

Quality ID #409: Clinical Outcome Post Endovascular Stroke Treatment – National Quality Strategy  
Domain: Effective Clinical Care

**2018 OPTIONS FOR INDIVIDUAL MEASURES:**  
REGISTRY ONLY

**MEASURE TYPE:**  
Outcome

**DESCRIPTION:**  
Percentage of patients with a mRS score of 0 to 2 at 90 days following endovascular stroke intervention

**INSTRUCTIONS:**  
This measure is to be submitted **each time** an endovascular stroke intervention procedure is performed during the performance period. This measure may be submitted by eligible clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

***NOTE:** Include only patients that have cerebrovascular accidents through **September 30** of the performance period. This will allow the evaluation of at least 90 days after the cerebrovascular accident within the performance period.*

**Measure Submission:**

The listed denominator criteria is used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions allowed by the measure. The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

**DENOMINATOR:**  
All patients with 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, I63.8, I63.9

**AND**

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

**NUMERATOR:**  
Patients with a mRS of 0 to 2 at 90 days

**Definition:**

**The Modified Rankin Scale (mRS) -**

The scale runs from 0-6, running from perfect health without symptoms to death.

0 - No symptoms

1 - No significant disability. Able to carry out all usual activities, despite some symptoms

- 2 - Slight disability. Able to look after own affairs without assistance, but unable to carry out all previous activities
- 3 - Moderate disability. Requires some help, but able to walk unassisted
- 4 - Moderately severe disability. Unable to attend to own bodily needs without assistance, and unable to walk unassisted
- 5 - Severe disability. Requires constant nursing care and attention, bedridden, incontinent
- 6 - Dead

**Numerator Options:**

**OR**      *Performance Met:*      Patients with 90 day mRS score of 0 to 2 (G9646)

*Denominator Exception:*      Patients in whom mRS score could not be obtained a 90 day follow-up (G9647)

**OR**      *Performance Not Met:*      Patients with 90 day mRS score greater than 2 (G9648)

**RATIONALE:**

Patient outcomes following endovascular stroke therapy can be assessed using the mRS, a simple to administer scale that ascertains the degree of disability or dependence in the daily activities of patients suffering a stroke. The objective of endovascular therapy in stroke is to enable patients to maintain their independence in daily activities. Achieving a mRS of 2 or less after endovascular therapy is considered an excellent outcome following a stroke.

