2018 OPTIONS FOR INDIVIDUAL MEASURES:
REGISTRY ONLY

MEASURE TYPE:
Process

DESCRIPTION:
Percentage of patients aged 18 years and older with a diagnosis of acute ischemic stroke who arrive at the hospital within two hours of time last known well and for whom IV t-PA was initiated within three hours of time last known well

INSTRUCTIONS:
This measure is to be submitted for each episode of acute ischemic stroke for patients who arrive at the hospital within two hours of time last known well and for whom IV t-PA was initiated within three hours of time last known well. It is anticipated that eligible clinicians providing care for patients with acute ischemic stroke in the hospital setting will submit this measure.

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 aged 18 years and older with a diagnosis of acute ischemic stroke whose time of arrival is within two hours (≤ 120 minutes) of time last known well

> Denominator Criteria (Eligible Cases):
> Patients aged ≥ 18 years on date of encounter
> 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, I63.6, I63.8, I63.9
> AND
> Patient encounter during performance period (CPT): 99218, 99219, 99220, 99221, 99222, 99223, 99224, 99225, 99226, 99231, 99232, 99233, 99281, 99282, 99283, 99284, 99285, 99291
> WITHOUT
> Telehealth Modifier: GQ, GT, 95, POS 02
> AND
> Time last known well to arrival in the emergency department less than or equal to two hours (≤ 120 minutes)

NUMERATOR:
Patients for whom IV thrombolytic therapy was initiated at the hospital within three hours (≤ 180 minutes) of time last known well

Definition:
Last Known Well – The date and time prior to hospital arrival at which it was witnessed or reported that the patient was last known to be without the signs and symptoms of the current stroke or at his or her baseline state of health.

Numerator Options:

Performance Met: IV t-PA initiated within three hours (≤ 180 minutes) of time last known well **(G8600)**

OR

Denominator Exception: IV t-PA not initiated within three hours (≤ 180 minutes) of time last known well for reasons documented by clinician (e.g., patient enrolled in clinical trial for stroke, patient admitted for elective carotid intervention) **(G8601)**

OR

Performance Not Met: IV t-PA not initiated within three hours (≤ 180 minutes) of time last known well, reason not given **(G8602)**

RATIONALE:
The administration of thrombolytic agents to carefully screened, eligible patients with acute ischemic stroke has been shown to be beneficial in several clinical trials. These included two positive randomized controlled trials in the United States; The National Institute of Neurological Disorders and Stroke (NINDS) Studies, Part I and Part II. Based on the results of these studies, the Food and Drug Administration approved the use of intravenous recombinant tissue plasminogen activator (IV r-TPA or t-PA) for the treatment of acute ischemic stroke when given within 3 hours of stroke symptom onset. A large meta-analysis controlling for factors associated with stroke outcome confirmed the benefit of IV t-PA in patients treated within 3 hours of symptom onset. While controversy still exists among some specialists, the major society practice guidelines developed in the United States all recommend the use of IV t-PA for eligible patients. Physicians with experience and skill in stroke management and the interpretation of CT scans should supervise treatment.

CLINICAL RECOMMENDATION STATEMENTS:
Intravenous r-TPA (0.9 mg/kg, maximum dose 90 mg) is recommended for selected patients who may be treated within 3 hours of onset of ischemic stroke (Class 1, Level of Evidence A) (AHA/ASA).

For eligible patients (see inclusion and exclusion criteria listed below), we recommend administration of IV t-PA in a dose of 0.9 mg/kg (maximum of 90 mg), with 10% of the total dose given as an initial bolus and the remainder infused over 60 min, provided that treatment is initiated within 3 hours of clearly defined symptom onset (Class 1, Grade 1A) (ACP).
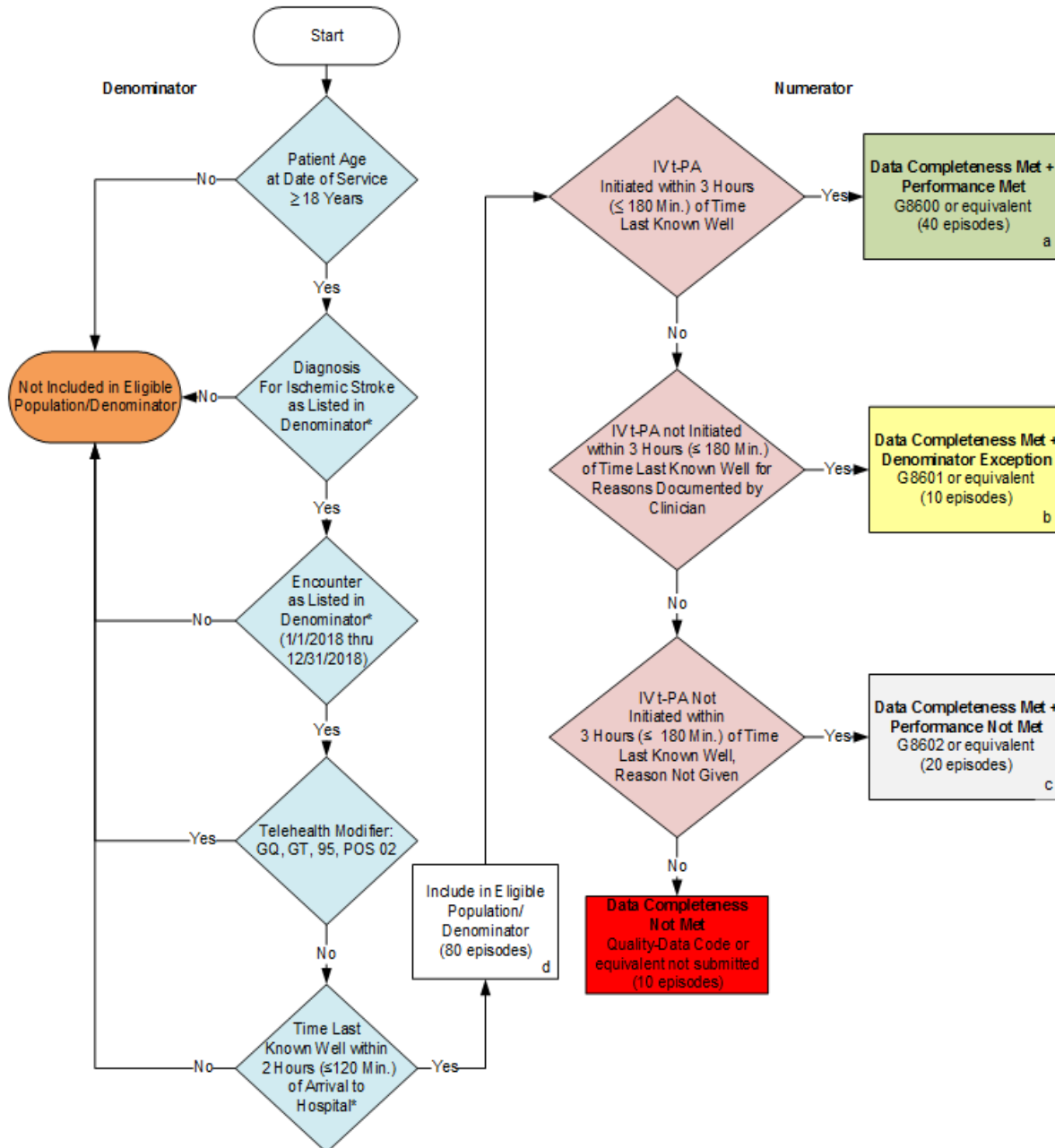
COPYRIGHT:

