Medical Coverage Policy | Non-Wearable Automatic External Defibrillators (AED)

EFFECTIVE DATE: 01|01|2017
POLICY LAST UPDATED: 12|16|2020

OVERVIEW

Automatic defibrillators are devices that are capable of monitoring cardiac rhythms, detecting dysrhythmias, and delivering a defibrillation shock to the heart when appropriate without any user decision-making.

There are both wearable (a vest-like garment) and non-wearable (a portable unit for use in the home) defibrillator devices. This policy refers to a non-wearable automatic external defibrillator. For information regarding the wearable device, please refer to the Preauthorization via Web-Based Tool for DME policy.

MEDICAL CRITERIA

Medicare Advantage Plans

A nonwearable automatic defibrillator is covered for beneficiaries in two circumstances. They must meet EITHER both criteria A and B, OR criteria C, described below:

A. The beneficiary has one of the following conditions (1-8):

1. A documented episode of cardiac arrest due to ventricular fibrillation, not due to a transient or reversible cause
2. A sustained, lasting 30 seconds or longer, ventricular tachyarrhythmia, either spontaneous or induced during an electrophysiologic (EP) study, not associated with acute myocardial infarction, and not due to a transient or reversible cause
3. Familial or inherited conditions with a high risk of life-threatening ventricular tachyarrythmias such as long QT syndrome or hypertrophic cardiomyopathy
4. Coronary artery disease with a documented prior myocardial infarction with a measured left ventricular ejection fraction less than or equal to 0.35, and inducible, sustained ventricular tachycardia (VT) or ventricular fibrillation (VF) during an EP study. To meet this criterion:
    a. The myocardial infarction must have occurred more than 4 weeks prior to the external defibrillator prescription; and,
    b. The EP test must have been performed more than 4 weeks after the qualifying myocardial infarction.
5. Documented prior myocardial infarction and a measured left ventricular ejection fraction less than or equal to 0.30. Beneficiaries must not have:
    a. Cardiogenic shock or symptomatic hypotension while in a stable baseline rhythm; or,
    b. Had a coronary artery bypass graft (CABG) or percutaneous transluminal coronary angioplasty (PTCA) within past 3 months; or,
    c. Had an enzyme-positive MI within past month; or,
    d. Clinical symptoms or findings that would make them a candidate for coronary revascularization; or,
    e. Irreversible brain damage from preexisting cerebral disease; or,
    f. Any disease, other than cardiac disease (e.g., cancer, uremia, liver failure), associated with a likelihood of survival less than one year.
6. Beneficiaries with ischemic dilated cardiomyopathy (IDCM), documented prior myocardial infarction (MI), New York Heart Association (NYHA) Class II and III heart failure, and measured left ventricular ejection fraction (LVEF) less than or equal to 35%.

7. Beneficiaries with nonischemic dilated cardiomyopathy (NIDCM) > 3 months, NYHA Class II and III heart failure, and measured LVEF less than or equal to 35%.
8. Beneficiaries who meet one of the previous criteria (1-7) and have NYHA Class IV heart failure

B. Implantation surgery is contraindicated.

C. A previously implanted defibrillator now requires explantation.

Commercial Products
Not applicable

PRIOR AUTHORIZATION

Medicare Advantage Plans
Prior authorization is required for Medicare Advantage Plans and is obtained via the online tool for participating providers. See the Related Policies section.

Commercial Products
Not applicable

POLICY STATEMENT

Medicare Advantage Plans
An automatic external defibrillator for use in the home is considered medically necessary when the medical criteria above has been met.

Commercial Products
An automatic external defibrillator for use in the home is a contract exclusion/non-covered service.

COVERAGE

Benefits may vary between groups/contracts. Please refer to the appropriate Benefit Booklet, Evidence of Coverage or Subscriber Agreement for applicable durable medical equipment benefits/coverage.

BACKGROUND

The non-wearable automatic defibrillator is a portable automatic device used to restore normal heart rhythm to patients in cardiac arrest. An external electric shock is administered through conductive adhesive electrode pads applied to the person by a user. Built-in computers analyze the person's rhythm and determine if rhythm requires defibrillation shocks. The user is guided through the process by voice and visual prompts. Automatic external defibrillators are designed to be used by lay rescuers or first responders.

Automatic external defibrillators (AEDs) have become an important component of emergency medical systems (EMS), and the availability of AEDs in public places is expanding. There is insufficient evidence in the published medical literature, however, to demonstrate that use of AEDs in the home by laypersons improves outcomes. An AED in the home is primarily considered a safety device kept in the home as precautionary measure to address a possible acute event, rather than a device for active treatment.

CODING

The following HCPCS code is covered for Medicare Advantage Plans when medical criteria are met and is a contract exclusion/non-covered item for Commercial products.
E0617 External defibrillator with integrated electrocardiogram analysis

RELATED POLICIES

Preauthorization via Web Based Tool for Durable Medical Equipment (DME)

PUBLISHED

Provider Update, March 2021
Provider Update, January 2020
Provider Update, January 2019
Provider Update, June 2017
Provider Update, November 2016

REFERENCES

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3. Marenco JP, Wang PJ, Link MS. Improving survival from sudden cardiac arrest: the role of the automatic external defibrillator. JAMA. 2001 Jul;286(1):47-9.

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6. Weisfeldt ML, Sitlani CM, Ornato JP, Rea T, Aufderheide TP, Davis D, et al.; ROC Investigators. Survival after application of automatic external defibrillators before arrival of the emergency medical system: evaluation in the resuscitation outcomes consortium population of 21 million. J Am Coll Cardiol. 2010 Apr 20;55(16):1713-20