Pioneers in Quality
Expert to Expert Webinar Series

2023 Annual Updates for 2024 Reporting Year

eSTK-2 Discharged on Antithrombotic Therapy
eSTK-3 Anticoagulation Therapy for Atrial Fibrillation/Flutter
eSTK-5 Antithrombotic Therapy By End of Hospital Day 2

October 31, 2023

Webinar Audio – Information & Tips

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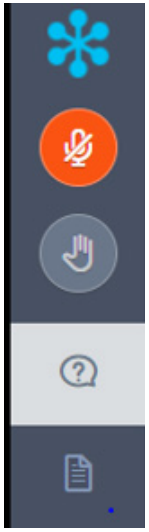
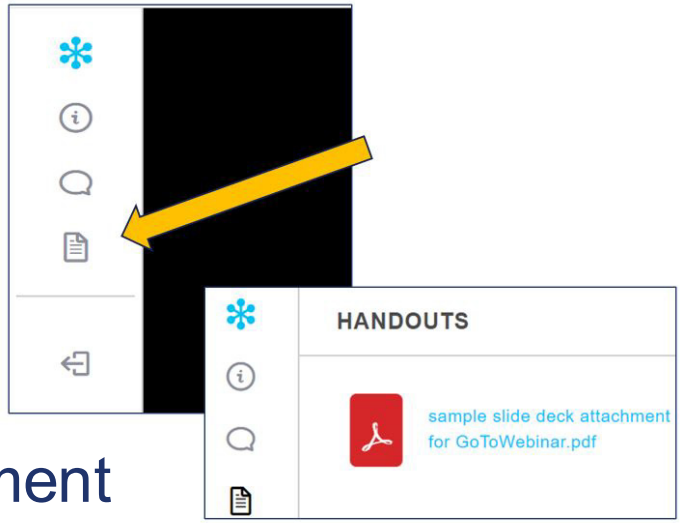


Welcome!

But first things first…

"Get Started with eCQMs"

Slides are available now!



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https://www.jointcommission.org/measurement/quality-measurement-webinars-and-videos/expert-to-expert-webinars/

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Learning Objectives:

- Navigate to the measure specifications, value sets, measure flow diagrams and technical release notes
- Apply concepts learned about the logic and intent for eSTK-2, eSTK-3, eSTK-5
- Prepare to implement eSTK-2, eSTK-3, eSTK-5 for the 2024 eCQM reporting period
- Identify common issues and questions regarding eSTK-2, eSTK-3, eSTK-5

Topics Not Covered in Today's Webinar

- Basic eCQM concepts
- Topics related to chart abstracted measures
- Process improvement efforts related to this measure
- eCQM validation

Disclosure Statement

These staff and speakers have disclosed that they do not have any conflicts of interest. For example, financial arrangements, affiliations with, or ownership of organizations that provide grants, consultancies, honoraria, travel, or other benefits that would impact the presentation of today's webinar content.

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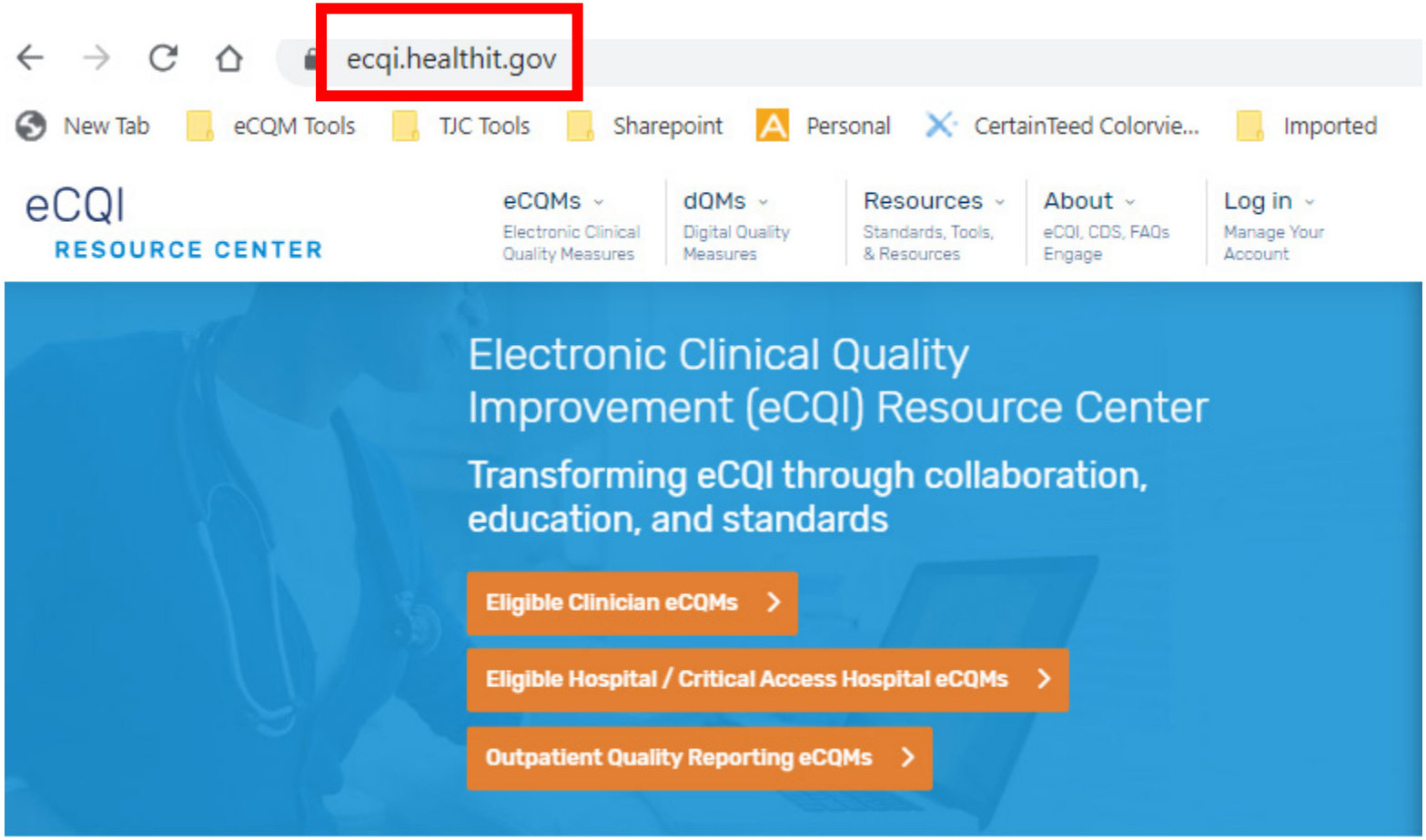
Pioneers in Quality Expert to Expert Webinar Agenda: STK eCQMs

