Quality ID #413: Door to Puncture Time for Endovascular Stroke Treatment
- National Quality Strategy Domain: Effective Clinical Care
- Meaningful Measure Area: Patient Focused Episode of Care

**2020 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 less than two hours

**INSTRUCTIONS:**
This measure is to be submitted each time a patient undergoes a procedure for treatment of a cerebral vascular accident 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 Central Venous Access (CVA) undergoing endovascular stroke treatment

**Denominator Criteria (Eligible Cases):**
All patients, regardless of age

**AND**

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

**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

**NUMERATOR:**
Patients with CVA undergoing endovascular stroke treatment who have a door to puncture time of less than 2 hours

**Numerator Options:**

- **Performance Met:**
  - Door to puncture time of less than 2 hours (G9580)

- **Performance Not Met:**
  - Door to puncture time of greater than 2 hours, 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 less than 2 hours, 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.

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2020 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.

Data Completeness = Performance Met (≥50 procedures) + Performance Not Met (≥20 procedures) = 70 procedures = 87.50%
Data Completeness Numerator (70 procedures) = 70 procedures

Performance Rate = Performance Met (≥50 procedures) = 50 procedures = 71.43%

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

NOTE: Submission Frequency: Procedure
2020 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. All Patients Regardless of Age

3. Check Patient Diagnosis:
   a. If Diagnosis for Ischemic Stroke as Listed in the Denominator equals No, do not include in Eligible Population. Stop Processing.
   b. If Diagnosis for Ischemic Stroke as Listed in the Denominator equals Yes, proceed to check Procedure Performed.

4. Check Procedure Performed:
   a. If Procedure as Listed in the Denominator equals No, do not include in Eligible Population. Stop Processing.
   b. If Procedure as Listed in the Denominator equals Yes, proceed to check Patient Who Are Transferred from One Institution to Another with a Known Diagnosis of CVA for Endovascular Stroke Treatment.

5. Check Patient 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. 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 Patient with New CVA Diagnosis.

6. Check Hospitalized Patient with New CVA Diagnosis:
   a. If Hospitalized Patients with Newly Diagnosed CVA Considered for Endovascular Stroke Treatment equals Yes, do not include in Eligible Population. Stop Processing.
   b. If Hospitalized Patients with Newly Diagnosed CVA Considered for Endovascular Stroke Treatment equals No, include in Eligible Population.

7. Denominator Population:
   a. 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 Door to Puncture Time of Less Than 2 Hours:
a. If Door to Puncture Time of Less Than 2 Hours equals Yes, include in Data Completeness Met and Performance Met.

b. 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.

c. If Door to Puncture Time of Less Than 2 Hours equals No, proceed to check Door to Puncture Time of Greater Than 2 Hours, No Reason Given.

10. Check Door to Puncture Time of Greater Than 2 Hours, No Reason Given:

a. If Door to Puncture Time of Greater Than 2 Hours, No Reason Given equals Yes, include in Data Completeness Met and Performance Not Met.

b. 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.

c. If Door to Puncture Time of Greater Than 2 Hours, No Reason Given 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:

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

Performance Rate:

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