

## Quality ID #413: Door to Puncture Time for Endovascular Stroke Treatment

**2025 COLLECTION TYPE:**  
MIPS CLINICAL QUALITY MEASURES (CQMS)

**MEASURE TYPE:**  
Intermediate Outcome – High Priority

**DESCRIPTION:**  
Percentage of patients undergoing endovascular stroke treatment who have a door to puncture time of 90 minutes or less.

**INSTRUCTIONS:**  
This measure is to be submitted **each time** a patient undergoes a procedure for treatment of a cerebrovascular accident (CVA) during the performance period. This measure may be submitted by Merit-based Incentive Payment System (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:**  
All patients with cerebrovascular accident (CVA) undergoing endovascular stroke treatment

**Denominator Criteria (Eligible Cases):**

All patients, regardless of age

**AND**

**Diagnosis for ischemic stroke (ICD-10-CM):** I63.00, I63.011, I63.012, I63.013, I63.019, I63.02, I63.031, I63.032, I63.033, I63.039, I63.09, I63.10, I63.111, I63.112, I63.113, I63.119, I63.12, I63.131, I63.132, I63.133, I63.139, I63.19, I63.20, I63.211, I63.212, I63.213, I63.219, I63.22, I63.231, I63.232, I63.233, I63.239, I63.29, I63.30, I63.311, I63.312, I63.313, I63.319, I63.321, I63.322, I63.323, I63.329, I63.331, I63.332, I63.333, I63.339, I63.341, I63.342, I63.343, I63.349, I63.39, I63.40, I63.411, I63.412, I63.413, I63.419, I63.421, I63.422, I63.423, I63.429, I63.431, I63.432, I63.433, I63.439, I63.441, I63.442, I63.443, I63.449, I63.49, I63.50, I63.511, I63.512, I63.513, I63.519, I63.521, I63.522, I63.523, I63.529, I63.531, I63.532, I63.533, I63.539, I63.541, I63.542, I63.543, I63.549, I63.59, I63.81, I63.89, I63.9

**AND**

**Patient procedure during the performance period (CPT):** 36223, 36224, 36225, 36226, 61645

**WITHOUT**

**Telehealth Modifier (including but not limited to):** GQ, GT, POS 02, POS 10

**AND NOT**

**DENOMINATOR EXCLUSIONS:**

**Patients who are transferred from one institution to another with a known diagnosis of CVA for endovascular stroke treatment:** G9766

**OR**

**Hospitalized patients with newly diagnosed CVA considered for endovascular stroke treatment:** G9767

**OR**

Patients with secondary stroke (e.g., a subsequent stroke that may occur with vasospasm in the setting of subarachnoid hemorrhage) within 5 days of the initial procedure: M1381

**NUMERATOR:**

Patients with CVA undergoing endovascular stroke treatment who have a door to puncture time of less than 90 minutes

**Numerator Options:**

*Performance Met:*

Door to puncture time of 90 minutes or less (**G9580**)

**OR**

*Performance Not Met:*

Door to puncture time of greater than 90 minutes, no reason given (**G9582**)

**RATIONALE:**

Acknowledgment of the critical importance of time to reperfusion for obtaining favorable outcomes in myocardial revascularization has led to the formation of similar initiatives as a measure of effective systems to enable an endovascular treatment program for acute stroke. Multiple hospital systems must interact effectively to enable patients presenting from any location to be assessed clinically and undergo imaging to ascertain if they are candidates for endovascular therapies. By ensuring a door to puncture time of 90 minutes or less, stroke patients are given the best chance of functional recovery.

**CLINICAL RECOMMENDATION STATEMENTS:**

This measure is supported by the multispecialty guidelines for intra-arterial catheter directed stroke treatment published in 2013 and updated in 2018 (1, 2, 3).

- (1) Sacks D. et al. Society of Interventional Radiology Multisociety Consensus Quality Improvement Guidelines For Intraarterial Catheter-Directed Treatment Of Acute Ischemic Stroke. *J Vasc Interv Radiol.* 2013; 24: 151-163
- (2) Sacks, D. et al. Society of Interventional Radiology Multisociety Consensus Quality Improvement Revised Consensus Statement for Endovascular Therapy of Acute Ischemic Stroke *J Vasc Interv Radiol* 2018; 29:441–453
- (3) Multisociety consensus quality improvement guidelines for intraarterial catheter-directed treatment of acute ischemic stroke *J Vasc Interv Radiol.* 2013 Feb;24(2):151-63. Epub 2013 Jan 28.