2018 Registry Flow for Quality ID #187:
Stroke and Stroke Rehabilitation: Thrombolytic Therapy

SAMPLE CALCULATIONS:

Data Completeness=

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

Performance Rate=

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

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

2018 Registry Flow For Quality ID
#187: Stroke and Stroke Rehabilitation: Thrombolytic Therapy

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 Age:

   a. If the Age is greater than or equal to 18 years of age at Date of Service and equals No during the measurement period, do not include in Eligible Patient Population. Stop Processing.

   b. If the Age is greater than or equal to 18 years of age at Date of Service and equals Yes during the measurement period, proceed to check Patient Diagnosis.

3. 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 Encounter Performed.

4. Check Encounter Performed:

   a. If Encounter as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.

   b. If Encounter as Listed in the Denominator equals Yes, proceed to Telehealth Modifier.

5. Check Telehealth Modifier:

   a. If Telehealth Modifier equals Yes, do not include in Eligible Patient Population. Stop Processing.

   b. If Telehealth Modifier equals No, proceed to Time Last Known Well within 2 Hours (≤ 120 Min.) of Arrival to Hospital.

6. Check Time Last Known Well within 2 Hours (≤ 120 Min.) of Arrival to Hospital:

   a. If Time Last Known Well within 2 Hours (≤ 120 Min.) of Arrival to Hospital equals No, do not include in Eligible Patient Population. Stop Processing.

   b. If Time Last Known Well within 2 Hours (≤ 120 Min.) of Arrival to Hospital equals Yes, include in Eligible Population.

7. 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 episodes in the Sample Calculation.

8. Start Numerator

9. Check IV t-PA Initiated within 3 Hours (≤ 180 Min.) of Time Last Known Well:

a. If IV t-PA Initiated within 3 Hours (≤ 180 Min.) of Time last Known Well equals Yes, include in Data Completeness Met and Performance Met.

b. Data Completeness Met and Performance Met is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a equals 40 episodes in Sample Calculation.

c. If IV t-PA Initiated within 3 Hours (≤ 180 Min.) of Time Last Known Well equals NO, proceed to IV t-PA Initiated within 3 Hours (≤ 180 Min.) of Time last Known Well for Reasons Documented by Clinician.

10. Check IV t-PA Initiated within 3 Hours (≤ 180 Min.) of Time Last Known Well for Reasons Documented by Clinician:

a. If IV t-PA Initiated within 3 Hours (≤ 180 Min.) of Time Last Known Well for Reasons Documented by Clinician equals Yes, include in Data Completeness Met and Denominator Exception.

b. Data Completeness Met and Denominator Exception is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter b equals 10 episodes in the Sample Calculation.

c. If IV t-PA Initiated within 3 Hours (≤ 180 Min.) of Time Last Known Well for Reasons Documented by Clinician equals No, proceed to IV t-PA Not Initiated within 3 Hours (≤ 180 Min.) of Time last Known Well, Reason Not Given.

11. Check IV t-PA Not Initiated within 3 Hours (≤ 180 Min.) of Time Last Known Well, Reason Not Given:

a. If IV t-PA Not Initiated within 3 Hours (≤ 180 Min.) of Time Last Known Well, Reason Not Given equals Yes, include in the Data Completeness Met and Performance Not Met.

b. Data Completeness Met and Performance Not Met is represented in the Data Completeness in the Sample Calculation listed at the end of this document. Letter c equals 20 episodes in the Sample Calculation.

c. If IV t-PA Not Initiated within 3 Hours (≤ 180 Min.) of Time Last Known Well, Reason Not Given equals No, proceed to Data Completeness Not Met.

12. Check Data Completeness Not Met:

a. If Data Completeness Not Met equals No, Quality Data Code or equivalent not submitted. 10 episodes have been subtracted from the Data Completeness Numerator in the Sample Calculation.

SAMPLE CALCULATIONS:

Data Completeness=

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

Performance Rate=

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