Medical Policy
Extracranial Carotid Angioplasty and Stenting

Table of Contents
• Policy: Commercial
• Policy: Medicare
• Authorization Information
• Coding Information
• Description
• Policy History
• Information Pertaining to All Policies
• References

Policy Number: 219
BCBSA Reference Number: 7.01.68

Related Policies
None

Policy
Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity

Carotid angioplasty with associated stenting and embolic protection may be MEDICALLY NECESSARY in patients who meet the following criteria:
• 50%–99% stenosis (NASCET measurement), AND
• Symptoms of focal cerebral ischemia (transient ischemic attack or monocular blindness) in previous 120 days, symptom duration less than 24 hours, or nondisabling stroke, AND
• Anatomic contraindication for carotid endarterectomy (such as prior radiation treatment or neck surgery, lesions surgically inaccessible, spinal immobility, or tracheostomy).

Carotid angioplasty with or without associated stenting and embolic protection is INVESTIGATIONAL for all other indications, including but not limited to, patients with carotid stenosis who are suitable candidates for CEA and patients with carotid artery dissection.

Medicare HMO BlueSM and Medicare PPO BlueSM Members

BCBSMA covers carotid angioplasty with the placement of an FDA-approved carotid stent with embolic protection for the following indications for Medicare HMO Blue and Medicare PPO Blue members in accordance with CMS NCD:
• Patients who are at high risk for carotid endarterectomy (CEA) and who have symptomatic carotid artery stenosis >70%, or
• Patients who are at high risk for CEA and have symptomatic carotid artery stenosis between 50% and 70%, or
• Patients who are at high risk for CEA and have asymptomatic carotid artery stenosis >80%.
Note: Patients at high risk for CEA are defined as having significant comorbidities and/or anatomic risk factors (i.e., recurrent stenosis and/or previous radical neck dissection), and would be poor candidates for CEA in the opinion of a surgeon. Significant comorbid conditions include but are not limited to:

- Congestive heart failure (CHF) class III/IV
- Left ventricular ejection fraction (LVEF) <30%
- Unstable angina
- Contralateral carotid occlusion
- Recent myocardial infarction (MI)
- Previous CEA with recurrent stenosis, and
- Prior radiation treatment to the neck.

BCBSMA does not cover carotid angioplasty with the placement of an FDA-approved carotid stent for Medicare HMO Blue and Medicare PPO Blue members in accordance with CMS NCD when the deployment of the distal embolic protection device is not technically possible.

National Coverage Determination (NCD) for Percutaneous Transluminal Angioplasty (PTA) (20.7)

Prior Authorization Information

See below for situations where prior authorization may be required or may not be required.

Yes indicates that prior authorization is required.
No indicates that prior authorization is not required.

<table>
<thead>
<tr>
<th>Provider Type</th>
<th>Outpatient</th>
<th>Inpatient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Managed Care (HMO and POS)</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Commercial PPO and Indemnity</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Medicare HMO Blue&lt;sup&gt;SM&lt;/sup&gt;</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Medicare PPO Blue&lt;sup&gt;SM&lt;/sup&gt;</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

CPT Codes / HCPCS Codes / ICD-9 Codes

The following codes are included below for informational purposes. Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member’s contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.

Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

CPT Codes

<table>
<thead>
<tr>
<th>CPT codes</th>
<th>Code Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>37215</td>
<td>Transcatheter placement of intravascular stent(s), cervical carotid artery, percutaneous; with distal embolic protection</td>
</tr>
<tr>
<td>37216</td>
<td>Transcatheter placement of intravascular stent(s), cervical carotid artery, percutaneous; without distal embolic protection</td>
</tr>
<tr>
<td>36221</td>
<td>Non-selective catheter placement, thoracic aorta, with angiography of the extracranial carotid, vertebral, and/or intracranial vessels, unilateral or bilateral, and all associated radiological supervision and interpretation, includes angiography of the cervicocerebral arch, when performed</td>
</tr>
<tr>
<td>36222</td>
<td>Selective catheter placement, common carotid or innominate artery, unilateral, any approach, with angiography of the ipsilateral extracranial carotid circulation and all associated radiological supervision and interpretation, includes angiography of the cervicocerebral arch, when performed</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td>36223</td>
<td>Selective catheter placement, common carotid or innominate artery, unilateral, any approach, with angiography of the ipsilateral intracranial carotid circulation and all associated radiological supervision and interpretation, includes angiography of the extracranial carotid and cervicocerebral arch, when performed</td>
</tr>
<tr>
<td>36224</td>
<td>Selective catheter placement, internal carotid artery, unilateral, with angiography of the ipsilateral intracranial carotid circulation and all associated radiological supervision and interpretation, includes angiography of the extracranial carotid and cervicocerebral arch, when performed</td>
</tr>
<tr>
<td>36225</td>
<td>Selective catheter placement, subclavian or innominate artery, unilateral, with angiography of the ipsilateral vertebral circulation and all associated radiological supervision and interpretation, includes angiography of the cervicocerebral arch, when performed</td>
</tr>
<tr>
<td>36226</td>
<td>Selective catheter placement, vertebral artery, unilateral, with angiography of the ipsilateral vertebral circulation and all associated radiological supervision and interpretation, includes angiography of the cervicocerebral arch, when performed</td>
</tr>
<tr>
<td>36227</td>
<td>Selective catheter placement, external carotid artery, unilateral, with angiography of the ipsilateral external carotid circulation and all associated radiological supervision and interpretation (List separately in addition to code for primary procedure)</td>
</tr>
<tr>
<td>36228</td>
<td>Selective catheter placement, each intracranial branch of the internal carotid or vertebral arteries, unilateral, with angiography of the selected vessel circulation and all associated radiological supervision and interpretation (eg, middle cerebral artery, posterior inferior cerebellar artery) (List separately in addition to code for primary procedure)</td>
</tr>
<tr>
<td>37217</td>
<td>Transcatheter placement of an intravascular stent(s), intrathoracic common carotid artery or innominate artery by retrograde treatment, via open ipsilateral cervical carotid artery exposure, including angioplasty, when performed, and radiological supervision and interpretation</td>
</tr>
<tr>
<td>37238</td>
<td>Transcatheter placement of an intravascular stent(s), open or percutaneous, including radiological supervision and interpretation and including angioplasty within the same vessel, when performed; initial vein</td>
</tr>
<tr>
<td>37239</td>
<td>Transcatheter placement of an intravascular stent(s), open or percutaneous, including radiological supervision and interpretation and including angioplasty within the same vessel, when performed; each additional vein (List separately in addition to code for primary procedure)</td>
</tr>
<tr>
<td>0075T</td>
<td>Transcatheter placement of extracranial vertebral or intrathoracic carotid artery stent(s), including radiologic supervision and interpretation, percutaneous; initial vessel</td>
</tr>
<tr>
<td>0076T</td>
<td>Transcatheter placement of extracranial vertebral or intrathoracic carotid artery stent(s), including radiologic supervision and interpretation, percutaneous; each additional vessel (List separately in addition to code for primary procedure)</td>
</tr>
</tbody>
</table>