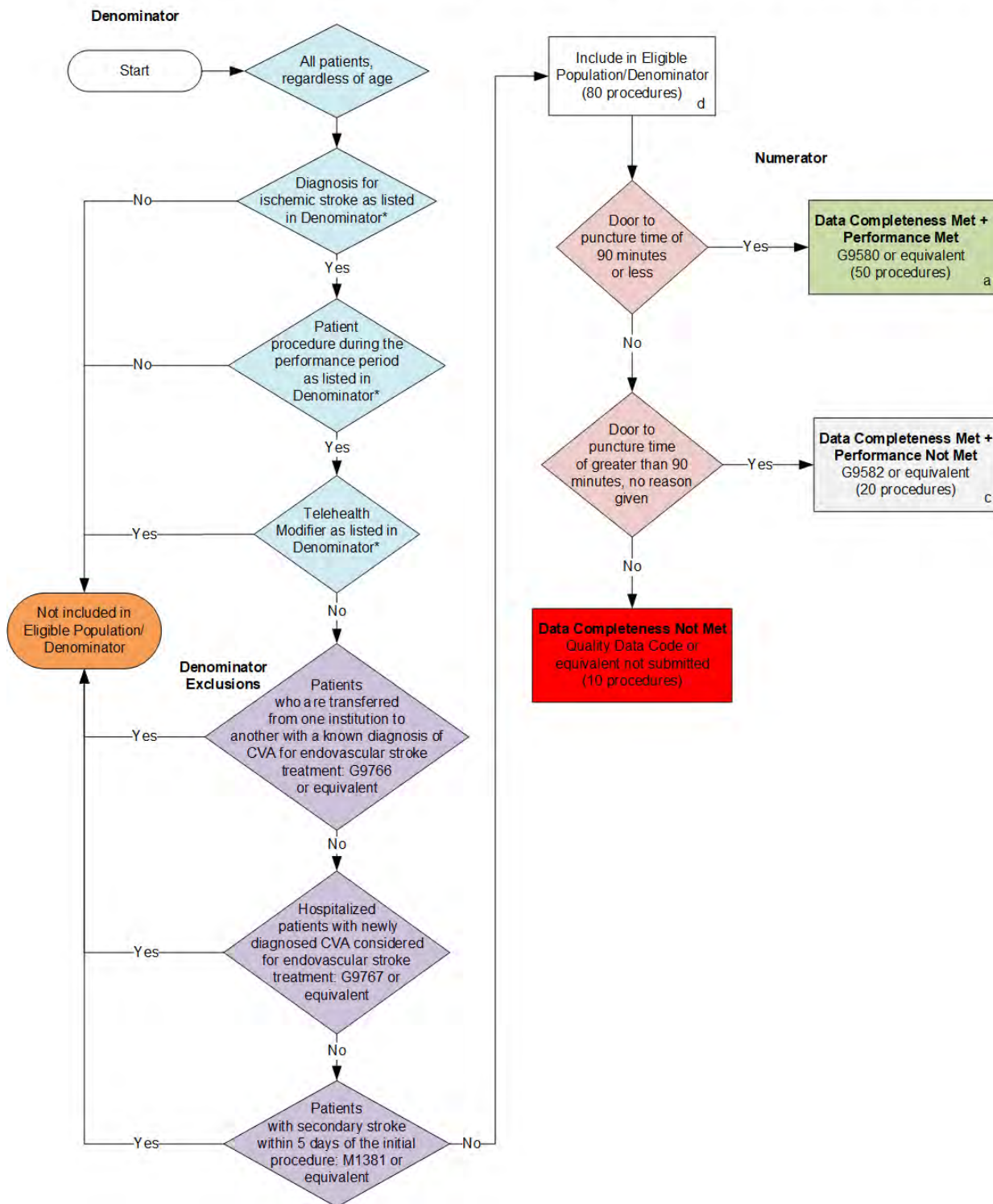
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## 2025 Clinical Quality Measure Flow for Quality ID #413: Door to Puncture Time for Endovascular Stroke Treatment