- Demonstrate eCQI Resource Center navigation to measure specifications, value sets, measure flow diagrams and technical release notes
- Review the measure flow/algorithm
- Review changes made to STK-2, STK-3, STK-5
- Review FAQs
- Facilitated Audience Q&A Segment

eCQI Resource Center Website Demo



Stroke Measure Set

The stroke measure set consists of 3 measures:

- STK-2 Discharged on Antithrombotic Therapy
- STK-3 Anticoagulation Therapy for Atrial Fibrillation/Flutter
- STK-5 Antithrombotic Therapy by End of Hospital Day 2

STK Measure Set

- Two measures (STK-2, STK-3) focus on therapies for secondary stroke prevention which should be prescribed prior to hospital discharge.
- One measure (STK-5) addresses an early intervention that should be taken when acute ischemic stroke is diagnosed.
- 2021 national averages for organizations submitting the eCQMs were:
  - STK-2 95.2%
  - STK-3 71.6%
  - STK-5 91.2%

Stroke Population Criteria

	Initial Population	Denominator	Denominator Exclusions	Numerator	Denominator Exceptions
STK-2	Inpatient hospitalizations for patients • age 18 and older • discharged from inpatient care • non-elective admission	Initial Population plus Principal diagnosis of ischemic stroke	Admitted for **elective** carotid intervention Discharged to: • another hospital • home or health care facility for hospice Comfort measures documented Left AMA Expired	Prescribed or continuing to take antithrombotic therapy at hospital discharge	Reason documented during inpatient encounter for not prescribing antithrombotic therapy at discharge Patients who receive Prasugrel as antithrombotic therapy at discharge
STK-3	• principal diagnosis of ischemic or hemorrhagic stroke • length of stay less than or equal to 120 days that ends during the measurement period	Initial Population plus Principal diagnosis of ischemic stroke plus one of the following: • Atrial ablation procedure • History of Atrial Ablation • History of Afib/flutter • Current Diagnosis of Afib/flutter)	Same as STK-2	Prescribed or continuing to take anticoagulation therapy at hospital discharge	Reason documented during inpatient encounter for not prescribing anticoagulation therapy at discharge
STK-5		Same as STK-2	Duration of stay < 2 days Comfort measures documented day-of-or-day-after arrival Intra-venous or intra-arterial Thrombolytic (t-PA) therapy administered within 24 hours before or during hospitalization	Antithrombotic therapy administered the day-of-or-day-after hospital arrival	Reason for not prescribing antithrombotic therapy day-of-or-day-after hospital arrival Patients who receive Prasugrel antithrombotic therapy day-of-or-day-after hospital arrival INR greater than 3.5

Common Logic Across Stroke Measures

Initial Population – All STK Measures

TJC."Encounter with Principal Diagnosis and Age"

TJC."Encounter with Principal Diagnosis and Age"
"All Stroke Encounter" AllStrokeEncounter
where AgeInYearsAt (date from
start of AllStrokeEncounter.relevantPeriod)) >= 18

TJC.**"All Stroke Encounter"**
"Non Elective Inpatient Encounter" NonElectiveEncounter
where exists (NonElectiveEncounter.diagnoses Diagnosis
where Diagnosis.rank = 1
and (Diagnosis.code in "Hemorrhagic Stroke"
or Diagnosis.code in "Ischemic Stroke"))

Initial Population – All STK Measures (2)

TJC."Non Elective Inpatient Encounter"

["Encounter, Performed": "Nonelective Inpatient Encounter"]
NonElectiveEncounter

where Global."LengthInDays" (NonElectiveEncounter.relevantPeriod)
<= 120

and NonElectiveEncounter.relevantPeriod ends during
day of "Measurement Period"

Frequently Asked Question for the Initial Patient Population

Question: What is considered a nonelective inpatient encounter?

Answer: Nonelective encounters are captured using the "Nonelective Inpatient Encounter" value set. The value set intends to capture all non-scheduled hospitalizations. Non-elective admissions include emergency, urgent and unplanned admissions.

Denominator – STK-2 & STK-5

TJC."Ischemic Stroke Encounter"

"**Encounter with Principal Diagnosis and Age** "
EncounterWithAge
    where exists (EncounterWithAge.diagnoses Diagnosis
    where Diagnosis.code in "Ischemic Stroke"
        and Diagnosis.rank = 1)

Denominator Exclusions – STK-2 & STK-3

TJC."Ischemic Stroke Encounters with Discharge Disposition“

Union

TJC."Encounter with Comfort Measures during Hospitalization"

Denominator Exclusions – STK-2 & STK-3 (2)

TJC."**Ischemic Stroke Encounters with Discharge Disposition**"
(("Ischemic Stroke Encounter" IschemicStrokeEncounter
where IschemicStrokeEncounter.dischargeDisposition in
"Discharge To Acute Care Facility"
or IschemicStrokeEncounter.dischargeDisposition in
"Left Against Medical Advice"
or IschemicStrokeEncounter.dischargeDisposition in
"Patient Expired"
or IschemicStrokeEncounter.dischargeDisposition in
"Discharged to Home for Hospice Care"
or IschemicStrokeEncounter.dischargeDisposition in
"Discharged to Health Care Facility for Hospice Care"
))

Denominator Exclusions – STK-2 & STK-3 (3)

TJC. "**Encounter with Comfort Measures during Hospitalization"**
"Ischemic Stroke Encounter" IschemicStrokeEncounter
with "**Intervention Comfort Measures**" ComfortMeasure
such that Coalesce(start of Global."NormalizeInterval"(
ComfortMeasure.relevantDatetime,
ComfortMeasure.relevantPeriod),
ComfortMeasure.authorDatetime)
during Global."HospitalizationWithObservation"
(IschemicStrokeEncounter)

TJC."Intervention Comfort Measures"
["Intervention, Order": "Comfort Measures"]
union ["Intervention, Performed": "Comfort Measures"]

STK-2 Discharged on Antithrombotic Therapy
CMS104

STK-2 Rationale
Discharged on Antithrombotic Therapy

- Antithrombotic therapy includes both antiplatelet and anticoagulant medications.
- Long-term antithrombotic therapy is recommended after an ischemic stroke to reduce stroke morbidity and mortality.
- For patients with non-cardioembolic ischemic stroke, antiplatelet medications are preferred over anticoagulants.

