Stenosis Measurement in Carotid Imaging Reports

This measure is to be reported each time a carotid imaging study is performed for all patients, regardless of age, during the reporting period.

Measure description
Percentage of final reports for carotid imaging studies (neck magnetic resonance angiography [MRA], neck computed tomography angiography [CTA], neck duplex ultrasound, carotid angiogram) performed that include direct or indirect reference to measurements of distal internal carotid diameter as the denominator for stenosis measurement1,2

What will you need to report for each patient undergoing a carotid imaging study for this measure?
If you select this measure for reporting, you will report:

- Whether or not the final report for carotid imaging study includes direct or indirect reference to measurements of distal internal carotid diameter as the denominator for stenosis measurement

What if this process or outcome of care is not appropriate for your patient?
Some measures provide an opportunity for the physician or eligible health professional to document when a process or outcome of care is not appropriate for a given patient (also called performance exclusions). Because this measure is applicable to most if not all patients, there are not allowable performance exclusions.

A short note can be made in the final report, such as:
• "Severe left ICA stenosis of 70-80% by NASCET criteria" or
• "Severe left ICA stenosis of 70-80% by criteria similar to NASCET" or
• "70% stenosis derived by comparing the narrowest segment with the distal luminal diameter as related to the reported measure of arterial narrowing" or
• "Severe stenosis of 70-80% — validated velocity measurements with angiographic measurements, velocity criteria are extrapolated from diameter data as defined by the Society of Radiologists in Ultrasound Consensus Conference Radiology 2003; 229;340-346."

1"Direct or indirect reference to measurements of distal internal carotid diameter as the denominator for stenosis measurement" includes direct angiographic stenosis calculation based on the distal lumen as the denominator for stenosis measurement OR an equivalent validated method referenced to the above method (eg, for duplex ultrasound studies, velocity parameters that correlate with anatomic measurements that use the distal internal carotid lumen as the denominator for stenosis measurement).

2This measure requires that the estimate of stenosis included in the report of the imaging study employ a method such as the North American Symptomatic Carotid Endarterectomy Trial (NASCET) method for calculating the degree of stenosis. The NASCET method calculates the degree of stenosis with reference to the lumen of the carotid artery distal to the stenosis.

For duplex imaging studies the reference is indirect, since the degree of stenosis is inferred from velocity parameters and cross referenced to published or self-generated correlations among velocity parameters and results of angiography or other imaging studies which serve as the gold standard. In Doppler ultrasound, the degree of stenosis can be estimated using Doppler parameter of the peak systolic velocity (PSV) of the internal carotid artery (ICA), with concordance of the degree of narrowing of the ICA lumen. Additional Doppler parameters of ICA-to-common carotid artery (CCA) PSV ratio and ICA end-diastolic velocity (EDV) can be used when degree of stenosis is uncertain from ICA PSV. Reference (Grant et al, Society of Radiologists in Ultrasound, 2003).
**Stenosis Measurement in Carotid Imaging Reports**

### Coding Specifications

Codes required to document final reports for carotid imaging studies (neck MR angiography [MRA], neck CT angiography [CTA], neck duplex ultrasound, carotid angiogram) performed:

CPT code is required to identify patients to be included in this measure.

All measure specific coding should be reported on the claim(s) representing the eligible encounter.

**CPT codes**
- 36222, 36223, 36224
- 70498, 70547, 70548, 70549
- 93880, 93882

**Quality codes for this measure:**

**CPT II code descriptors**

(Data collection sheet should be used to determine appropriate code.)

- **CPT II 3100F:** Carotid imaging study report (includes direct or indirect reference to measurements of distal internal carotid diameter as the denominator for stenosis measurement)
- **CPT II 3100F–8P:** Carotid imaging study report did not include direct or indirect reference to measurements of distal internal carotid diameter as the denominator for stenosis measurement, reason not otherwise specified

**Physician Quality Reporting System 2013 Measure 195, Effective Date 01/01/2013**

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**Stenosis Measurement in Carotid Imaging Reports**

**Physician Quality Reporting System Data Collection Sheet**

<table>
<thead>
<tr>
<th>Patient’s Name</th>
<th>Practice Medical Record Number (MRN)</th>
<th>Birth Date (mm/dd/yyyy)</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Male/Female</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>National Provider Identifier (NPI)</th>
<th>Date of Service</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Clinical Information**

**Step 1** Is patient eligible for this measure?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Billing Information**

**Step 2** Does patient meet or have an acceptable reason for not meeting the measure?

<table>
<thead>
<tr>
<th>Direct or Indirect Reference to Measurements of Distal Internal Carotid Diameter as Denominator for Stenosis Measurement¹²</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code Required on Claim Form</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verify date of birth on claim form.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Included in Carotid Imaging Study Report</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code to be Reported on Line 24D of Paper Claim Form, if Yes (or Service Line 24 of Electronic Claim Form)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3100F</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If **No** is checked for the above, report 3100F–8P (Carotid imaging study report did not include direct or indirect reference to measurements of distal internal carotid diameter as the denominator for stenosis measurement, reason not otherwise specified).

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¹“Direct or indirect reference to measurements of distal internal carotid diameter as the denominator for stenosis measurement” includes direct angiographic stenosis calculation based on the distal lumen as the denominator for stenosis measurement OR an equivalent validated method referenced to the above method (eg, for duplex ultrasound studies, velocity parameters that correlate with anatomic measurements that use the distal internal carotid lumen as the denominator for stenosis measurement).

²This measure requires that the estimate of stenosis included in the report of the imaging study employ a method such as the North American Symptomatic Carotid Endarterectomy Trial (NASCET) method for calculating the degree of stenosis. The NASCET method calculates the degree of stenosis with reference to the lumen of the carotid artery distal to the stenosis.

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