other relevant factors). EmblemHealth expressly reserves the right to revise these conclusions as clinical information changes and welcomes further relevant information. Each benefit program defines which services are covered. The conclusion that a particular service or supply is medically necessary does not constitute a representation or warranty that this service or supply is covered and/or paid for by EmblemHealth, as some programs exclude coverage for services or supplies that EmblemHealth considers medically necessary.

If there is a discrepancy between this guideline and a member's benefits program, the benefits program will govern. Identification of selected brand names of devices, tests and procedures in a medical coverage policy is for reference only and is not an endorsement of any one device, test or procedure over another. In addition, coverage may be mandated by applicable legal requirements of a state, the Federal Government or the Centers for Medicare & Medicaid Services (CMS) for Medicare and Medicaid members. All coding and web site links are accurate at time of publication.

EmblemHealth may also use tools developed by third parties, such as the MCG™ Care Guidelines, to assist us in administering health benefits. The MCG™ Care Guidelines are intended to be used in connection with the independent professional medical judgment of a qualified health care provider and do not constitute the practice of medicine or medical advice. EmblemHealth Services Company, LLC, has adopted this policy in providing management, administrative and other services to EmblemHealth Plan, Inc., EmblemHealth Insurance Company, EmblemHealth Services Company, LLC, and Health Insurance Plan of Greater New York (HIP) related to health benefit plans offered by these entities. ConnectiCare, an EmblemHealth company, has also adopted this policy. All of the aforementioned entities are affiliated companies under common control of EmblemHealth Inc.

Acronyms Key

Electrophysiologic study	EP
Left ventricular ejection fraction	LVEF
Myocardial infarction	MI
Sudden cardiac death	SCD
Ventricular fibrillation	VF
Ventricular tachycardia	VT

Guideline

Automatic external defibrillators are covered for members with the DME benefit who are at high risk for SCD due to one of the conditions described under Section I or II. It is expected that the ordering physician be experienced in the management of patients at risk for SCD.

I. Wearable defibrillator; one of the criteria must be met:

1. Documented VF episode or a sustained VT (> 30 seconds). These dysrhythmias may be either spontaneous or induced during an EP study, but may not be due to a transient or reversible cause nor occur during the first 48 hours of an MI
2. Familial or inherited conditions with a high risk of life-threatening VT (i.e., long QT syndrome or hypertrophic cardiomyopathy)
3. Either documented prior MI or dilated cardiomyopathy and a measured LVEF \leq 35%
4. Members that satisfy requirements for an ICD, but have a temporary contraindication or are awaiting heart transplantation
5. A previously implanted cardioverter defibrillator (ICD) now requires explantation (e.g. ICD system defect or infection caused by ICD)

II. Nonwearable defibrillator; both criteria 1 and 2 must be met:

1. The member has one of the following conditions:
 - A documented episode of cardiac arrest due to VF, not due to a transient or reversible cause
 - A sustained VT (> 30 seconds) either spontaneous or induced during an EP study, not associated with acute MI and not due to a transient or reversible cause
 - Familial or inherited conditions with a high risk of life-threatening VT (i.e., long QT syndrome or hypertrophic cardiomyopathy)
 - Coronary artery disease with a documented prior MI, measured LVEF \leq 35% and inducible, sustained VT or VF during an EP study. To meet this criterion, **both** of the following must apply:
 - The MI must have occurred > 4 weeks prior to the external defibrillator prescription
 - The EP test must have been performed > 4 weeks after the qualifying MI
 - Documented prior MI and a measured LVEF \leq 30%. Members must not have any of the following:
 - Cardiogenic shock or symptomatic hypotension while in a stable baseline rhythm
 - Coronary artery bypass graft or percutaneous transluminal coronary angioplasty within the past 3 months
 - Enzyme-positive MI within 40 day
 - Clinical symptoms or findings that would make them candidates for coronary revascularization
 - Irreversible brain damage from pre-existing cerebral disease
 - Any disease other than cardiac disease (i.e., cancer, uremia, liver failure) associated with a likelihood of survival < 1 year
 - Ischemic dilated cardiomyopathy, documented MI, New York Heart Association (NYHA) Class II and III heart failure and measured LVEF \leq 35%

- Nonischemic dilated cardiomyopathy for > 3 months, NYHA Class II and III heart failure and measured LVEF ≤ 35%
- One of the previous criteria in this section and NYHA Class IV heart failure.