STK-2 Rationale (2)
Discharged on Antithrombotic Therapy

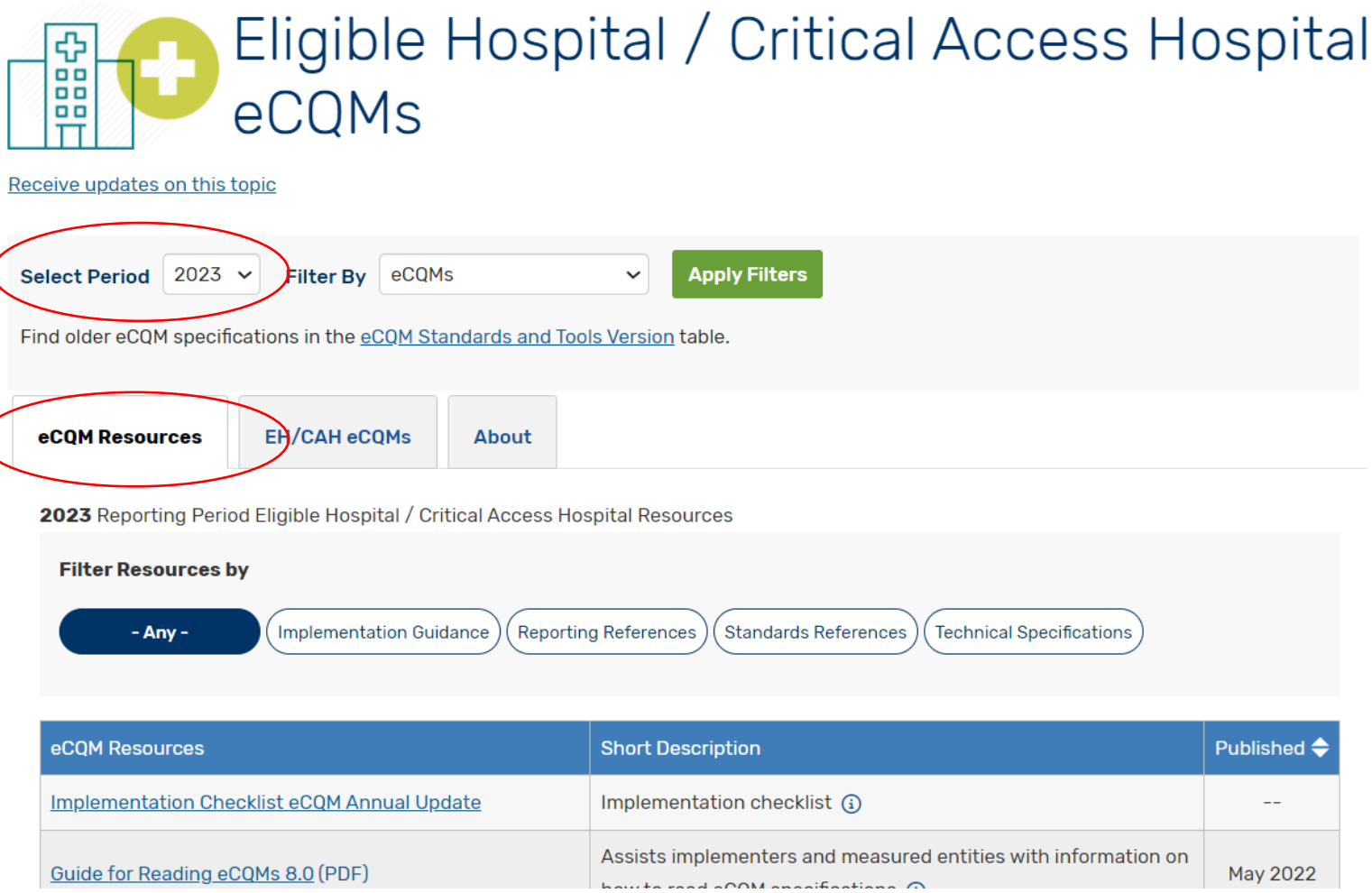
- Aspirin 50 to 325 mg daily, clopidogrel 75 mg, or aspirin 25 mg / extended-release dipyridamole 200 mg twice daily are commonly prescribed medications for secondary stroke prevention.
- Dual antiplatelet therapy or concurrent administration of more than one antithrombotic medication is generally not recommended.
- Short-term combination treatment with ticagrelor and aspirin may be indicated for select patients (THALES trial, 2020).

STK-2 Measure Changes

Measure Components	2023 Reporting Year	2024 Reporting Year
Denominator Exceptions Logic	"Encounter with No Antithrombotic At Discharge" renamed to ….	"Encounter with Documented Reason for No Antithrombotic At Discharge"
Numerator Logic	"Antithrombotic Therapy at Discharge" definition replaced with….	Inline reference to QDM datatype "Medication, Discharge'"
Global Value Sets	-	Special characters in value set titles were removed (i.e.-)
Global Value Set	"Antithrombotic Therapy"	"Antithrombotic Therapy for Ischemic Stroke"
Global Value Set	"Medical Reason" value set renamed to ….	"Medical Reason For Not Providing Treatment"