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



### SAMPLE CALCULATIONS

**Data Completeness=**

$$\frac{\text{Performance Met (a=50 procedures)} + \text{Performance Not Met (c=20 procedures)}}{\text{Eligible Population / Denominator (d=80 procedures)}} = \frac{70 \text{ procedures}}{80 \text{ procedures}} = 87.50\%$$

**Performance Rate=**

$$\frac{\text{Performance Met (a=50 procedures)}}{\text{Data Completeness Numerator (70 procedures)}} = \frac{50 \text{ procedures}}{70 \text{ procedures}} = 71.43\%$$

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

NOTE: Submission Frequency: Procedure

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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.

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**2025 Clinical Quality Measure Flow Narrative for Quality ID #413:  
Door to Puncture Time for Endovascular Stroke Treatment**

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

1. Start with Denominator
2. Check *All patients regardless of age.*
3. Check *Diagnosis for ischemic stroke as listed in Denominator\**:
  - a. If *Diagnosis for ischemic stroke as listed in Denominator\** equals No, do not include in *Eligible Population/Denominator*. Stop processing.
  - b. If *Diagnosis for ischemic stroke as listed in Denominator\** equals Yes, proceed to check *Patient procedure during the performance period as listed in Denominator\**.
4. Check *Patient procedure during the performance period as listed in Denominator\**:
  - a. If *Patient procedure during the performance period as listed in Denominator\** equals No, do not include in *Eligible Population/Denominator*. Stop processing.
  - b. If *Patient procedure during the performance period as listed in Denominator\** equals Yes, proceed to check *Telehealth Modifier as listed in Denominator\**.
5. Check *Telehealth Modifier as listed in Denominator\**:
  - a. If *Telehealth Modifier as listed in Denominator\** equals Yes, do not include in *Eligible Population/Denominator*. Stop processing.
  - b. If *Telehealth Modifier as listed in Denominator\** equals No, proceed to check *Patients who are transferred from one institution to another with a known diagnosis of CVA for endovascular stroke treatment*.
6. Check *Patients who are transferred from one institution to another with a known diagnosis of CVA for endovascular stroke treatment*:
  - a. If *Patients who are transferred from one institution to another with a known diagnosis of CVA for endovascular stroke treatment* equals Yes, do not include in *Eligible Population/Denominator*. Stop processing.
  - b. If *Patients who are transferred from one institution to another with a known diagnosis of CVA for endovascular stroke treatment* equals No, proceed to check *Hospitalized patients with newly diagnosed CVA considered for endovascular stroke treatment*.
7. Check *Hospitalized patients with newly diagnosed CVA considered for endovascular stroke treatment*:
  - a. If *Hospitalized patients with newly diagnosed CVA considered for endovascular stroke treatment* equals Yes, do not include in *Eligible Population/Denominator*. Stop processing.
  - b. If *Hospitalized patients with newly diagnosed CVA considered for endovascular stroke treatment* equals No, include in *Patients with secondary stroke within 5 days of the initial procedure*.
8. Check *Patients with secondary stroke within 5 days of the initial procedure*:
  - a. If *Patients with secondary stroke within 5 days of the initial procedure* equals Yes, do not include in *Eligible Population/Denominator*. Stop processing.

- b. If *Patients with secondary stroke within 5 days of the initial procedure* equals No, include in *Eligible Population/Denominator*.
9. 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.
10. Start Numerator
11. Check *Door to puncture time of 90 minutes or less*:
- a. If *Door to puncture time of 90 minutes or less* 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 *Door to puncture time of 90 minutes or less* equals No, proceed to check *Door to puncture time of greater than 90 minutes, no reason given*.
12. Check *Door to puncture time of greater than 90 minutes, no reason given*:
- a. If *Door to puncture time of greater than 90 minutes, no reason given* 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 *Door to puncture time of greater than 90 minutes, no reason given* equals No, proceed to check *Data Completeness Not Met*.
13. Check *Data Completeness Not Met*:
- 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 71.43 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.