Quality ID #344: Rate of Carotid Artery Stenting (CAS) for Asymptomatic Patients, Without Major Complications (Discharged to Home by Post-Operative Day #2)
– National Quality Strategy Domain: Effective Clinical Care
– Meaningful Measure Area: Appropriate Use of Healthcare

2022 COLLECTION TYPE:
MIPS CLINICAL QUALITY MEASURES (CQMS)

MEASURE TYPE:
Outcome – High Priority

DESCRIPTION:
Percent of asymptomatic patients undergoing CAS who are discharged to home no later than post-operative day #2.

INSTRUCTIONS:
This measure is to be submitted **each time** a CAS is performed during the performance period. It is anticipated that Merit-based Incentive Payment System (MIPS) eligible clinicians who provide services of CAS, as described in the measure, based on the services provided and the measure-specific denominator coding will submit this measure. This measure may be submitted by MIPS eligible clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

Measure Submission Type:
Measure data may be submitted by individual MIPS eligible clinicians, groups, or third-party intermediaries. The listed denominator criteria are used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions as allowed by the measure. The quality data codes listed do not need to be submitted by MIPS eligible clinicians, groups, or third-party intermediaries that utilize this modality for submissions; however, these codes may be submitted for those third-party intermediaries that utilize Medicare Part B claims data. For more information regarding Application Programming Interface (API), please refer to the Quality Payment Program (QPP) website.

DENOMINATOR:
Patients aged 18 and older who are asymptomatic undergoing CAS

> **DENOMINATOR NOTE:** *Signifies that this CPT Category I code is a non-covered service under the Medicare Part B Physician Fee Schedule (PFS). These non-covered services should be counted in the denominator population for MIPS CQMs.*

> **Denominator Criteria (Eligible Cases):**
> Patients aged 18 and older
> **AND**
> **Patient procedure during performance period (CPT):** 37215, 37216*
> **WITHOUT**
> **Telehealth Modifier:** GQ, GT, 95, POS 02
> **AND NOT**
> **DENOMINATOR EXCLUSIONS:**
> **Symptomatic carotid stenosis: Ipsilateral carotid territory TIA or stroke less than 120 days prior to procedure:** 9006F
> **OR**
> **Other carotid stenosis: Ipsilateral TIA or stroke 120 days or greater prior to procedure or any prior contralateral carotid territory or vertebrobasilar TIA or stroke:** 9007F

NUMERATOR:
Patients discharged to home no later than post-operative day 2 following CAS

Definition:
Home – For purposes of submitting this measure, "home" is the point of origin prior to hospital admission prior to procedure. For example, if the patient comes from a skilled facility and returns to the skilled facility, this would meet criteria for discharged to home.

Numerator Options:

Performance Met: Documentation of patient discharged to home no later than post-operative day 2 following CAS **(G9255)**

OR

Performance Not Met: Documentation of patient discharged to home later than post-operative day 2 following CAS **(G9254)**

RATIONALE:
Surgeons performing CAS on asymptomatic patients must select patients at low risk for morbidity and perform the procedure with a very low complication rate in order to achieve benefit. Discharge to home within two days of the procedure is an indicator of patients who were not frail prior to the procedure and who did not experience a major complication (e.g., disabling stroke, myocardial infarction). The proposed measure will therefore serve as an indicator of both appropriateness and overall outcome.