Navigation to the Measure Flow Diagrams

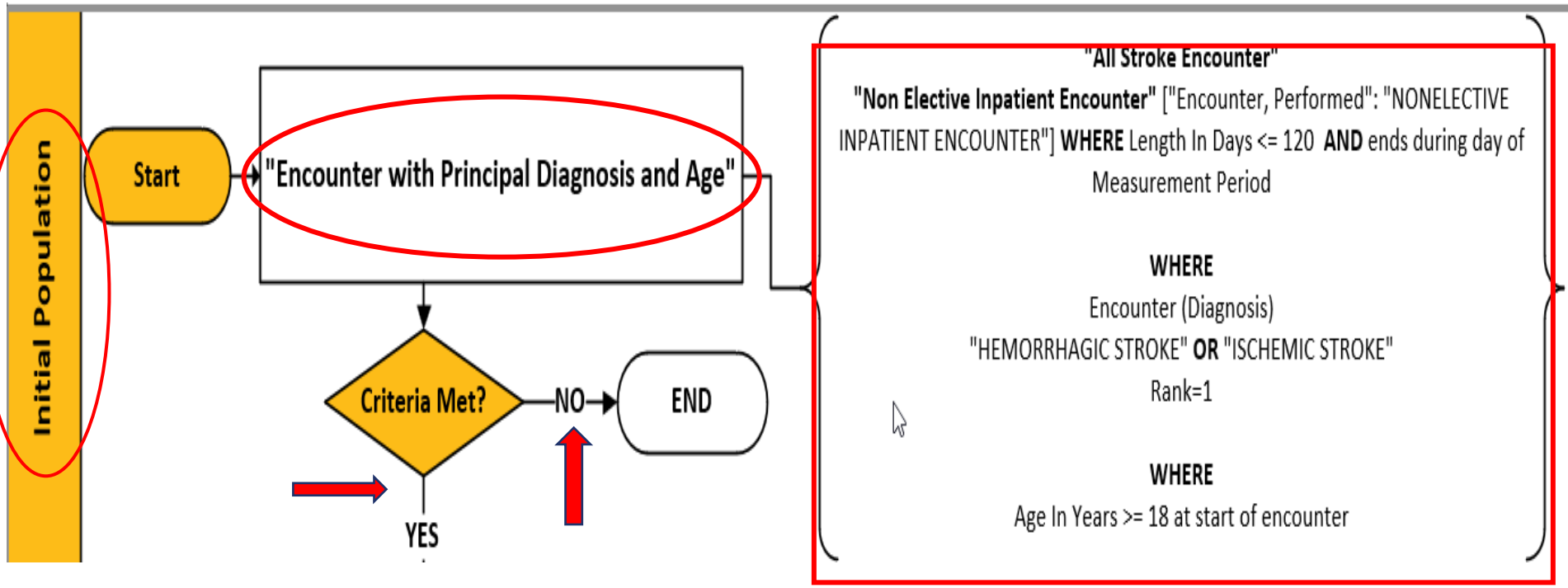
Navigation to the Measure Flow Diagrams (cont. 2)



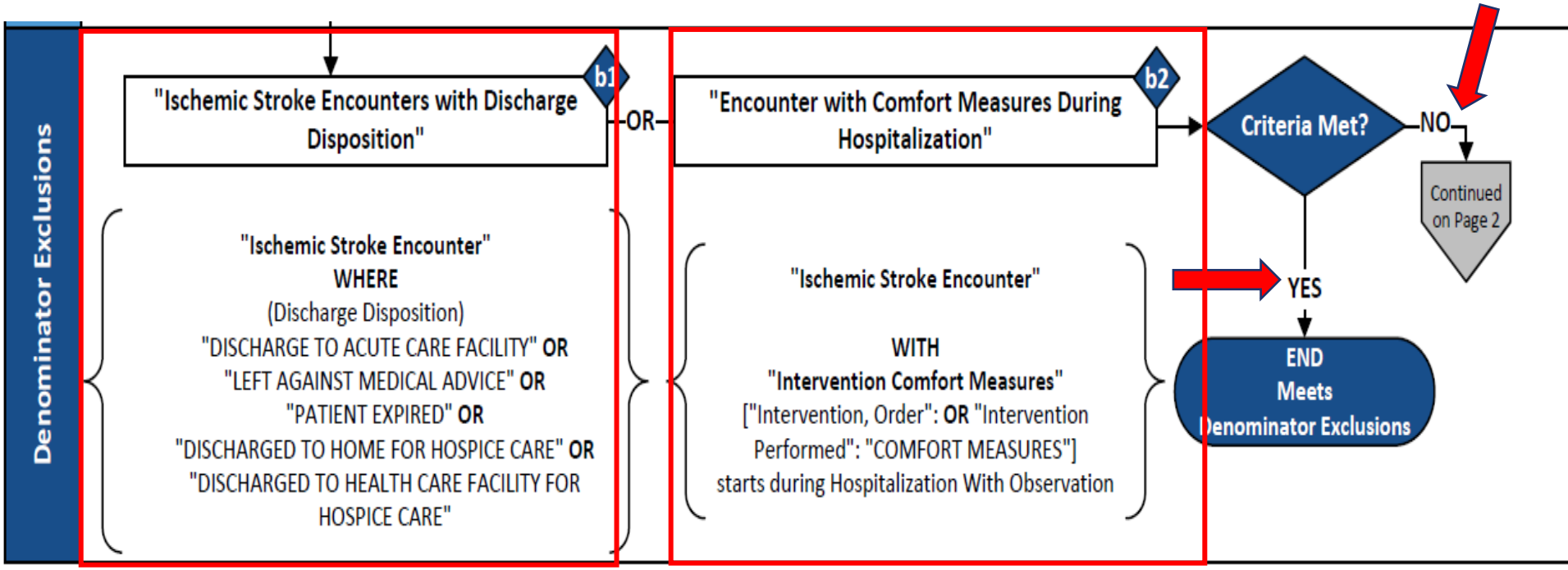
Navigation to the Measure Flow Diagrams (cont. 3)

eCQM Resources	Short Description	Published
Implementation Checklist eCQM Annual Update	Implementation checklist	--
Guide for Reading eCQMs 8.0 (PDF)	Assists implementers and measured entities with information on how to read eCQM specifications	May 2022
Hospital Quality Reporting Table of eCQMs (PDF)	List of eCQMs available for use	Sep 2022
eCQM Specifications for Hospital Quality Reporting (ZIP)	eCQM technical specifications	Nov 2022
Measure Authoring Tool (MAT) Global Common Library (GCL) Technical Specifications and Technical Release Notes (ZIP)	MAT-CGL specifications and technical release notes	May 2022
eCQM and Hybrid Measure Value Sets	Value sets used with eCQMs and Hybrid Measures	May 2022
EH/CAH Value Sets CMS334 (ZIP)	Value sets used in CMS334v4	Apr 2023
eCQM Direct Reference Codes Lis	eCQM Direct Reference Codes used in eCQMs	May 2022
Binding Parameter Specificatio (ZIP)	Value set metadata	May 2022
eCQM Logic and Implementa idance v6.0 (PDF)	Assists implementers and measured entities with how to use eCQMs and report issues	May 2022
Technical Release Notes	Year over year changes to eCQM logic and terminology	May 2022
Technical Release Not	Year over year changes to eCQM logic and terminology	May 2022
Standards and s used for reporting period	Tools and standards versions measure developers used to create eCQMs and versions of standards and tools used for their reporting	May 2022
eCQM Flows (ZIP)	Assists implementers and measured entities with steps to take to calculate an eCQM	Oct 2022
2023 CMS QRDA I Implementation Guide for Hospital Quality Reporting (PDF)	Format for reporting eCQMs to CMS	Mar 2023
2023 CMS QRDA I Schematrons and Sample Files (ZIP)	Rules to validate eCQM reports with samples	Mar 2023
eCQM Annual Update Pre-Publication Document (PDF)	Standards and code system versions for the eCQM Annual Update	Mar 2022