OR

2. Implantation surgery is contraindicated.

OR

3. A previously implanted ICD now requires explantation (e.g. ICD system defect or infection caused by ICD).

Procedure Codes

93292	Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; wearable defibrillator system
93745	Initial set-up and programming by a physician or other qualified health care professional of wearable cardioverter-defibrillator includes initial programming of system, establishing baseline electronic ECG, transmission of data to data repository, patient instruction in wearing system and patient reporting of problems or events
K0606	Automatic external defibrillator with integrated electrocardiogram analysis, garment type
K0607	Replacement battery for automated external defibrillator, garment type only, each
K0608	Replacement garment for use with automated external defibrillator, each
K0609	Replacement electrodes for use with automated external defibrillator, garment type only, each
E0617	External defibrillator with integrated electrocardiogram analysis

ICD-10 Diagnoses

A18.84	Tuberculosis of heart
I21.A1	Myocardial infarction type 2
I21.A9	Other myocardial infarction type
I21.01	ST elevation (STEMI) myocardial infarction involving left main coronary artery
I21.02	ST elevation (STEMI) myocardial infarction involving left anterior descending coronary artery
I21.09	ST elevation (STEMI) myocardial infarction involving other coronary artery of anterior wall
I21.11	ST elevation (STEMI) myocardial infarction involving right coronary artery
I21.19	ST elevation (STEMI) myocardial infarction involving other coronary artery of inferior wall
I21.21	ST elevation (STEMI) myocardial infarction involving left circumflex coronary artery
I21.29	ST elevation (STEMI) myocardial infarction involving other sites
I21.3	ST elevation (STEMI) myocardial infarction of unspecified site
I21.4	Non-ST elevation (NSTEMI) myocardial infarction
I21.9	Acute myocardial infarction, unspecified

I22.0	Subsequent ST elevation (STEMI) myocardial infarction of anterior wall
I22.1	Subsequent ST elevation (STEMI) myocardial infarction of inferior wall
I22.2	Subsequent non-ST elevation (NSTEMI) myocardial infarction
I22.8	Subsequent ST elevation (STEMI) myocardial infarction of other sites
I22.9	Subsequent ST elevation (STEMI) myocardial infarction of unspecified site
I25.2	Old myocardial infarction
I42.0	Dilated cardiomyopathy
I42.1	Obstructive hypertrophic cardiomyopathy
I42.2	Other hypertrophic cardiomyopathy
I42.3	Endomyocardial (eosinophilic) disease
I42.4	Endocardial fibroelastosis
I42.5	Other restrictive cardiomyopathy
I42.6	Alcoholic cardiomyopathy
I42.7	Cardiomyopathy due to drug and external agent
I42.8	Other cardiomyopathies
I42.9	Cardiomyopathy, unspecified
I43	Cardiomyopathy in diseases classified elsewhere
I45.81	Long QT syndrome
I46.2	Cardiac arrest due to underlying cardiac condition
I46.8	Cardiac arrest due to other underlying condition
I46.9	Cardiac arrest, cause unspecified
I47.0	Re-entry ventricular arrhythmia
I47.1	Supraventricular tachycardia
I47.20	Ventricular tachycardia, unspecified (eff.10/1/2022)
I47.21	Torsades de pointes (eff.10/1/2022)
I47.29	Other ventricular tachycardia (eff.10/1/2022)
I47.9	Paroxysmal tachycardia, unspecified
I49.01	Ventricular fibrillation
I49.02	Ventricular flutter
I49.2	Junctional premature depolarization
I50.1	Left ventricular failure, unspecified
I50.20	Unspecified systolic (congestive) heart failure
I50.21	Acute systolic (congestive) heart failure
I50.22	Chronic systolic (congestive) heart failure
I50.23	Acute on chronic systolic (congestive) heart failure
I50.30	Unspecified diastolic (congestive) heart failure