CLINICAL RECOMMENDATIONS STATEMENTS:
Percutaneous carotid intervention is a rapidly emerging field. Published trial results have established carotid stenting (CAS) in high risk surgical patients to be an effective alternative to carotid endarterectomy (CEA). It is well established that CEA benefits patients with asymptomatic >60% stenosis only if performed with a high degree of technical proficiency on appropriately selected patients. The same is proposed to hold true for CAS. This is particularly important when considering an asymptomatic population where the relative risk reduction with intervention is narrow when compared to medical management. Numerous publications have noted variation in the combined endpoint of stroke and death following carotid angioplasty and stent placement with embolic protection (Percutaneous Transluminal Angioplasty, Cochrane Database Syst Rev 2007). Adoption of this outcome measure in the United States would likely disclose disparate results between hospitals and between providers, and lead to quality improvement when this information was provided to individual providers and participating centers. The SVS Vascular Registry has shown that outcome results are good for CAS, but variations exist between interventionalists and centers. Postoperative stroke or death is the accepted outcome parameter for this procedure, and its measurement and reporting would demonstrate variation and opportunity for improvement. CAS is an elective procedure in nearly all cases. Patients can be referred or transferred to a center with the personnel and experience to perform this procedure with a high level of competence and any procedure that has "stroke" as a potential risk should be performed only by individuals with appropriate training and experience. (Carotid Artery Angioplasty, J Vasc Interv Radiol 2003)
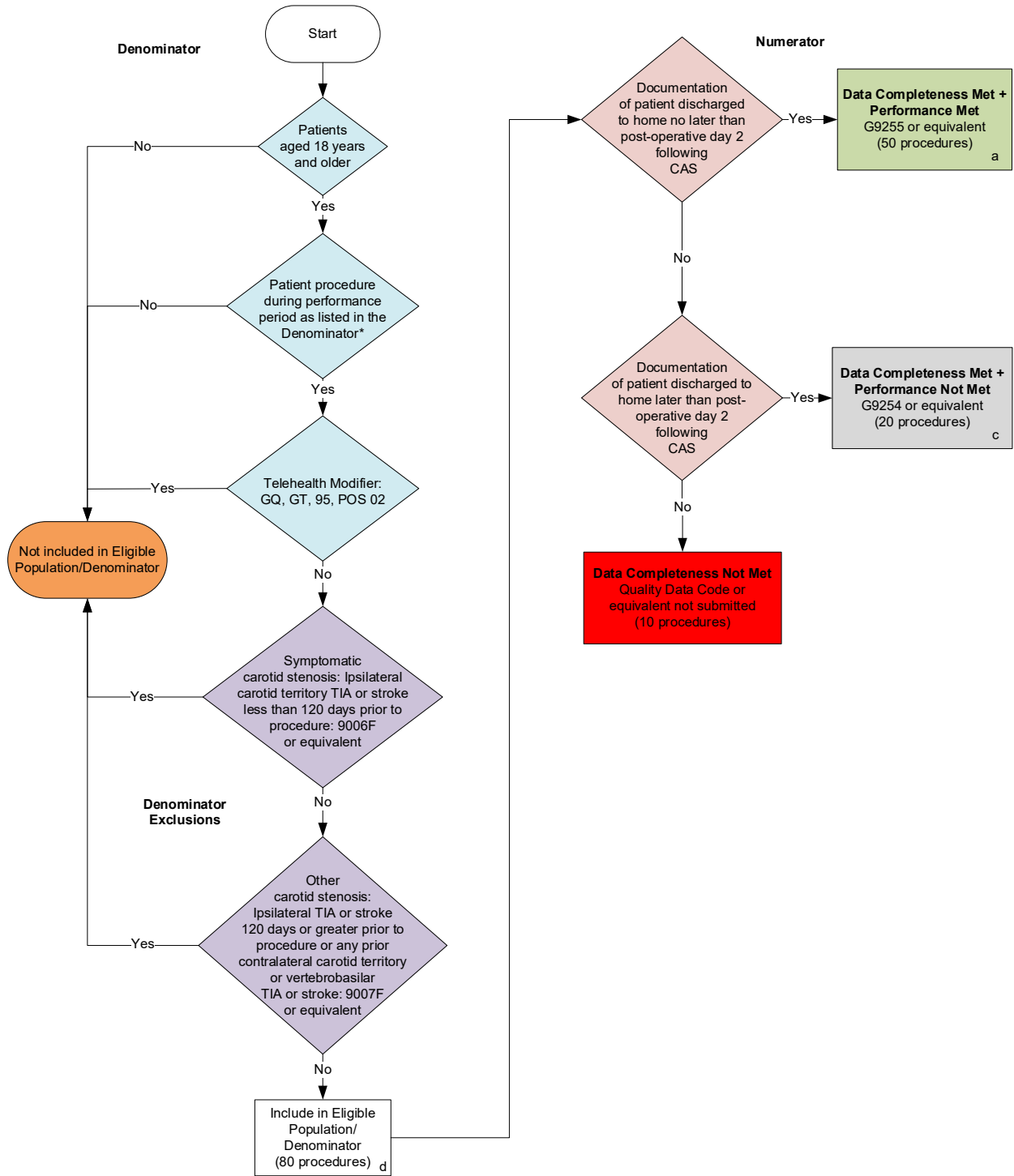
COPYRIGHT:

2022 Clinical Quality Measure Flow for Quality ID #344:
Rate of Carotid Artery Stenting (CAS) for Asymptomatic Patients, Without Major
Complications (Discharged to Home by Post-Operative Day #2)

Disclaimer: Refer to the measure specification for specific coding and instructions to submit this measure.

Denominator

Numerator

Start

Patients aged 18 years and older
— No → Not included in Eligible Population/Denominator
Yes ↓

Patient procedure during performance period as listed in the Denominator*
— No → Not included in Eligible Population/Denominator
Yes ↓

Telehealth Modifier: GQ, GT, 95, POS 02
— Yes → Not included in Eligible Population/Denominator
No ↓

Denominator Exclusions

Symptomatic carotid stenosis: Ipsilateral carotid territory TIA or stroke less than 120 days prior to procedure: 9006F or equivalent
— Yes → Not included in Eligible Population/Denominator
No ↓

Other carotid stenosis: Ipsilateral TIA or stroke 120 days or greater prior to procedure or any prior contralateral carotid territory or vertebrobasilar TIA or stroke: 9007F or equivalent
— Yes → Not included in Eligible Population/Denominator
No ↓

Include in Eligible Population/ Denominator (80 procedures) d

→ Documentation of patient discharged to home no later than post-operative day 2 following CAS
— Yes → **Data Completeness Met + Performance Met** G9255 or equivalent (50 procedures) a
No ↓

Documentation of patient discharged to home later than post-operative day 2 following CAS
— Yes → **Data Completeness Met + Performance Not Met** G9254 or equivalent (20 procedures) c
No ↓

Data Completeness Not Met Quality Data Code or equivalent not submitted (10 procedures)

SAMPLE CALCULATIONS

Data Completeness=

Performance Met (a=50 procedures) + Performance Not Met (c=20 procedures) = 70 procedures = **87.50%**

Eligible Population / Denominator (d=80 procedures) = 80 procedures

Performance Rate=

Performance Met (a=50 procedures) = 50 procedures = **71.42%**

Data Completeness Numerator (70 procedures) = 70 procedures

*See the posted measure specification for specific coding and instructions to submit this measure.
NOTE: Submission Frequency: Procedure

v6

2022 Clinical Quality Measure Flow Narrative for Quality ID #344:
Rate of Carotid Artery Stenting (CAS) for Asymptomatic Patients, Without Major Complications
(Discharged to Home by Post-Operative Day #2)

Disclaimer: Refer to the measure specification for specific coding and instructions to submit this measure

1. Start with Denominator

2. Check *Patients aged 18 years and older*:

    a. If *Patients aged 18 years and older* equals No, do not include in *Eligible Population/Denominator*. Stop processing.

    b. If *Patients aged 18 years and older* equals Yes, proceed to check *Patient procedure during performance period as listed in the Denominator**.

3. Check *Patient procedure during performance period as listed in the Denominator**:

    a. If *Patient procedure during performance period as listed in the Denominator** equals No, do not include in *Eligible Population/Denominator*. Stop processing.

    b. If *Patient procedure during performance period as listed in the Denominator** equals Yes, proceed to check *Telehealth Modifier*.