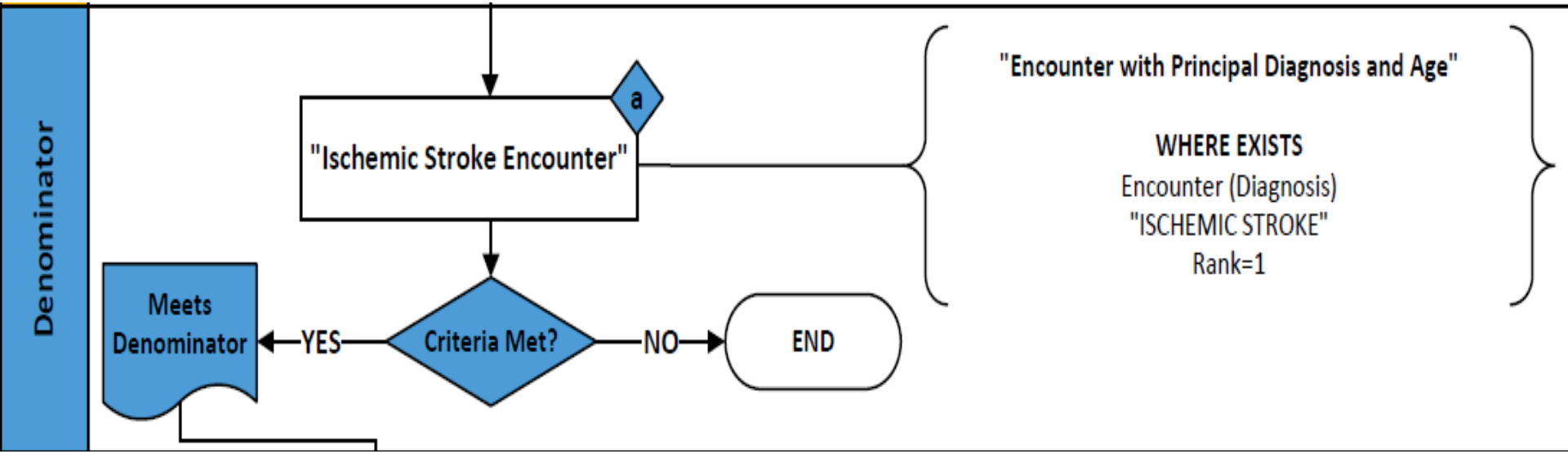
Measure Flow Diagram – STK-2



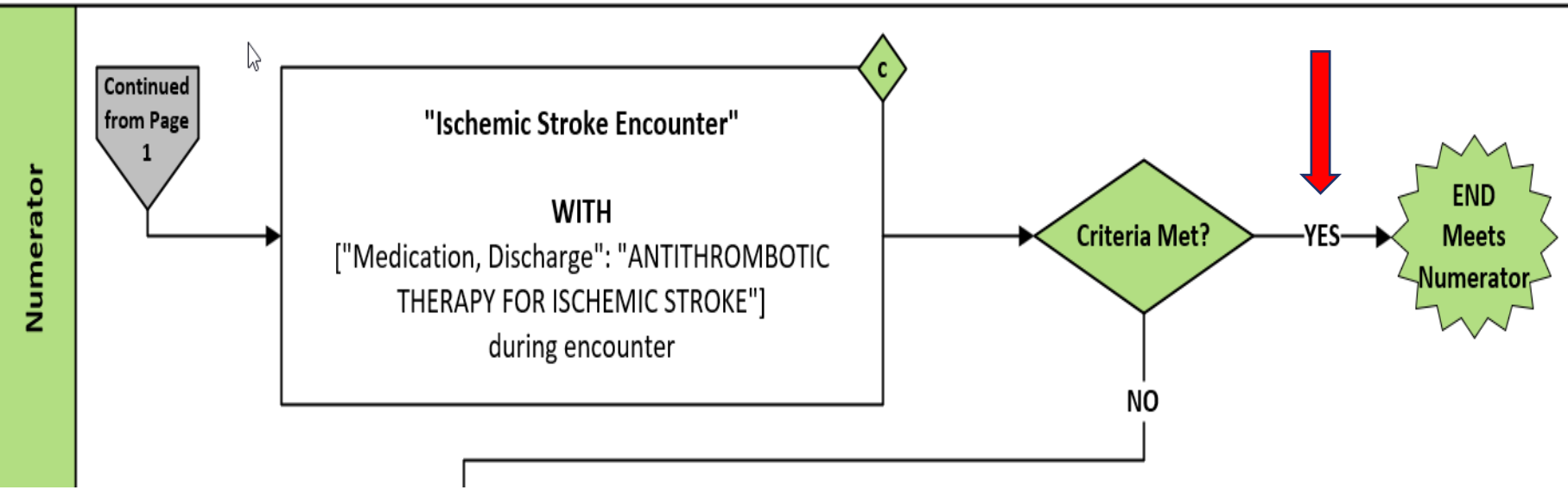
Measure Flow Diagram – STK-2 (cont. 2)



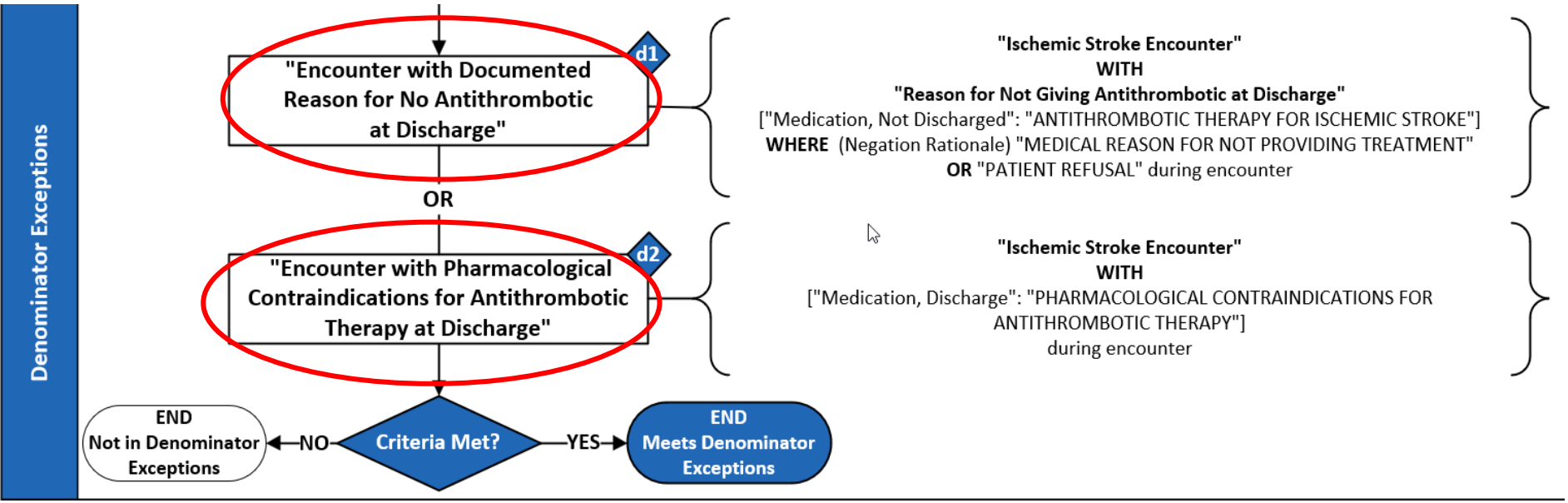
Measure Flow Diagram – STK-2 (cont. 3)



