

Policy: MP342

Section: Medical Benefit Policy

Subject: Non-Wearable Automatic External Defibrillator

Applicable line of business:

Commercial	x	Medicaid	x
Medicare	x	ACA	x
CHIP	x		

I. Policy: Non-Wearable Automatic External Defibrillator

II. Purpose/Objective:

To provide a policy of coverage regarding

III. Responsibility:

- A. Medical Directors
- **B.** Medical Management

IV. Required Definitions

- 1. Attachment a supporting document that is developed and maintained by the policy writer or department requiring/authoring the policy.
- 2. Exhibit a supporting document developed and maintained in a department other than the department requiring/authoring the policy.
- 3. Devised the date the policy was implemented.
- 4. Revised the date of every revision to the policy, including typographical and grammatical changes.
- 5. Reviewed the date documenting the annual review if the policy has no revisions necessary.

Commercial

Geisinger Health Plan may refer collectively to health care coverage sponsors Geisinger Health Plan, Geisinger Quality Options, Inc., and Geisinger Indemnity Insurance Company, unless otherwise noted. Geisinger Health Plan is part of Geisinger, an integrated health care delivery and coverage organization.

Medicare

Geisinger Gold Medicare Advantage HMO, PPO, and HMO D-SNP plans are offered by Geisinger Health Plan/Geisinger Indemnity Insurance Company, health plans with a Medicare contract. Continued enrollment in Geisinger Gold depends on contract renewal. Geisinger Health Plan/Geisinger Indemnity Insurance Company are part of Geisinger, an integrated health care delivery and coverage organization.

CHIP

Geisinger Health Plan Kids (GHP Kids) is a Children's Health Insurance Program (CHIP) offered by Geisinger Health Plan in conjunction with the Pennsylvania Department of Human Services (DHS). Geisinger Health Plan is part of Geisinger, an integrated health care delivery and coverage organization.

Medicaid

Geisinger Health Plan Family (GHP Family) is a Medical Assistance (Medicaid) insurance program offered by Geisinger Health Plan in conjunction with the Pennsylvania Department of Human Services (DHS). Geisinger Health Plan is part of Geisinger, an integrated health care delivery and coverage organization

V. Additional Definitions

Medical Necessity or Medically Necessary means Covered Services rendered by a Health Care Provider that the Plan determines are:

- a. appropriate for the symptoms and diagnosis or treatment of the Member's condition, illness, disease or injury;
- b. provided for the diagnosis, and the direct care and treatment of the Member's condition, illness disease or injury;
- c. in accordance with current standards of good medical treatment practiced by the general medical community.
- d. not primarily for the convenience of the Member, or the Member's Health Care Provider; and
- e. the most appropriate source or level of service that can safely be provided to the Member. When applied to hospitalization, this further means that the Member requires acute care as an inpatient due to the nature of the services rendered or the Member's condition, and the Member cannot receive safe or adequate care as an outpatient.

Medicaid Business Segment

Medically Necessary — A service, item, procedure, or level of care that is necessary for the proper treatment or management of an illness, injury, or disability is one that:

- Will, or is reasonably expected to, prevent the onset of an illness, condition, injury or disability.
- Will, or is reasonably expected to, reduce or ameliorate the physical, mental or developmental effects of an illness, condition, injury or disability.
- Will assist the Member to achieve or maintain maximum functional capacity in performing daily activities, taking into account both the functional capacity of the Member and those functional capacities that are appropriate for Members of the same age

INDICATIONS: REQUIRES PRIOR AUTHORIZATIN BY A PLAN MEDICAL DIRECTOR OR DESIGNEE

ADULTS:

Criteria A: the member has one of the following conditions:

- A documented episode of cardiac arrest due to ventricular fibrillation, not due to a transient or reversible cause; **or**
- 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; or
- Familial or inherited conditions with a high risk of life-threatening ventricular tachyarrhythmias such as long QT syndrome or hypertrophic cardiomyopathy; or
- 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;
 - The myocardial infarction must have occurred more than 4 weeks prior to the external defibrillator prescription; **and**
 - The EP test must have been performed more than 4 weeks after the qualifying myocardial infarction.
- Documented prior myocardial infarction and a measured left ventricular ejection fraction less than or equal to 0.30; or
- 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) ≤ 35%; or
- Nonischemic dilated cardiomyopathy (NIDCM) > 3 months, NYHA Class II and III heart failure, and measured LVEF ≤ 35%; or
- Members who meet one of the previous criteria and have NYHA Class IV heart failure
 AND

B. Implantation surgery or wearable AED is contraindicated; OR

C. A previously implanted defibrillator now requires explantation

CHILDREN:

A pediatric non-wearable AED is considered medically necessary for children one to eight years of age who weigh less than 55 pounds (25 kilograms) and meet one or more of the medically necessary adult criteria listed above.

LIMITATIONS:

For lines of business with Durable Medical Equipment benefit, coverage will be subject to the limitations or exclusions expressed in the applicable benefit document.