4. Check *Telehealth Modifier*:

    a. If *Telehealth Modifier* equals Yes, do not include in *Eligible Population/Denominator*. Stop processing.

    b. If *Telehealth Modifier* equals No, proceed to check *Symptomatic carotid stenosis: Ipsilateral carotid territory TIA or stroke less than 120 days prior to procedure* .

5. Check *Symptomatic carotid stenosis: Ipsilateral carotid territory TIA or stroke less than 120 days prior to procedure*:

    a. If *Symptomatic carotid stenosis: Ipsilateral carotid territory TIA or stroke less than 120 days prior to procedure* equals Yes, do not include in *Eligible Population/Denominator*. Stop processing.

    b. If *Symptomatic carotid stenosis: Ipsilateral carotid territory TIA or stroke less than 120 days prior to procedure* equals No, proceed to check *Other carotid stenosis: Ipsilateral TIA or stroke 120 days or greater prior to procedure or any prior contralateral carotid territory or vertebrobasilar TIA or stroke*.

6. Check *Other carotid stenosis: Ipsilateral TIA or stroke 120 days or greater prior to procedure or any prior contralateral carotid territory or vertebrobasilar TIA or stroke*:

    a. If *Other carotid stenosis: Ipsilateral TIA or stroke 120 days or greater prior to procedure or any prior contralateral carotid territory or vertebrobasilar TIA or stroke* equals Yes, do not include in *Eligible Population/Denominator*. Stop processing.

    b. If *Other carotid stenosis: Ipsilateral TIA or stroke 120 days or greater prior to procedure or any prior contralateral carotid territory or vertebrobasilar TIA or stroke* equals No, include in *Eligible Population/Denominator*.

7. Denominator Population:

- Denominator Population is all Eligible Procedures in the Denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d equals 80 procedures in the Sample Calculation.

8. Start Numerator

9. Check *Documentation of patient discharged to home no later than post-operative day 2 following CAS*:

   a. If *Documentation of patient discharged to home no later than post-operative day 2 following CAS* equals Yes, include in *Data Completeness Met and Performance Met*.

      - *Data Completeness Met and Performance Met* letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a equals 50 procedures in the Sample Calculation.

   b. If *Documentation of patient discharged to home no later than post-operative day 2 following CAS* equals No, proceed to check *Documentation of patient discharged to home later than post-operative day 2 following CAS*.

10. Check *Documentation of patient discharged to home later than post-operative day 2 following CAS*:

    a. If *Documentation of patient discharged to home later than post-operative day 2 following CAS* equals Yes, include *in Data Completeness Met and Performance Not Met*.

       - *Data Completeness Met and Performance Not Met* letter is represented in the Data Completeness in the Sample Calculation listed at the end of this document. Letter c equals 20 procedures in the Sample Calculation.

    b. If *Documentation of patient discharged to home later than post-operative day 2 following CAS* equals No, proceed to check *Data Completeness Not Met.*

11. Check *Data Completeness Not Met*:

    a. If *Data Completeness Not Met*, the Quality Data Code or equivalent was not submitted. 10 procedures have been subtracted from the Data Completeness Numerator in the Sample Calculation.

Sample Calculations:

Data Completeness equals Performance Met (a equals 50 procedures) plus Performance Not Met (c equals 20 procedures) divided by Eligible Population / Denominator (d equals 80 procedures). All equals 70 procedures divided by 80 procedures. All equals 87.50 percent.

Performance Rate equals Performance Met (a equals 50 procedures) divided by Data Completeness Numerator (70 procedures). All equals 50 procedures divided by 70 procedures). All equals 71.42 percent.

*See the posted measure specification for specific coding and instructions to submit this measure.

NOTE: Submission Frequency: Procedure

The measure diagrams were developed by CMS as a supplemental resource to be used in conjunction with the measure specifications. They should not be used alone or as a substitution for the measure specification.