



Policy Number: EVH_MP.2521.MPC

Last Review Date: 03/17/2026

Effective Date: 04/01/2026

EVH_MP.2521.MPC Enhanced External Counterpulsation Therapy

Maryland Physicians Care considers an initial treatment course of 35 one-hour sessions of **Enhanced External Counterpulsation Therapy (EECP)** per benefit period, given five days per week, medically necessary for the following:

- Members with chronic coronary disease, refractory angina pectoris, or with Class III or IV angina symptoms per New York Heart Association (NYHA) or Canadian Cardiovascular Society (CCS), **AND** on maximally tolerated guideline-directed medical therapy (GDMT) ^(1,2)
- Members who are not amenable for revascularization, either percutaneously (percutaneous coronary intervention (PCI)) or surgically (coronary artery bypass graft (CABG)) due to any **ONE** of the following ⁽³⁾:
 - Inoperative condition or high risk of operative complications or post-operative failure
 - Recurrent angina pectoris despite multiple revascularization procedures
 - Unsuitable coronary anatomy
 - Additional co-morbid states that could create excessive risk

Repeat courses of EECP will be considered on a case-by-case basis for members with refractory angina pectoris if **ALL** the following criteria are met ⁽³⁾:

- Member meets medical necessity criteria for EECP
- Prior EECP has resulted in a sustained improvement in symptoms, with a significant (> 25%) reduction in frequency of angina symptoms **OR** improvement by one or more angina classes (NYHA or CCS); **AND**
- Three or more months has elapsed from the prior EECP treatment.

To review a request for medical necessity, the following items must be submitted for review:

- Progress note that prompted request, including list of current medications
- Records from last EECP treatment (if applicable)
- Most recent echocardiogram, stress test
- Most recent cardiac catheterization report

Limitations

- This policy only addresses EECP performed in the outpatient setting



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- All other cardiac conditions not otherwise specified as nationally covered for the use of EECP remain nationally non-covered
 - Non-coverage of hydraulic versions of these types of devices remains in force
- It is an expectation that all members receive care/service from a licensed clinician using FDA-cleared EECP devices intended for the treatment of cardiac conditions
- EECP is not intended as a first-line therapy for angina
- Where a specific clinical indication is not directly addressed in this guideline, medical necessity determination will be made based on widely accepted standard of care criteria. These criteria are supported by evidence-based or peer-reviewed sources such as medical literature, societal guidelines and state/national recommendations, and CMS policies when applicable.

Contraindications ⁽¹⁻³⁾

- Decompensated heart failure
- Severe aortic regurgitation
- Severe peripheral artery disease
- Recent myocardial infarction within the last 3 months
- Recent surgical intervention within the last 6 weeks
- Recent cardiac catheterization (1-2 weeks) or arterial femoral puncture
- Unstable angina pectoris
- Severe hypertension > 180/110 mm Hg
- Heart rate of < 35 or > 125 beats per minute
- Arrhythmias that interfere with EECP triggering
- Severe venous disease (e.g., thrombophlebitis, deep vein thrombosis, or pulmonary embolism)
- Severe chronic obstructive pulmonary disease
- Severe lower extremity vaso-occlusive disease
- Coagulopathy with international normalized ratio of prothrombin time > 2.0
- Presence of a documented aortic aneurysm requiring surgical repair
- Pregnancy

Background

Enhanced External Counterpulsation (EECP) as 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 member 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 member's cardiac cycle.

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Although EECF devices are cleared by the 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 ⁽⁴⁾

- 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, 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 ⁽⁵⁾

- Class I: Ordinary physical activity does not cause angina, such as walking or climbing stairs. Angina occurs with strenuous, rapid or prolonged exertion at work or recreation.
- Class II: Slight limitation of ordinary activity. Angina occurs when walking or climbing stairs rapidly, walking uphill, walking or stair climbing after meals, or in cold, or in 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. Angina occurs when walking one or two blocks on the level 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

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associated risks. This approach aims to maintain a robust foundation for decision-making and underscores our commitment to upholding the highest standards of care. ⁽⁶⁻¹⁰⁾

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

Acronyms/Abbreviations

- AUC Appropriate use criteria
- CABG Coronary Artery Bypass Graft
- CAD Coronary Artery Disease
- CCS Canadian Cardiovascular Society
- EECPP Enhanced External Counterpulsation
- FDA Food and Drug Administration
- GDMT Guideline-Directed Medical Therapy
- NYHA New York Heart Association
- PCI Percutaneous Coronary Intervention

Codes

CPT Codes / HCPCS Codes / ICD-10 Codes	
Code	Description
HCPCS 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
I20.2	Refractory angina pectoris
I20.81	Angina pectoris with coronary microvascular dysfunction

