

MEDICAL POLICY – 2.02.514

Enhanced External Counterpulsation Therapy

Ref. Policy: MP-107

Effective Date: Jul. 1, 2025

Last Revised: Jun. 23, 2025

Replaces: N/A

RELATED MEDICAL POLICIES:

None

Select a hyperlink below to be directed to that section.

[POLICY CRITERIA](#) | [CODING](#) | [RELATED INFORMATION](#)[EVIDENCE REVIEW](#) | [REFERENCES](#) | [HISTORY](#)

Clicking this icon returns you to the hyperlinks menu above.

Introduction

Angina is chest pain, pressure, or discomfort that occurs when the heart doesn't get enough oxygen-rich blood. Chronic stable angina is chest pain/discomfort that has a pattern of what triggers it, how long it lasts, and how often it happens. Angina is a symptom of coronary artery disease and can limit physical activity based on how severe it is. External counterpulsation therapy (ECP) is a minimally-invasive treatment for chronic disabling stable angina for those who haven't improved with medication and are unable to have surgery. With ECP, large air cuffs are wrapped around the legs. The cuffs inflate and deflate to help increase blood flow to the heart. This policy describes when external counterpulsation therapy (ECP) may be considered medically necessary.

Note: The Introduction section is for your general knowledge and is not to be taken as policy coverage criteria. The rest of the policy uses specific words and concepts familiar to medical professionals. It is intended for providers. A provider can be a person, such as a doctor, nurse, psychologist, or dentist. A provider also can be a place where medical care is given, like a hospital, clinic, or lab. This policy informs them about when a service may be covered.

Policy Coverage Criteria

Service	Medical Necessity
Enhanced external counterpulsation therapy (EECP)	<p>An initial full course (35 one-hour treatments per benefit period, usually five days per week) of enhanced external counterpulsation therapy (EECP) may be considered medically necessary for the following indications:</p> <ul style="list-style-type: none"> • Individuals with coronary disease, refractory angina pectoris, or with Class III or IV angina symptoms per the New York Heart Association (NYHA) or Canadian Cardiovascular Society (CCS) and on maximally tolerated guideline-directed medical therapy (GDMT) • Individuals who are not amenable for revascularization, either percutaneously (PCI) or surgically (CABG) due to: <ul style="list-style-type: none"> ○ Inoperative condition or high risk of operative complications or post-op failure; or ○ Recurrent angina pectoris despite multiple revascularization procedures; or ○ Their coronary anatomy is not amenable for such procedures; or ○ They have co-morbid states which could create excessive risk. • Repeat courses of EECP will be considered on a case by case basis for individuals with refractory angina pectoris if all of the following criteria are met: <ul style="list-style-type: none"> ○ Individual meets medical necessity criteria for EECP, and ○ Prior EECP has resulted in a sustained improvement in symptoms, with a significant (greater than 25%) reduction in frequency of angina symptoms; and ○ Improvement by one or more angina classes (NYHA or CCS); and ○ Three or more months has elapsed from the prior EECP treatment. <p>Note: See Related Information below for Limitations</p>

Coding

Code	Description
HCCPS Codes Covered if Selection Criteria are Met (If Appropriate)	
G0166	External counterpulsation, per treatment session
ICD-10 Codes Covered if Selection Criteria are Met	
I20.0	Unstable angina
I20.1	Angina pectoris with documented spasm
I20.8	Other forms of angina pectoris
I20.9	Angina pectoris, unspecified

Note: CPT codes, descriptions and materials are copyrighted by the American Medical Association (AMA). HCCPS codes, descriptions and materials are copyrighted by Centers for Medicare Services (CMS).

Related Information

Limitations

- This policy only addresses enhanced external counterpulsation (EECP) performed in the outpatient setting
- All other cardiac conditions not otherwise specified as nationally covered for the use of EECP remain nationally non-covered
- All individuals must receive care/service from a licensed clinician
- US Food and Drug Administration (FDA) approved EECP devices intended for the treatment of cardiac conditions
- Hydraulic versions of ECP devices will not be covered
- EECP is not intended as a first-line therapy for angina

Contraindications:

- Active thrombophlebitis
- Arrhythmias that interfere with EECP triggering

- Decompensated heart failure
- Heart rate of <35 or >125 beats per minute
- Pregnancy
- Presence of a documented aortic aneurysm requiring surgical repair
- Recent cardiac catheterization (1-2 weeks) or arterial femoral puncture
- Recent myocardial infarction within the last 3 months
- Recent surgical intervention within the last 6 weeks
- Severe Aortic Regurgitation
- Severe hypertension > 180/110 mm Hg
- Severe lower extremity vaso-occlusive disease
- Severe Peripheral Artery Disease
- Severe venous disease (thrombophlebitis, deep vein thrombosis, or pulmonary embolism) Arrhythmias that interfere with machine triggering
- Unstable angina pectoris

Evidence Review

Background

Enhanced External Counterpulsation (EECP) is a nonsurgical outpatient treatment of angina pectoris and coronary artery disease (CAD) refractory to medical and/or surgical therapy. This therapy increases blood flow to the heart by compressing blood vessels in the lower extremities. The individual is placed on a treatment table where their lower trunk and lower extremities are wrapped in a series of three compressive air cuffs which inflate and deflate in synchronization with the individual's cardiac cycle.

