Pioneers in Quality
Expert to Expert:
STK 4 – Thrombolytic Therapy

Lisa Anderson MSN, RN-BC
Karen Kolbusz, BSN, MBA
Pioneers in Quality Webinars:

"Time to get back to eCQM 101 - A Breakdown of the Basics." The objective of this webinar was to discuss key components of the program, as well as provide information to improve your basic eCQM knowledge.

“ABCs of eCQMs: Acronyms and Resources You Need to Know.” In this session we took a deeper dive into terminologies used in eCQMs, and how terminologies and value sets are used to represent eCQM data elements.

“eCQM Implementation and Submission Insights.” In this session we provided participants with actionable information on eCQM implementation and reporting from veteran eCQM submitters.

“eCQM Hospital Readiness and Initial Data Analysis.” In this session we discussed 2015 eCQM measure results, chart-based measure national averages, and nationwide survey results regarding eCQM readiness for 2017 submission.
Logistics

- All attendee lines are muted
- Chat controls are currently disabled
  - Chat will be enabled when Q&A begins
- This session is being recorded
- The recording and slides will be posted to The Joint Commission Pioneers in Quality Portal within 7-10 business days
The Objectives of this Webinar

Learning Objectives:
- Explain logic specifications for STK-4
- Discuss frequently asked questions about STK-4
Background

- In 2016, CMS requires organizations participating in IQR to submit 4 of 28 available eCQMs
- In 2016, The Joint Commission gives accredited hospitals *the option* to submit eCQMs to The Joint Commission to meet their ORYX reporting requirements
- STK-4 is a commonly selected measure for the Joint Commission Hospital Accreditation Program
- In 2017, this measure is retired
- The Joint Commission and CMS use the same measure specifications

Resources:
- Joint Commission Reporting Requirements: [https://www.jointcommission.org/performance_measurement.aspx](https://www.jointcommission.org/performance_measurement.aspx)
Introduction

The administration of intravenous (IV) thrombolytic agents (i.e., Activase, alteplase, recombinant tissue plasminogen activator r-tPA) to carefully screened, eligible patients with acute ischemic stroke has been shown to be beneficial in several large clinical trials (The National Institute of Neurological Disorders and Stroke (NINDS) Studies, Part I and Part II, 1996).

Although the benefit of t-PA has been well established, only a minority of patients with acute ischemic stroke actually receive this medication across the United States (Demaerschalk, et.al., 2016).

This measure captures the proportion of acute ischemic stroke patients who arrive to the hospital emergency department within 2 hours (120 minutes) of stroke onset and receive IV thrombolytic therapy (t-PA) within 3 hours (180 minutes).
Initial Patient Population

Patients age 18 and older discharged from inpatient care (non-elective admissions) with a principal diagnosis of ischemic or hemorrhagic stroke and a length of stay less than or equal to 120 days.

- **Initial Population =**
  - AND: Age >= 18 year(s) at: Occurrence A of $EncounterInpatientNonElective
  - AND: Union of:
    - "Diagnosis, Active: Ischemic Stroke (ordinality: Principal)"
    - "Diagnosis, Active: Hemorrhagic Stroke (ordinality: Principal)"
    - starts during Occurrence A of $EncounterInpatientNonElective
Denominator

Ischemic stroke patients admitted through the Emergency Department whose time of arrival is within 2 hours (less than or equal to 120 minutes) of either the:

1) time they were known to be at their baseline state of health
2) time of symptom onset
Denominator =

- AND: Initial Population
- AND: "Diagnosis, Active: Ischemic Stroke (ordinality: Principal)" starts during Occurrence A of $EncounterInpatientNonElective
- AND: "Occurrence A of Encounter, Performed: Emergency Department Visit" <= 1 hour(s) ends before or concurrent with start of Occurrence A of $EncounterInpatientNonElective
- AND: Union of:
  - "Physical Exam, Performed: Baseline State" <= 120 minute(s) ends before start of "Occurrence A of Encounter, Performed: Emergency Department Visit"
  - "Physical Exam, Performed: Time of Symptom Onset" <= 120 minute(s) starts before start of "Occurrence A of Encounter, Performed: Emergency Department Visit"
Example of Issue

- ED encounter start: 9/2 at 1000
- Baseline state: 9/2 at 0830
- Author Time: 9/2 at 1015
Numerator