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I20.89	Other forms of angina pectoris
I20.9	Angina pectoris, unspecified
I25.10	Atherosclerotic heart disease of native coronary artery without angina pectoris
I25.110	Atherosclerotic heart disease of native coronary artery with unstable angina pectoris
I25.111	Atherosclerotic heart disease of native coronary artery with angina pectoris with documented spasm
I25.112	Atherosclerotic heart disease of native coronary artery with refractory angina pectoris
I25.118	Atherosclerotic heart disease of native coronary artery with other forms of angina pectoris
I25.119	Atherosclerotic heart disease of native coronary artery with unspecified angina pectoris
I25.6	Silent myocardial ischemia
I25.700	Atherosclerosis of coronary artery bypass graft(s), unspecified, with unstable angina pectoris
I25.701	Atherosclerosis of coronary artery bypass graft(s), unspecified, with angina pectoris with documented spasm
I25.702	Atherosclerosis of coronary artery bypass graft(s), unspecified, with refractory angina pectoris
I25.708	Atherosclerosis of coronary artery bypass graft(s), unspecified, with other forms of angina pectoris
I25.709	Atherosclerosis of coronary artery bypass graft(s), unspecified, with unspecified angina pectoris
I25.710	Atherosclerosis of autologous vein coronary artery bypass graft(s) with unstable angina pectoris
I25.711	Atherosclerosis of autologous vein coronary artery bypass graft(s) with angina pectoris with documented spasm
I25.712	Atherosclerosis of autologous vein coronary artery bypass graft(s) with refractory angina pectoris
I25.718	Atherosclerosis of autologous vein coronary artery bypass graft(s) with other forms of angina pectoris

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I25.719	Atherosclerosis of autologous vein coronary artery bypass graft(s) with unspecified angina pectoris
I25.720	Atherosclerosis of autologous artery coronary artery bypass graft(s) with unstable angina pectoris
I25.721	Atherosclerosis of autologous artery coronary artery bypass graft(s) with angina pectoris with documented spasm
I25.722	Atherosclerosis of autologous artery coronary artery bypass graft(s) with refractory angina pectoris
I25.728	Atherosclerosis of autologous artery coronary artery bypass graft(s) with other forms of angina pectoris
I25.729	Atherosclerosis of autologous artery coronary artery bypass graft(s) with unspecified angina pectoris
I25.730	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with unstable angina pectoris
I25.731	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with angina pectoris with documented spasm
I25.732	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with refractory angina pectoris
I25.738	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with other forms of angina pectoris
I25.739	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with unspecified angina pectoris
I25.750	Atherosclerosis of native coronary artery of transplanted heart with unstable angina
I25.751	Atherosclerosis of native coronary artery of transplanted heart with angina pectoris with documented spasm
I25.752	Atherosclerosis of native coronary artery of transplanted heart with refractory angina pectoris
I25.758	Atherosclerosis of native coronary artery of transplanted heart with other forms of angina pectoris
I25.759	Atherosclerosis of native coronary artery of transplanted heart with unspecified angina pectoris
I25.760	Atherosclerosis of bypass graft of coronary artery of transplanted heart with unstable angina

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I25.761	Atherosclerosis of bypass graft of coronary artery of transplanted heart with angina pectoris with documented spasm
I25.762	Atherosclerosis of bypass graft of coronary artery of transplanted heart with refractory angina pectoris
I25.768	Atherosclerosis of bypass graft of coronary artery of transplanted heart with other forms of angina pectoris
I25.769	Atherosclerosis of bypass graft of coronary artery of transplanted heart with unspecified angina pectoris
I25.790	Atherosclerosis of other coronary artery bypass graft(s) with unstable angina pectoris
I25.791	Atherosclerosis of other coronary artery bypass graft(s) with angina pectoris with documented spasm
I25.792	Atherosclerosis of other coronary artery bypass graft(s) with refractory angina pectoris
I25.798	Atherosclerosis of other coronary artery bypass graft(s) with other forms of angina pectoris
I25.799	Atherosclerosis of other coronary artery bypass graft(s) with unspecified angina pectoris
I25.810	Atherosclerosis of coronary artery bypass graft(s) without angina pectoris
I25.811	Atherosclerosis of native coronary artery of transplanted heart without angina pectoris
I25.812	Atherosclerosis of bypass graft of coronary artery of transplanted heart without angina pectoris
I25.82	Chronic total occlusion of coronary artery
I25.85	Chronic coronary microvascular dysfunction
I25.89	Other forms of chronic ischemic heart disease
I25.9	Chronic ischemic heart disease, unspecified

Policy History

Date	Summary
March 17, 2026	<ul style="list-style-type: none"> Removed diagnosis code I20.8
February 19, 2026	<ul style="list-style-type: none"> This guideline was renumbered from MP.107.MPC

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Date	Summary
	<p>Enhanced External Counterpulsation Therapy</p> <ul style="list-style-type: none">● Annual Review - Replaced patient with member throughout; formatting updates throughout; updated Indications and Limitations sections; shortened heading for Contraindications For Enhanced External Counterpulsation and added severe COPD and coagulopathy contraindications; updated New York Heart Association Grading Scale for Heart Failure and Canadian Cardiovascular Society Grading Scale for Angina sections to better match original language; updated Acronyms/Abbreviations Section; added Policy History Log; updated References

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