Measure Flow Diagram – STK-2 (cont. 4)



Measure Flow Diagram – STK-2 (cont. 5)



Sample Calculation

$$\text{Performance Rate} = \frac{\text{Numerator (c = 50)}}{\text{Denominator (a = 100)} - \text{Denominator Exclusions (b1 + b2 = 20)} - \text{Denominator Exceptions (d1 + d2 = 20)}} = 83\%$$

Numerator – STK-2

TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
with
~~**"Antithrombotic Therapy at Discharge"**~~
["Medication, Discharge": "Antithrombotic Therapy for Ischemic Stroke"] DischargeAntithrombotic
such that DischargeAntithrombotic.authorDatetime
during IschemicStrokeEncounter.relevantPeriod

~~**"Antithrombotic Therapy at Discharge"**~~
~~["Medication, Discharge": "Antithrombotic Therapy"]~~

Denominator Exceptions – STK-2

"Encounter with **Documented Reason for** No Antithrombotic At Discharge At Discharge“

union

"Encounter with Pharmacological Contraindications for Antithrombotic Therapy at Discharge"

Denominator Exceptions – STK-2 (cont. 2)

Encounter with Documented Reason for No Antithrombotic At Discharge"

TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
with "**Reason for Not Giving Antithrombotic at Discharge"**
NoDischargeAntithrombotic
such that NoDischargeAntithrombotic.authorDatetime
during IschemicStrokeEncounter.relevantPeriod

"Reason for Not Giving Antithrombotic at Discharge"
["Medication, Not Discharged": "Antithrombotic Therapy **for Ischemic Stroke**"]
NoAntithromboticDischarge
where NoAntithromboticDischarge.negationRationale in "Medical Reason **For Not Providing Treatment**"
or NoAntithromboticDischarge.negationRationale in "Patient Refusal"

Denominator Exceptions – STK-2 (cont. 3)

"Encounter with Pharmacological Contraindications for Antithrombotic Therapy at Discharge"

TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
with ["Medication, Discharge":
"Pharmacological Contraindications For Antithrombotic Therapy]
Pharmacological
such that Pharmacological.authorDatetime during
IschemicStrokeEncounter.relevantPeriod

Frequently Asked Question for STK-2

Question:

The discharge summary and discharge medication list include one aspirin 81 mg chewable tablet to be taken for 2 days after discharge, followed by apixaban 5 mg tablet twice daily starting on day 3 post discharge. Will this meet "Antithrombotic Therapy at Discharge", since aspirin was prescribed for only two days?

Answer:

Aspirin prescribed at discharge for 2 days will meet STK-2. Aspirin is in the "Antithrombotic Therapy" value set. As long as it is prescribed as a discharge medication and authored during the ischemic stroke encounter, it will be included in the Numerator.

STK-3 Anticoagulation Therapy for Atrial Fibrillation/Flutter CMS71

STK-3 Rationale
Anticoagulation Therapy for Atrial Fibrillation/Flutter

- Ischemic stroke patients with a current finding or history of atrial fibrillation or flutter are at increased risk of experiencing another stroke compared to ischemic stroke patients without these arrhythmias.
- The proportion of stroke attributable to AF increases significantly with age:
- ~1.5% of strokes in individuals 50-59 years of age and 23.5% in those 80-89 years of age.
- Anticoagulation therapy rather than antiplatelet therapy is recommended for these patients.

STK-3 Rationale (cont. 2)
Anticoagulation Therapy for Atrial Fibrillation/Flutter

- Direct oral anticoagulant medications should be considered before warfarin for most patients.
- Studies have demonstrated underuse of anticoagulation (Tsao, et al., 2022).
- In a GWTG-Stroke analysis of 1622 hospitals / 94,474 patients with AIS and known AF from 2012-2015 (Xian, et al., 2017):
- 39.9% were receiving antiplatelets only
- 30.3% were not receiving any anticoagulation or antithrombotic therapy