I50.31	Acute diastolic (congestive) heart failure
I50.32	Chronic diastolic (congestive) heart failure
I50.33	Acute on chronic diastolic (congestive) heart failure
I50.40	Unspecified combined systolic (congestive) and diastolic (congestive) heart failure
I50.41	Acute combined systolic (congestive) and diastolic (congestive) heart failure
I50.42	Chronic combined systolic (congestive) and diastolic (congestive) heart failure
I50.43	Acute on chronic combined systolic (congestive) and diastolic (congestive) heart failure
I50.810	Right heart failure, unspecified
I50.811	Acute right heart failure
I50.812	Chronic right heart failure
I50.813	Acute on chronic right heart failure
I50.814	Right heart failure due to left heart failure
I50.82	Biventricular heart failure
I50.83	High output heart failure
I50.84	End stage heart failure
I50.89	Other heart failure
I50.9	Heart failure, unspecified
I51.7	Cardiomegaly
T82.110A	Breakdown (mechanical) of cardiac electrode, initial encounter
T82.111A	Breakdown (mechanical) of cardiac pulse generator (battery), initial encounter
T82.118A	Breakdown (mechanical) of other cardiac electronic device, initial encounter
T82.119A	Breakdown (mechanical) of unspecified cardiac electronic device, initial encounter
T82.120A	Displacement of cardiac electrode, initial encounter
T82.121A	Displacement of cardiac pulse generator (battery), initial encounter
T82.128A	Displacement of other cardiac electronic device, initial encounter
T82.129A	Displacement of unspecified cardiac electronic device, initial encounter
T82.190A	Other mechanical complication of cardiac electrode, initial encounter
T82.191A	Other mechanical complication of cardiac pulse generator (battery), initial encounter
T82.198A	Other mechanical complication of other cardiac electronic device, initial encounter
T82.199A	Other mechanical complication of unspecified cardiac device, initial encounter
T82.6XXA	Infection and inflammatory reaction due to cardiac valve prosthesis, initial encounter
T82.7XXA	Infection and inflammatory reaction due to other cardiac and vascular devices, implants and grafts, initial encounter

References

ACC/AHA/ESC. Guidelines 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 and the European Society of Cardiology Committee for

Practice Guidelines. 2006. <http://circ.ahajournals.org/content/114/10/1088.full.pdf>. Accessed June 15, 2023.

Arnon Adler, MD; Amir Halkin, MD; Sami Viskin, MD. New Drugs and Technologies. Wearable Cardioverter-Defibrillators. Circulation. 2013; 127: 854-860.

Jeffrey E. Olgin, M.D., Mark J. Pletcher, M.D., M.P.H., Eric Vittinghoff, Ph.D., Jerzy Wranicz, M.D., Ph.D., Rajesh Malik, M.D., Daniel P. Morin, M.D., M.P.H., Steven Zweibel, M.D., Alfred E. Buxton, M.D., Claude S. Elayi, M.D., Eugene H. Chung, M.D., Eric Rashba, M.D., Martin Borggrefe, M.D., Ph.D., et al., for the VEST Investigators*. Wearable Cardioverter-Defibrillator after Myocardial Infarction. September 27, 2018. N Engl J Med 2018; 379:1205-1215.

Lackermair, K., et al. (2018). Impairment of Quality of Life among Patients with Wearable Cardioverter Defibrillator Therapy (LifeVest(r)): A Preliminary Study. BioMed research international, 2018, 6028494. doi:10.1155/2018/6028494

Olgin, J., et al. (2018) Wearable Cardioverter-Defibrillator after Myocardial Infarction. N Engl J Med. 2018 Sep 27; 379(13):1205-1215. doi: 10.1056/NEJMoa1800781.

Reek, S., et al. (2017). The wearable cardioverter-defibrillator: current technology and evolving indications. Europace. 2017 Mar 1; 19(3):335-345. doi:10.1093/Europace/euw18

Noridian Healthcare Solutions. Local Coverage Determination Automatic External Defibrillators. January 2020. <https://www.cms.gov/medicare-coverage-database/view/lcd.aspx?LCDId=33690>. Accessed June 15, 2023.

National Government Services. Local Coverage Article. Surveillance of Implantable or Wearable Cardioverter Defibrillators (ICDs): Office, Hospital, Web, or Non-Web Based. January 1, 2019. <https://www.cms.gov/medicare-coverage-database/details/article-details.aspx?articleId=53018&ver=9&Date=&DocID=A53018&bc=hAAAABAAAA&>. Accessed June 15, 2023.

Specialty-matched clinical peer review.

Revision History

Company(ies)	DATE	REVISION
ConnectiCare	Oct. 5, 2020	Connecticare adopts clinical criteria of its parent corporation EmblemHealth