Reimbursement Policy

External Counterpulsation (ECP) Therapy for Severe Angina (NCD 20.20)

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<tr>
<th>Policy Number</th>
<th>Approved By</th>
<th>Current Approval Date</th>
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<tr>
<td>20.20</td>
<td>UnitedHealthcare Medicare Reimbursement Policy Committee</td>
<td>06/11/2014</td>
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**IMPORTANT NOTE ABOUT THIS REIMBURSEMENT POLICY**

This policy is applicable to UnitedHealthcare Medicare Advantage Plans offered by UnitedHealthcare and its affiliates.

You are responsible for submission of accurate claims. This reimbursement policy is intended to ensure that you are reimbursed based on the code or codes that correctly describe the health care services provided. UnitedHealthcare reimbursement policies use Current Procedural Terminology (CPT®*), Centers for Medicare and Medicaid Services (CMS), or other coding guidelines. References to CPT or other sources are for definitional purposes only and do not imply any right to reimbursement.

This reimbursement policy applies to all health care services billed on CMS 1500 forms and, when specified, to those billed on UB04 forms (CMS 1450). Coding methodology, industry-standard reimbursement logic, regulatory requirements, benefits design and other factors are considered in developing reimbursement policy. This information is intended to serve only as a general resource regarding UnitedHealthcare’s reimbursement policy for the services described and is not intended to address every aspect of a reimbursement situation. Accordingly, UnitedHealthcare may use reasonable discretion in interpreting and applying this policy to health care services provided in a particular case. Further, the policy does not address all issues related to reimbursement for health care services provided to UnitedHealthcare enrollees. Other factors affecting reimbursement may supplement, modify or, in some cases, supersede this policy. These factors may include, but are not limited to: legislative mandates, the physician or other provider contracts, and/or the enrollee’s benefit coverage documents. Finally, this policy may not be implemented exactly the same way on the different electronic claims processing systems used by UnitedHealthcare due to programming or other constraints; however, UnitedHealthcare strives to minimize these variations.

UnitedHealthcare may modify this reimbursement policy at any time by publishing a new version of the policy on this Website. However, the information presented in this policy is accurate and current as of the date of publication.

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**Table of Contents**

- Application ......................................................................................................................................1
- Summary .........................................................................................................................................2
  - Overview........................................................................................................................................2
  - Reimbursement Guidelines ...........................................................................................................2
- CPT/HCPCS Codes ...........................................................................................................................3
- References Included (but not limited to): .......................................................................................3
  - CMS NCD .......................................................................................................................................3
  - CMS LCD(s) .......................................................................................................................................3
  - CMS Claims Processing Manual ...................................................................................................3
  - CMS Transmittals ............................................................................................................................3
  - UnitedHealthcare Medicare Advantage Coverage Summaries .......................................................3
  - MLN Matters ....................................................................................................................................3
- History .............................................................................................................................................3

**Application**

This reimbursement policy applies to services reported using the Health Insurance Claim Form CMS-1500 or its electronic equivalent or its successor form, and services reported using facility claim form CMS-1450 or its electronic equivalent or its successor form. This policy applies to all products, all network and non-network physicians, and other health care professionals.
External Counterpulsation (ECP) Therapy for Severe Angina (NCD 20.20)

The HCPCS/CPT code(s) may be subject to Correct Coding Initiative (CCI) edits. This policy does not take precedence over CCI edits. Please refer to the CCI for correct coding guidelines and specific applicable code combinations prior to billing UnitedHealthcare. It is not enough to link the procedure code to a correct, payable ICD-9-CM diagnosis code. The diagnosis must be present for the procedure to be paid. Compliance with the provisions in this policy is subject to monitoring by pre-payment review and/or post-payment data analysis and subsequent medical review. The effective date of changes/additions/deletions to this policy is the committee meeting date unless otherwise indicated. CPT codes and descriptions are copyright 2010 American Medical Association (or such other date of publication of CPT). All rights reserved. CPT is a registered trademark of the American Medical Association. Applicable FARS/DFARS restrictions apply to Government use.

Summary

Overview
External counterpulsation (ECP), commonly referred to as enhanced external counterpulsation, is a noninvasive outpatient treatment for coronary artery disease refractory to medical and/or surgical therapy. 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.

Reimbursement Guidelines

Nationally Covered Indications
Effective for services performed on or after July 1, 1999, coverage is provided for the use of ECP 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 PTCA or cardiac bypass, because:

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.

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. The patient 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 patient's cardiac cycle.

During diastole the three sets of air cuffs are inflated sequentially (distal to proximal) compressing the vascular beds within the muscles of the calves, lower thighs and upper thighs. This action results in an increase in diastolic pressure, generation of retrograde arterial blood flow and an increase in venous return. The cuffs are deflated simultaneously just prior to systole, which produces a rapid drop in vascular impedance, a decrease in ventricular workload and an increase in cardiac output.

The augmented diastolic pressure and retrograde aortic flow appear to improve myocardial perfusion, while systolic unloading appears to reduce cardiac workload and oxygen requirements. The increased venous return coupled with enhanced systolic flow appears to increase cardiac output. As a result of this treatment, most patients experience increased time until onset of ischemia, increased exercise tolerance, and a reduction in the number and severity of anginal episodes. Evidence was presented that this effect lasted well beyond the immediate post-treatment phase, with patients symptom-free for several months to two years. This procedure must be done under direct supervision of a physician.
## Nationally Non-Covered Indications
All other cardiac conditions not otherwise specified as nationally covered for the use of ECP remain nationally non-covered.

## CPT/HCPCS Codes

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<tr>
<th>Code</th>
<th>Description</th>
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<tr>
<td>G0166</td>
<td>External counterpulsation, per treatment session</td>
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## References Included (but not limited to):

- **CMS NCD**
  NCD 20.20 External Counterpulsation (ECP) Therapy for Severe Angina

- **CMS LCD(s)**
  Numerous LCDs

- **CMS Claims Processing Manual**
  Chapter 32; § 130 External Counterpulsation (ECP) Therapy § 130.1 Billing and Payment Requirements

- **CMS Transmittals**
  Transmittal 898, Change Request 4350, Dated 03/31/2006 (External Counterpulsation (ECP) Therapy)

- **UnitedHealthcare Medicare Advantage Coverage Summaries**
  Cardiac Pacemakers and Defibrillators

- **MLN Matters**
  Article MM4350, External Counterpulsation (ECP) Therapy

## History

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<tr>
<th>Date</th>
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<tr>
<td>06/11/2014</td>
<td>Annual review, no changes</td>
</tr>
<tr>
<td>04/24/2013</td>
<td>Annual review, no changes</td>
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<tr>
<td>01/25/2012</td>
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