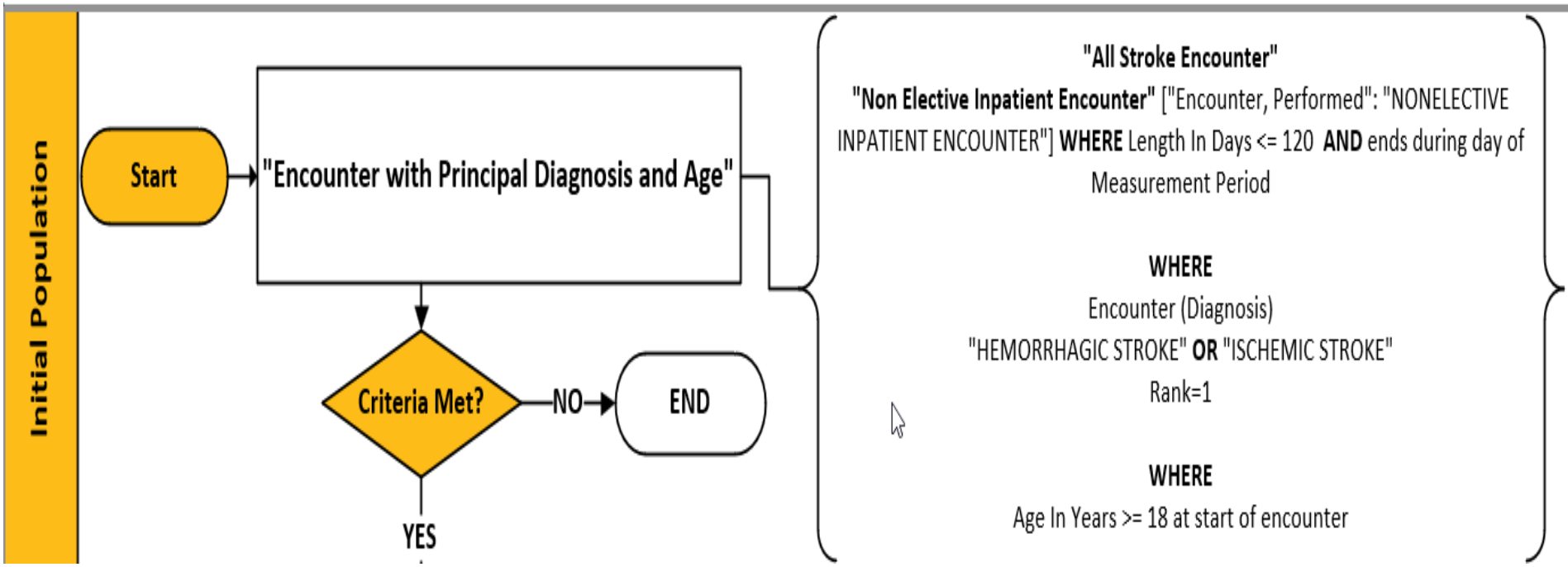
STK-3 Measure Changes

Measure Components	2023 Reporting Year	2024 Reporting Year
Denominator Logic	Separate Definitions • "Encounter with a history of Atrial Fibrillation or Flutter" • "Encounter with Current Diagnosis Code of Atrial Fibrillation or Flutter"	Combined and renamed the definitions to align with logic intent: "Encounter with Prior or Present Diagnosis of Atrial Fibrillation or Flutter"
Denominator Logic	History of Atrial Ablation did not address diagnoses, only procedures.	Added QDM datatypes "Assessment, Performed" and "Diagnosis" for new value set "History of Atrial Ablation"
Denominator Exceptions Logic	Definition "Reason for Not Giving Anticoagulant at Discharge" renamed to…	"Documented Reason for Not Giving Anticoagulant at Discharge"
Numerator Logic	"Anticoagulant Therapy at Discharge" definition replaced with ….	Inline reference to QDM datatype "Medication, Discharge'"

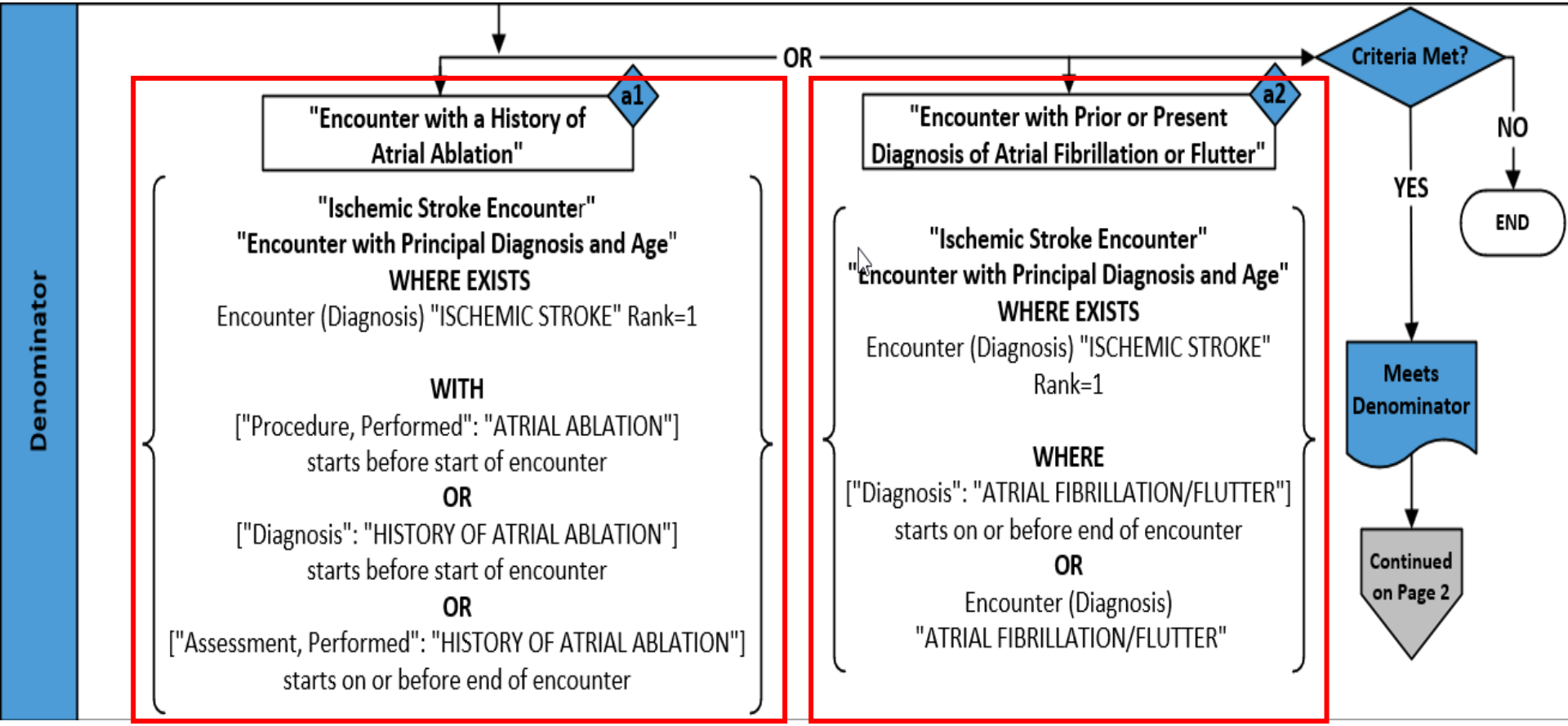
STK-3 Measure Changes – (cont. 2)

Measure Components	2023 Reporting Year	2024 Reporting Year
Global Value sets		Special characters in value set titles were removed (i.e.,-)
Global Value Set	Value set "Medical Reason" renamed to …	"Medical Reason For Not Providing Treatment"
Value Set		Atrial Fibrillation or Flutter: Added 2 snomed codes to include history of
Value Set		New value set to include history of procedure: History of Atrial Ablation

