Prospective review is recommended/required. Please check the member agreement for preauthorization guidelines.

Prospective review is not required.

Description:
Enhanced external counterpulsation (ECP) is a noninvasive outpatient therapy used for the treatment of coronary artery disease refractory to standard medical and/or surgical therapy.

ECP uses a set of three compressive air cuffs on each leg (upper thigh, lower thigh, and calf). The cuffs inflate and deflate simultaneously with compressed, air according to the patient’s cardiac cycle. As the blood vessels in the leg are compressed blood is forced back into the heart. This cycle lowers the pressure the heart pumps against, increases the rate of blood returned to the heart, and increases blood pressure while the heart is resting.

There is insufficient evidence to draw conclusions about the benefits of ECP and high-quality studies are needed to provide firm evidence of the clinical effectiveness of this procedure.

BlueCHiP for Medicare

A full course of therapy usually consists of 35 one-hour treatments, which may be offered once or twice daily, usually 5 days per week.

Although ECP 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. Non-coverage of hydraulic versions of these types of devices remains in force.

Medical Criteria:
Enhanced external counterpulsation (ECP) is considered medically necessary for BlueCHiP for Medicare only and requires preauthorization. ECP is not medically necessary for all other BCBSRI products as there is insufficient peer-reviewed scientific literature to demonstrate that the procedure is effective.

BlueCHiP for Medicare Criteria:
ECP is medically necessary for patients who have been diagnosed with disabling angina (Class III or Class IV, Canadian Cardiovascular Society Classification or equivalent classification) who,
in the opinion of a cardiologist or cardiothoracic surgeon, are not readily amenable to surgical intervention, such as Percutaneous transluminal coronary angioplasty (PTCA) or cardiac bypass, for the following conditions only:

1. Their condition is inoperable, or at high risk of operative complications or post-operative failure;
2. Their coronary anatomy is not readily amenable to such procedures; or
3. They have co-morbid states which create excessive risk.

All other cardiac conditions not otherwise specified for the use of ECP are non-covered.

**Note:** Medicare policy is developed separately from BCBSRI policy. Medicare policy incorporates consideration of governmental regulations from CMS (Centers for Medicare and Medicaid Services), such as national coverage determinations or local coverage determinations. In addition to benefit differences, CMS may reach different conclusions regarding the scientific evidence than does BCBSRI. Medicare and BCBSRI policies may differ. However, BlueCHiP for Medicare members must be offered, at least, the same services as Medicare offers.

**Policy:**
**Preauthorization is required for BlueCHiP for Medicare.**
ECP is considered medically necessary for BlueCHiP for Medicare members with preauthorization for the specific conditions listed in the criteria and not medically necessary for all other BCBSRI products as there is insufficient evidence to support its use.

**Coverage:**
Benefits may vary between groups/contracts. Please refer to the appropriate Evidence of Coverage, Subscriber Agreement for applicable "Services Not Medically Necessary."

**Coding:**
G0166  External counterpulsation, per treatment session

**Also known as:**
ECP

**Related Topics:**
None

**Published:**
Policy Update, October 1999
Policy Update, November 2002
Policy Update, November 2005
Policy Update, January 2007
Provider Update, November 2008
Provider Update, June 2010
Provider Update, February 2011
Provider Update, June 2012

Blue Cross and Blue Shield Association Medical Policy Reference Manual 2.02.06 Enhanced External Counterpulsation (ECP) for Chronic Stable Angina or Congestive Heart Failure Reviewed with literature search/February 2011. Last accessed March 2012
Blue Cross and Blue Shield Association Technology Evaluation Center (TEC). External Counterpulsation for Treatment of Chronic Stable Angina Pectoris and Chronic Heart Failure. TEC Assessments 2005; Volume 20, Tab 13.


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