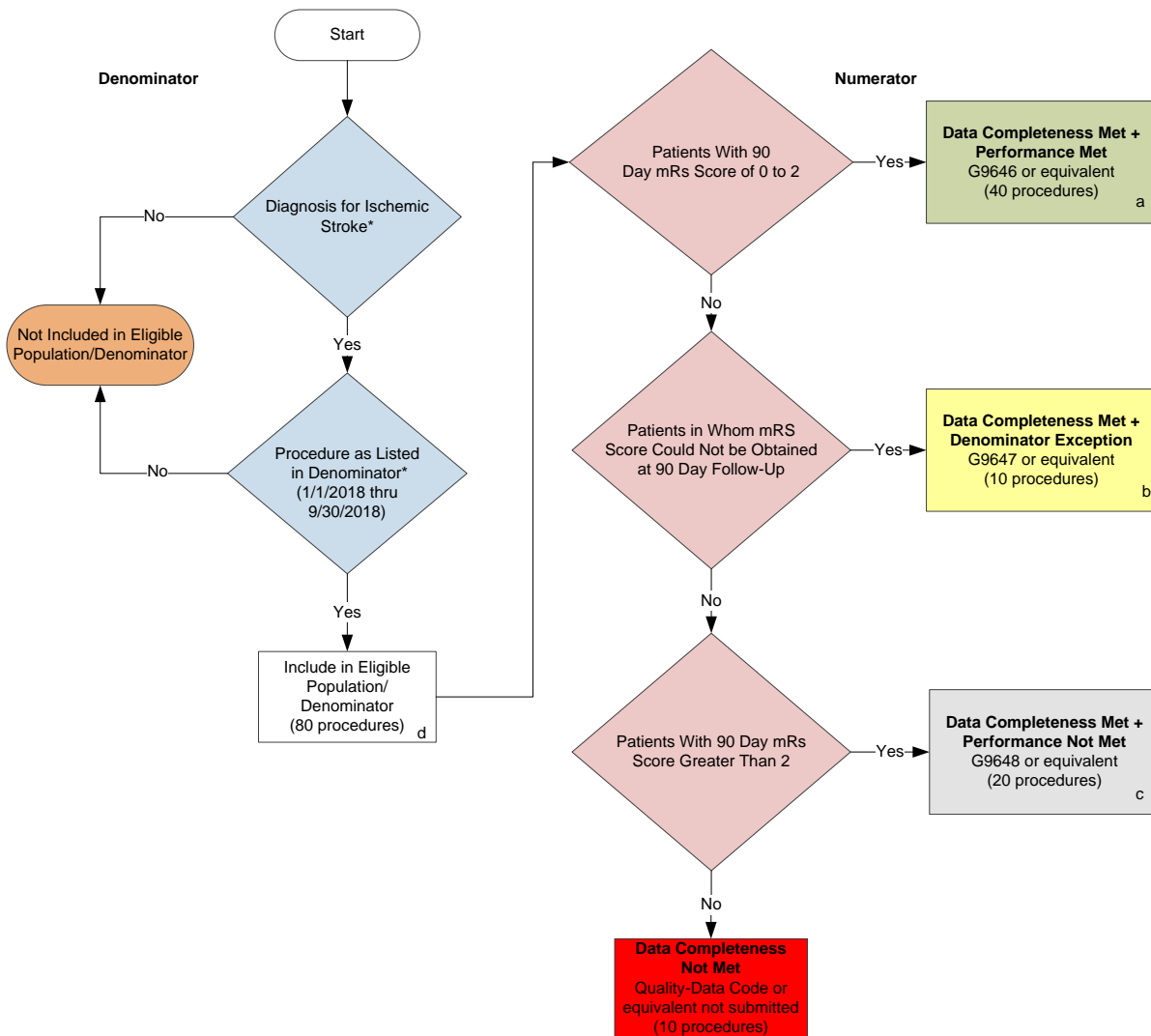
**CLINICAL RECOMMENDATION STATEMENTS:**

The standard definition of a good clinical outcome from intra-arterial therapy is a modified Rankin Scale (mRS) score of 0-2 at 90 days as assessed by a certified examiner independent of the interventional physician. This measure is supported by the multispecialty guidelines published in 2013.

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## 2018 Registry Flow for Quality ID #409: Clinical Outcome Post Endovascular Stroke Treatment



### SAMPLE CALCULATIONS:

**Data Completeness=**  
 Performance Met (a=40 procedures) + Denominator Exception (b=10 procedures) + Performance Not Met (c=20 procedures) = 70 procedures = **87.50%**  
 Eligible Population / Denominator (d=80 procedures) = 80 procedures

**Performance Rate=**  
 $\frac{\text{Performance Met (a=40 procedures)}}{\text{Data Completeness Numerator (70 procedures) - Denominator Exception (b=10 procedures)}} = \frac{40 \text{ procedures}}{60 \text{ procedures}} = \mathbf{66.67\%}$

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

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v2

**2018 Registry Flow for Quality ID  
#409: Clinical Outcome Post Endovascular Stroke Treatment**

Please refer to the specific section of the specification to identify the denominator and numerator information for use in submitting this Individual Specification. This flow is for registry data submission.

1. Start with Denominator
2. Check Patient Diagnosis:
  - a. If Diagnosis for Ischemic Stroke as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
  - b. If Diagnosis for Ischemic Stroke as Listed in the Denominator equals Yes, proceed to check Current Encounter Performed.
3. Check Procedure Performed:
  - a. If Procedure as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
  - b. If Procedure as Listed in the Denominator equals Yes, include in the Eligible Population.
4. Denominator Population:
  - a. Denominator population is all Eligible Patients 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.
5. Start Numerator
6. Check Patient With 90 Day mRs Score of 0 to 2:
  - a. If Patient With 90 Day mRs Score of 0 to 2 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 40 procedures in the Sample Calculation.
  - c. If Patient With 90 Day mRs Score of 0 to 2 equals No, proceed Patients in Whom mRS Score Could Not be Obtained at 90 Day Follow-up.
7. Check Patients in Whom mRS Score Could Not be Obtained at 90 Day Follow-Up:
  - a. If Patients in Whom mRS Score Could Not be Obtained at 90 Day Follow-Up equals Yes, include in Data Completeness Met and Denominator Exception.
  - b. Data Completeness Met and Denominator Exception letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter b equals 10 procedures in the Sample Calculation.
  - c. If Patients in Whom mRS Score Could not be Obtained at 90 Day Follow-Up: No, proceed to Patient With 90 Day mRs Score Greater Than 2.

8. Check Patient With 90 Day mRs Score Greater Than 2:
  - a. If Patient With 90 Day mRs Score Greater Than 2 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 Patient With 90 Day mRs Score Greater Than 2 equals No, proceed to Data Completeness Not Met.
9. Check Data Completeness Not Met:
  - a. If Data Completeness Not Met equals No, Quality Data Code or equivalent not submitted. 10 procedures have been subtracted from the Data Completeness Numerator in the Sample Calculation.

**SAMPLE CALCULATIONS:**

**Data Completeness=**

$$\frac{\text{Performance Met (a=40 procedures)} + \text{Denominator Exception (b=10 procedures)} + \text{Performance Not Met (c=20 procedures)}}{\text{Eligible Population / Denominator (d=80 procedures)}} = \frac{70 \text{ procedures}}{80 \text{ procedures}} = 87.50\%$$

**Performance Rate=**

$$\frac{\text{Performance Met (a=40 procedures)}}{\text{Data Completeness Numerator (70 procedures) - Denominator Exception (b=10 procedures)}} = \frac{40 \text{ procedures}}{60 \text{ procedures}} = 66.67\%$$