- Acute ischemic stroke patients for whom IV thrombolytic therapy was initiated at this hospital within 3 hours (less than or equal to 180 minutes) of when 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 =
  • AND: Union of:
    ▪ "Medication, Administered: Thrombolytic (t-PA) Therapy" ≤ 180 minute(s) starts after end of
      ▪ "Physical Exam, Performed: Baseline State" ≤ 120 minute(s) ends before start of "Occurrence A of Encounter, Performed: Emergency Department Visit"
    ▪ "Medication, Administered: Thrombolytic (t-PA) Therapy" ≤ 180 minute(s) starts after start of
      ▪ "Physical Exam, Performed: Time of Symptom Onset" ≤ 120 minute(s) starts before start of "Occurrence A of Encounter, Performed: Emergency Department Visit"
Denominator Exceptions

- Patients with comfort measures documented on the day of or the day after arrival
- Patients with intra-venous or intra-arterial Thrombolytic (t-PA) Therapy prior to arrival
- Patients with documentation of a National Institutes for Health Stroke Scale (NIHSS) score of zero in the emergency department
- Patients with Medical Reasons for not initiating IV thrombolytics documented by a physician/APN/PA or pharmacist on the day of or the day after arrival
Denominator Exceptions (cont.)

- Patients with any of the following results within 180 minutes of the 1) time they were known to be at their baseline state of health; or 2) time of symptom onset:
  - Prothrombin Time > 15 seconds
  - Platelet Count < 100,000
  - INR > 1.7
  - Partial Thromboplastin Time > 40 seconds
  - Systolic Blood Pressure > 185 mmHg
  - Diastolic Blood Pressure > 110 mmHg
  - Patient refusal
Denominator Exceptions =
  OR: Union of:
  - $InterventionComfortMeasures
  - $MedicalReasonForNotInitiatingIVThrombolytic
  - <= 1 day(s) starts after start of Occurrence A of $EncounterInpatientNonElective
  OR: Union of:
  - $InterventionComfortMeasures starts during "Occurrence A of Encounter, Performed: Emergency Department Visit"
  - $MedicalReasonForNotInitiatingIVThrombolytic starts during "Occurrence A of Encounter, Performed: Emergency Department Visit"
  OR: Union of:
  - "Laboratory Test, Performed: Prothrombin Time (result > 15 second(s))"
  - "Laboratory Test, Performed: INR (result > 1.7 )"
  - "Laboratory Test, Performed: Platelet Count (result < 100000 )"
  - "Laboratory Test, Performed: Partial Thromboplastin Time (result > 40 second(s))"
  - "Physical Exam, Performed: Systolic Blood Pressure (result > 185 mmHg)"
  - "Physical Exam, Performed: Diastolic Blood Pressure (result > 110 mmHg)"
  - "Medication, Order not done: Patient Refusal" for "t-PA ingredient specific"
  - "Medication, Administered not done: Patient Refusal" for "Thrombolytic (t-PA) Therapy"
  - <= 180 minute(s) starts after end of
    - "Physical Exam, Performed: Baseline State" <= 120 minute(s) ends before start of "Occurrence A of Encounter, Performed: Emergency Department Visit"
• OR: Union of:
  ▪ "Laboratory Test, Performed: Prothrombin Time (result > 15 second(s))"
  ▪ "Laboratory Test, Performed: INR (result > 1.7 )"
  ▪ "Laboratory Test, Performed: Platelet Count (result < 100000 )"
  ▪ "Laboratory Test, Performed: Partial Thromboplastin Time (result > 40 second(s))"
  ▪ "Physical Exam, Performed: Systolic Blood Pressure (result > 185 mmHg)"
  ▪ "Physical Exam, Performed: Diastolic Blood Pressure (result > 110 mmHg)"
  ▪ "Medication, Order not done: Patient Refusal" for "t-PA ingredient specific"
  ▪ "Medication, Administered not done: Patient Refusal" for "Thrombolytic (t-PA) Therapy"
  ▪ \(\leq 180\) minute(s) starts after start of
    ▪ "Physical Exam, Performed: Time of Symptom Onset" \(\leq 120\) minute(s) starts before start of "Occurrence A of Encounter, Performed: Emergency Department Visit"
• OR: Union of:
  ▪ "Medication, Administered: Thrombolytic (t-PA) Therapy"
  ▪ "Procedure, Performed: Intravenous Thrombolytic (t-PA) Therapy"
  ▪ \(\leq 2\) day(s) starts before start of "Occurrence A of Encounter, Performed: Emergency Department Visit"
• OR: First: "Occurrence A of Risk Category Assessment: National Institute of Health Stroke Scale (result = 0 )" starts during "Occurrence A of Encounter, Performed: Emergency Department Visit"
eCQM versus Chart for Stroke Measures: eCQM and chart results differ for the same hospitals
Review of Must Know Items

- Non-elective encounter
- Effective times and baseline state/time of symptom onset
- Discrete modelling of “other” reasons
- INR
- Platelets
Question

Why does Occurrence A of $EncounterInpatientNonElective occur in multiple sections of the measure, especially if patients satisfy the Initial Patient Population (IPP), why does it need to be explicitly restated in the Exclusion and Numerator?

