

## Policy

EMHS Employee Health Plan (powered by Beacon Health) considers an **Extracranial Carotid Angioplasty with Stenting (CAS)** medically necessary for the following indications:

1. Members requiring carotid revascularization using FDA approved CAS and embolic protection systems/devices who have documented high risk for adverse events from Carotid Endarterectomy (CEA) and meet one of the following criteria:
  - a. Members with hemispheric neurological symptoms in the ipsilateral carotid artery distribution and  $\geq 50\%$  stenosis of the common or internal carotid artery confirmed by angiographic measurement using North American Symptomatic Carotid Endarterectomy Trial (NASCET) methodology
  - b. Members without neurological symptoms who are **at high surgical risk** and  $\geq 80\%$  stenosis of the common or internal carotid artery confirmed by angiographic measurement using the NASCET methodology
    - i. Inability to move the neck to a suitable position for surgery
    - ii. Tracheostomy

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. 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;
  - Prior radiation treatment to the neck;
  - Severe chronic lung disease;
  - Documentation in the member's medical records; and
  - Other conditions that were used to determine patients at high risk for CEA in the prior carotid artery stenting trials and studies
2. The procedure is performed concurrent with the FDA-approved protocols governing Category B - Investigational Device Exemption (IDE) Clinical Trials (coverage of routine care only will be according to PA-078 Clinical Trials- Coverage of Routine Care Costs)
  3. The procedure is performed concurrent with FDA Approved Post Approval Study and the member meets one of the following criteria:

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- Members who are at high risk and with neurologic symptoms and carotid artery stenosis between 50 and 80%.
- Members who are at high risk with/without neurological symptoms and  $\geq 80\%$  stenosis of the common or internal carotid artery by ultrasound or angiogram; The member has carotid lesions that, due to their anatomic location, are difficult to approach surgically.

### Limitations:

1. Members who have had a disabling stroke (modified Rankin scale  $\geq 3$ ) shall be excluded from coverage.
2. If the use of an embolic protection device is not possible during an attempted CAS procedure, the procedure should be abandoned due to the risk of adverse events without embolic protection.
3. Carotid angioplasty with stenting must be performed by a physician with training and experience in this technology and facilities at which this procedure is performed must have written FDA approvals for Clinical trials or must have written affidavits approved by Centers for Medicare and Medicaid Services (CMS) attesting that they have met the minimum facility standards. (Refer to PA-078 Clinical Trials- Coverage for Routine Care Costs)
4. Carotid stenosis with angiographically visible intraluminal thrombus is considered not medically necessary and will therefore not be covered.
5. Vertebral artery angioplasty with/without stenting is not covered. The safety and efficacy of this procedure is not yet established.

### Background

Cerebrovascular disease is the third leading cause of death in the United States.<sup>1,2</sup> Approximately 750 000 people have a stroke annually, and carotid stenosis accounts for about 25% of these strokes. Risk factors for stroke include advanced age, male gender, hypertension, history of stroke or TIA (transient ischemic attack), atrial fibrillation, valvular heart disease, diabetes mellitus, carotid artery stenosis, hypercoagulable conditions, and cigarette smoking.

Prevention of stroke remains important and includes among others, treatment of hypertension and diabetes mellitus; smoking cessation; limiting alcohol intake; control of diet and obesity; antiplatelet drugs or anticoagulants for atrial fibrillation and appropriate acute myocardial infarctions; antiplatelet drugs for symptomatic carotid or vertebrobasilar atherosclerosis; and carotid endarterectomy (CEA) for specifically defined populations of patients with symptomatic carotid artery stenosis

Carotid artery stenting (CAS) is performed with a catheter, usually inserted through the femoral artery, and threaded up to the carotid artery beyond the area of narrowing. A distal embolic protection device or filter is usually placed first to catch emboli or debris

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that may dislodge during the procedure. A self-expandable or balloon-expandable, metal mesh stent is then placed to widen the stenosis and the protection device is removed.

### Modified Rankin Stroke Scale:

- 0 - No symptoms at all
- 1 - No significant disability despite symptoms; able to carry out all usual duties and activities
- 2 - Slight disability; unable to carry out all previous activities but able to look after own affairs without assistance
- 3 - Moderate disability; requiring some help, but able to walk without assistance
- 4 - Moderately severe disability: unable to walk without assistance, and unable to attend to own bodily needs without assistance
- 5 - Severe disability: bedridden, incontinent, and requiring constant nursing care and attention

### Codes:

CPT Codes	
Code	Description
0075T	Transcatheter placement of extracranial vertebral or intrathoracic carotid artery stent(s), including radiologic supervision and interpretation, percutaneous, initial vessel ( <i>Sunset January 2020</i> )
0076T	Each additional vessel (List separating in addition to code for primary procedure ( <i>Sunset January 2020</i> ))
37215	Transcatheter placement of intravascular stent(s), cervical carotid artery, percutaneous; with distal embolic protection

### References

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### Disclaimer:

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