Although EECP devices are cleared by the US Food and Drug Administration (FDA) for use in treating a variety of cardiac conditions, including stable or unstable angina pectoris, acute myocardial infarction and cardiogenic shock, the use of this device to treat cardiac conditions

other than stable angina pectoris is not covered, since only that use has developed sufficient evidence to demonstrate its medical effectiveness.

New York Heart Association Grading Scale for Heart Failure:

- Class I: No limitation of physical activity. Ordinary physical activity does not cause undue fatigue, palpitation, dyspnea (shortness of breath).
- Class II: Slight limitation of physical activity. Comfortable at rest. Ordinary physical activity results in fatigue, palpitation, dyspnea or chest pain.
- Class III: Marked limitation of physical activity. Comfortable at rest. Less than ordinary activity causes fatigue, palpitation, or dyspnea or chest pain.
- Class IV: Symptoms of heart failure at rest. Any physical activity causes further discomfort.

Canadian Cardiovascular Society Grading Scale for Angina:

- Class I: Ordinary physical activity does not cause angina, such as walking or climbing stairs. Angina occurs with strenuous, rapid or prolonged exertion.
- Class II: Slight limitation of ordinary activity. Angina occurs only during vigorous physical activity, such as walking or climbing stairs rapidly, walking uphill, walking or stair climbing after meals in cold, wind, or under emotional stress, or only during the few hours after awakening. Walking more than two blocks on the level and climbing more than one flight of ordinary stairs at a normal pace and in normal conditions.
- Class III: Marked limitation of ordinary physical activity. It is induced by walking one or two level blocks and climbing one flight of stairs in normal conditions and at a normal pace.
- Class IV: Inability to carry on any physical activity without discomfort. Anginal syndrome may be present at rest.

All criteria are substantiated by the latest evidence-based medical literature. To enhance transparency and reference, Appropriate Use (AUC) scores, when available, are diligently listed alongside the criteria.



This policy first defaults to AUC scores established by published, evidence-based guidance endorsed by professional medical organizations. In the absence of those scores, we adhere to a standardized practice of assigning an AUC score of 6. This score is determined by considering variables that ensure the delivery of patient centered care in line with current guidelines, with a focus on achieving benefits that outweigh associated risks. This approach aims to maintain a robust foundation for decision-making and underscores our commitment to upholding the highest standards of care. ^(1, 2, 3, 4, 5)

AUC Score

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

References

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History

Date	Comments
09/16/19	New policy, approved August 13, 2019, effective January 1, 2020. An initial full course (35 one hour treatments per benefit period, which may be offered once or twice daily, usually five days per week) of external counterpulsation therapy (ECP) may be considered medically necessary when criteria are met. Repeat courses will be considered on a case by case basis.
10/01/20	Annual Review, approved September 17, 2020. No changes to policy, references updated.
10/01/21	Annual Review, approved September 23, 2021. No changes to policy, references updated.
07/01/22	Annual Review, approved June 27, 2022. No changes to policy, references updated.
01/01/24	Annual Review, approved December 11, 2023. No changes to policy, references updated. Changed the wording from "patient" to "individual" throughout the policy for standardization.
07/01/24	Annual Review, approved June 24, 2024. No changes to policy, references updated.



Date	Comments
07/01/25	Annual Review, approved June 23, 2025. Minor update to criteria language, no change to content. References updated. Title change from External Counterpulsation Therapy to Enhanced External Counterpulsation Therapy.

Disclaimer: This medical policy is a guide in evaluating the medical necessity of a particular service or treatment. The Company adopts policies after careful review of published peer-reviewed scientific literature, national guidelines and local standards of practice. Since medical technology is constantly changing, the Company reserves the right to review and update policies as appropriate. Member contracts differ in their benefits. Always consult the member benefit booklet or contact a member service representative to determine coverage for a specific medical service or supply. CPT codes, descriptions and materials are copyrighted by the American Medical Association (AMA). ©2025 Premera All Rights Reserved.

Scope: Medical policies are systematically developed guidelines that serve as a resource for Company staff when determining coverage for specific medical procedures, drugs or devices. Coverage for medical services is subject to the limits and conditions of the member benefit plan. Members and their providers should consult the member benefit booklet or contact a customer service representative to determine whether there are any benefit limitations applicable to this service or supply. This medical policy only applies to Individual Plans.