CQM-1631
Answer

- For each section of the measure we evaluate whether the criteria occur during “Occurrence A of $EncounterInpatientNonElective” (aka, the encounter). The occurrence must be restated to ensure that each section of the measure is evaluating the same patient care encounter (aka occurrence), while looking for different data from within the encounter.

- For more information on Occurrences, please refer to eCQM Measure Logic Guidance v1.11 Update June 2015.
Question

The chart-abstracted measure has a new data element “Reason for Extending the Initiation of IV Thrombolytic”. However, when comparing to the eCQM, this data element does not exist. Why is there a discrepancy?

This change was added to the eCQM during the 2016 Annual Updates (2017 reporting period) as a Denominator Exception
Question

In our EHR, we have brand name drugs mapped to the RxNorm code for the branded drug, however, we do not see those codes in the value set. How should we handle this?
All value sets referring to specific prescribable medications use generalized drug concepts (for example, RxNorm “SCD” – Semantic Clinical Drugs). It is expected that vendors/providers will report the drug entities in patient data using the generalized drug concepts included in the defined value sets. Therefore, brand name drugs should be mapped to their generic medication counterparts for inclusion in the measure.

For more information, please refer to section 6.2 Drug Representations Used in Value Sets in the eCQM Measure Logic Guidance v1.11 Update June 2015 document.
Question

For STK-4, there are no Denominator Exclusions and several Denominator Exceptions. What’s really confusing and inconsistent is that these seem to be reversed. For example, in STK-2, 3, and 5, “Comfort Measures” is listed as an Exclusion, but in STK-4, it is listed as an Exception. Can you explain why this is different?
Answer

- Denominator Exclusion - a case that was never in the denominator

- Denominator Exception - a case that would normally be in the denominator but was removed because of an unusual situation

- For STK-4, we want everyone to be evaluated through the denominator before they are excluded, including comfort measure patients
Question

Why don’t the 2015 eCQMs requiring negation for a medication comply with QRDA-1 Release 3 and logic guidance documents?

– Example: Denominator Exceptions:
  – Medication, Order not done: Patient Refusal for “t-PA ingredient specific”:
  – Shouldn’t the logic be rewritten to use the nullflavor?
Answer

- The human readable did not change, in that, we still express that if medication was not done, we continue to use either ingredient specific value sets or the semantic clinical drug value sets.

- However, implementers should map to the value set OID, instead of a specific concept.

- For implementation, continue to follow the guidance in eCQM Measure Logic Guidance v1.11 Update June 2015 section 6.8 Activities That Were “Not Done”
Question

If a patient is cared for in one facility’s ED and then moved to another facility for their inpatient care, is the expectation that relevant eCQM’s would be calculated across those separate visits?

– Example: The encounters are documented in the same EHR database and the facilities are both part of the same TIN?
Answer

- If each facility within the healthcare system has its own CCN, then each facility must report their data separately under their own CCN.

- However, if the healthcare system and its entities share a CCN number, then they should report as one entity.
Please send additional feedback on the content of this program, and your suggestions to improve future programs, to:
PioneersInQuality@jointcommission.org
Upcoming 2016 Pioneers in Quality Events

- **October 25**- Webinar #5: eCQMs: Technical Aspects of Submission
- **November 8**- eCQM "Expert to Expert" Call-In Hour- ePC-01 & ePC-05

www.jointcommission.org/topics/pioneers_in_quality.aspx
The Core Measure Solution Exchange®

The Core Measure Solution Exchange® is a quality improvement tool offered as an exclusive benefit to our accredited hospitals. The Core Measure Solution Exchange:

- Facilitates the sharing of peer-to-peer success stories as to how accredited hospitals attained excellent performance on specific measures.
- Allows organizations to share the details associated with their pathways to performance measure success.
- Assists other accredited hospitals with their efforts to achieve a similar success story.
The Core Measure Solution Exchange®

The Exchange is available to Joint Commission accredited and certified organizations on the secure Joint Commission Connect Extranet.

- Submit a solution
- Search for solutions to improve measure performance
- Post comments and participate in discussions about the solutions
- Rate the usefulness and transferability of the solutions
- Post adapted versions of the solutions based upon your own experience
- Be notified via e-mail when new measure solutions are posted
The Core Measure Solution Exchange®

You may also send questions and comments to solutionexchange@jointcommission.org.

Share your performance measurement success stories

Visit the Core Measure Solution Exchange®