EXCLUSIONS:

Members must not have:

- 1. cardiogenic shock or symptomatic hypotension while in a stable baseline rhythm; or
- 2. had an enzyme-positive myocardial infarction within the past month; or
- 3. clinical symptoms that would make them a candidate for coronary revascularization; or
- 4. irreversible brain damage from a pre-existing cerebral disease; or
- 5. any disease other than cardiac disease associated with a likelihood of survival less than one year.

The Plan does **NOT COVER** a home-based automatic external defibrillator unit in the absence of medical necessity review meeting criteria outlined above because it is considered to be a precautionary safety device to address a possible cardiac event and not used for active treatment.

The Plan does not cover replacement of a functional Non-Wearable Automatic External Defibrillator based solely on upgrade or technology enhancements.

Note: A complete description of the process by which a given technology or service is evaluated and determined to be experimental, investigational or unproven is outlined in MP 15 - Experimental Investigational or Unproven Services or Treatment.

Medicaid Business Segment:

Any requests for services, that do not meet criteria set in the PARP, may be evaluated on a case by case basis.

CODING ASSOCIATED WITH: Non-Wearable Automatic External Defibrillator

The following codes are included below for informational purposes and may not be all inclusive. Inclusion of a procedure or device code(s) does not constitute or imply coverage nor does it imply or guarantee provider reimbursement. Coverage is determined by the member specific benefit plan document and any applicable laws regarding coverage of specific services. Please note that per Medicare coverage rules, only specific CPT/HCPCS Codes may be covered for the Medicare Business Segment. Please consult the CMS website at www.cms.gov or the local Medicare Administrative Carrier (MAC) for more information on Medicare coverage and coding requirements.

E0617 External defibrillator with integrated electrocardiogram analysis

Current Procedural Terminology (CPT®) © American Medical Association: Chicago, IL

LINE OF BUSINESS:

Eligibility and contract specific benefits, limitations and/or exclusions will apply. Coverage statements found in the line of business specific benefit document will supersede this policy. For Medicare, applicable LCD's and NCD's will supercede this policy. For PA Medicaid Business segment, this policy applies as written.

REFERENCES:

Bardy GH, Lee KL, Mark DB, Poole JE, Toff WD, Tonkin AM, et al., for the HAT Investigators. Home use of automated external defibrillators for sudden cardiac arrest. N Engl J Med. 2008 Apr 24;358(17):1793-804

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.

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.

Sanna T, La Torre G, de Waure C, et al. Cardiopulmonary resuscitation alone vs. cardiopulmonary resuscitation plus automated external defibrillator use by non-healthcare professionals: a meta-analysis on 1583 cases of out-of-hospital cardiac arrest. Resuscitation. 2008; 76(2):226-232.

Pundi KN, Bos JM, Cannon BC, Ackerman. Automated external defibrillator rescues among children with diagnosed and treated long QT syndrome. Heart Rhythm. 2015; 12(4):776-781

McLeod KA, Fern E, Clements F, McGowan R. Prescribing an automated external defibrillator for children at increased risk of sudden arrhythmic death. Cardiol Young. 2017; 27(7):1271-1279.

Centers for Medicare & Medicaid Services, Noridian Healthcare Solutions. Automatic External Defibrillators L33690

Lai M, et al. Risk Factors for Arrhythmic Death, Overall Mortality, and Ventricular Tachyarrhythmias Requiring Shock After Myocardial Infarction. Am J Cardiol 2023 Jan 15;187:18-25.

This policy will be revised as necessary and reviewed no less than annually.

Devised: 4/21 (Previously addressed in MP121- Retired)

Revised:

Reviewed: 4/22, 4/23, 4/24, 4/25

CMS UM Oversight Committee Approval: 12/23, 7/24, 6/25

Geisinger Health Plan may refer collectively to health care coverage sponsors Geisinger Health Plan, Geisinger Quality Options, Inc., and Geisinger Indemnity Insurance Company, unless otherwise noted. Geisinger Health Plan is part of Geisinger, an integrated health care delivery and coverage organization.

Coverage for experimental or investigational treatments, services and procedures is specifically excluded under the member's certificate with Geisinger Health Plan. Unproven services outside of an approved clinical trial are also specifically excluded under the member's certificate with Geisinger Health Plan. This policy does not expand coverage to services or items specifically excluded from coverage in the member's certificate with Geisinger Health Plan. Additional information can be found in MP015 Experimental, Investigational or Unproven Services.

Prior authorization and/or pre-certification requirements for services or items may apply. Pre-certification lists may be found in the member's contract specific benefit document. Prior authorization requirements can be found at https://www.geisinger.org/health-plan/providers/ghp-clinical-policies

Please be advised that the use of the logos, service marks or names of Geisinger Health Plan, Geisinger Quality Options, Inc. and Geisinger Indemnity Insurance Company on a marketing, press releases or any communication piece regarding the contents of this medical policy is strictly prohibited without the prior written consent of Geisinger Health Plan. Additionally, the above medical policy does not confer any endorsement by Geisinger Health Plan, Geisinger Quality Options, Inc. and Geisinger Indemnity Insurance Company regarding the medical service, medical device or medical lab test described under this medical policy.