**Description**
Carotid artery angioplasty with stenting is a treatment for carotid stenosis that is intended to prevent future stroke. It is an alternative to medical therapy and a less-invasive alternative to carotid endarterectomy (CEA).

**Background**
Combined with optimal medical management, carotid angioplasty with or without stenting has been evaluated as an alternative to CEA. Carotid angioplasty and stenting (CAS) involves the introduction of coaxial systems of catheters, microcatheters, balloons, and other devices. The procedure is most often performed through the femoral artery, but a transcervical approach can also be used to avoid traversing the aortic arch. The procedure typically takes 20 to 40 minutes. Interventionalists almost uniformly use an embolic protection device (EPD) designed to reduce the risk of stroke caused by thromboembolic material dislodged during CAS. EPDs can be deployed proximally (with flow reversal) or distally (using a filter). Carotid angioplasty rarely is performed without stent placement.
Proposed advantages of CAS over CEA include:
- General anesthesia is not used (although CEA can be performed under local/regional anesthesia)
- Cranial nerve palsies are infrequent sequelae (although almost all following CEA resolve over time)
- Simultaneous procedures may be performed on the coronary and carotid arteries

Examples of carotid stent systems for carotid angioplasty and stenting include ACCULINK™ and RX ACCULINK™ carotid stents from Guidant Corp., Xact® RX carotid stent system from Abbott Vascular Devices and Precise® nitinol carotid stent system from Cordis Corp, NexStent® carotid stent over-the-wire and monorail delivery systems, Endotext Interventional Systems; and FilterWire EZ™ embolic protection system, Boston Scientific Corp, ProtégéRx® and SpideRx®, ev3 Inc., Arterial Evolution Technology, Carotid Wallstent®, Boston Scientific Corp., GORE® Flow Reversal System, GORE® Embolic Filter, and Mo.Ma® Ultra Proximal Cerebral Protection Device, Invatec SPA. All carotid stent systems for carotid angioplasty and stenting are considered investigational regardless of the commercial name, the manufacturer or FDA approval status except as noted in the policy statement.

Summary
A substantial body of randomized controlled trial (RCT) evidence compares outcomes of carotid artery angioplasty with stenting (CAS) with carotid endarterectomy (CEA) for symptomatic and asymptomatic patients with carotid stenosis. The evidence does not support use of CAS in carotid artery disease for the average risk patient, because early adverse events are higher with CAS and long-term outcomes are not better. Data from RCTs and large database studies establish that the risk of CAS exceeds the threshold set to indicate overall benefit from the procedure. Therefore, for patients with carotid stenosis who are suitable candidates for CEA, CAS is considered investigational.

However, based on limited data, clinical input, an indirect chain of evidence, and unmet medical need, CAS may be considered a reasonable treatment option in recently symptomatic patients when CEA cannot be performed due to anatomic reasons. For this population, CAS may be considered medically necessary. It is considered investigational for all other indications, including carotid dissection.

Policy History

<table>
<thead>
<tr>
<th>Date</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2014</td>
<td>Updated to add new CPT codes 37217, 37238 and 37239.</td>
</tr>
<tr>
<td>5/2013</td>
<td>New references from BCBSA National medical policy.</td>
</tr>
<tr>
<td>1/2013</td>
<td>Updated to add new CPT codes 36221-36228.</td>
</tr>
<tr>
<td>12/2011</td>
<td>BCBSA National medical policy review. No changes to policy statements.</td>
</tr>
<tr>
<td>8/2008</td>
<td>BCBSA National medical policy review. No changes to policy statements.</td>
</tr>
<tr>
<td>7/2007</td>
<td>BCBSA National medical policy review. No changes to policy statements.</td>
</tr>
</tbody>
</table>
References