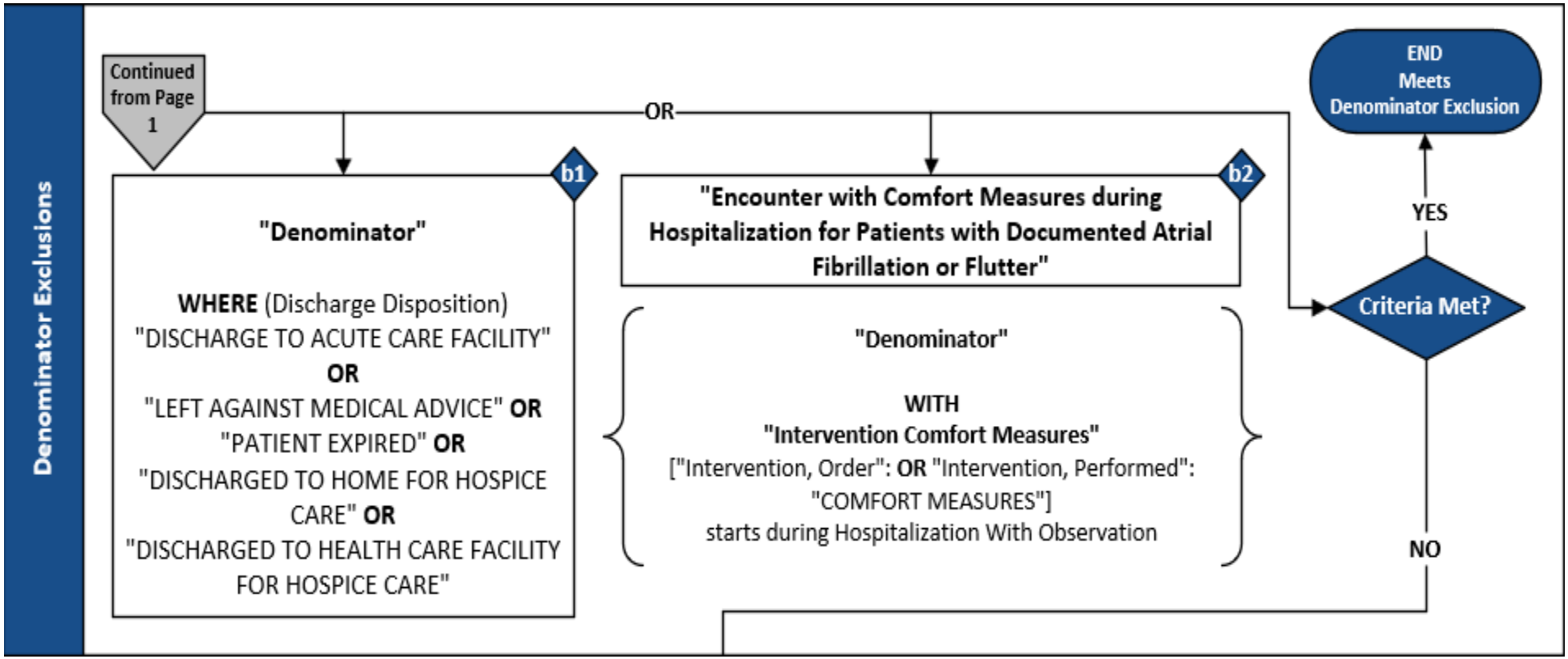
Measure Flow Diagram – STK-3 (cont. 2)



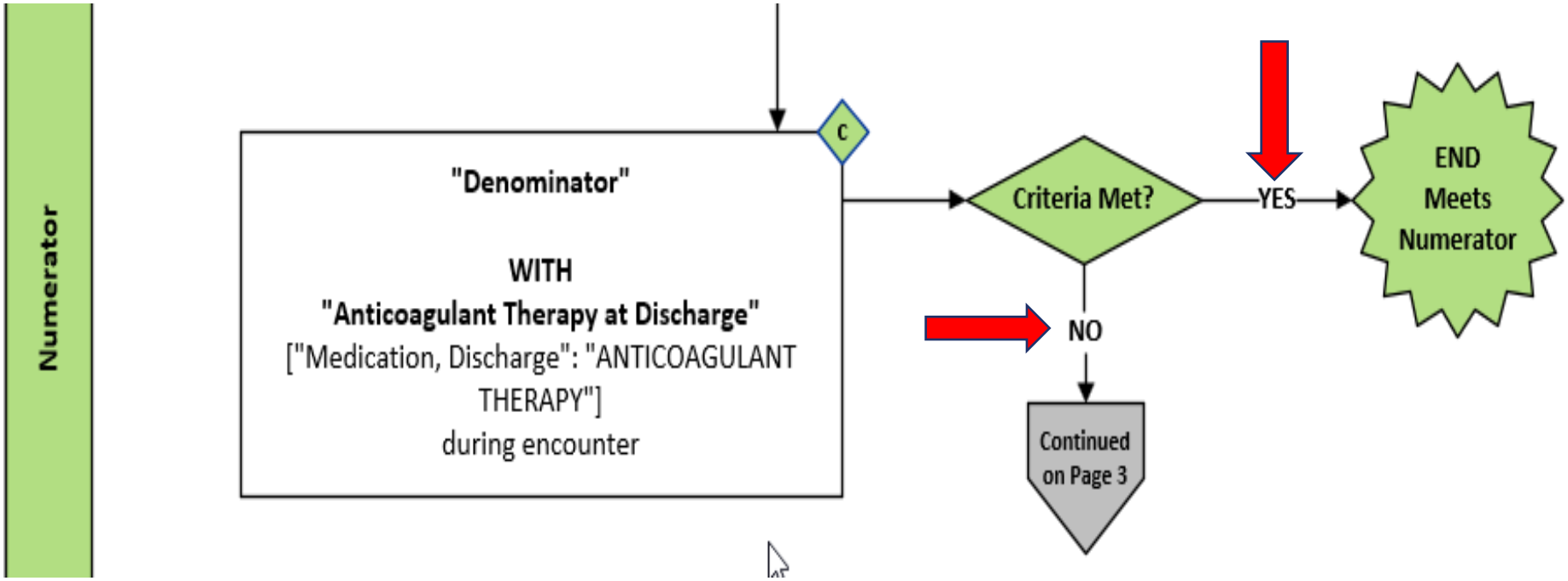
Measure Flow Diagram – STK-3 (cont. 3)



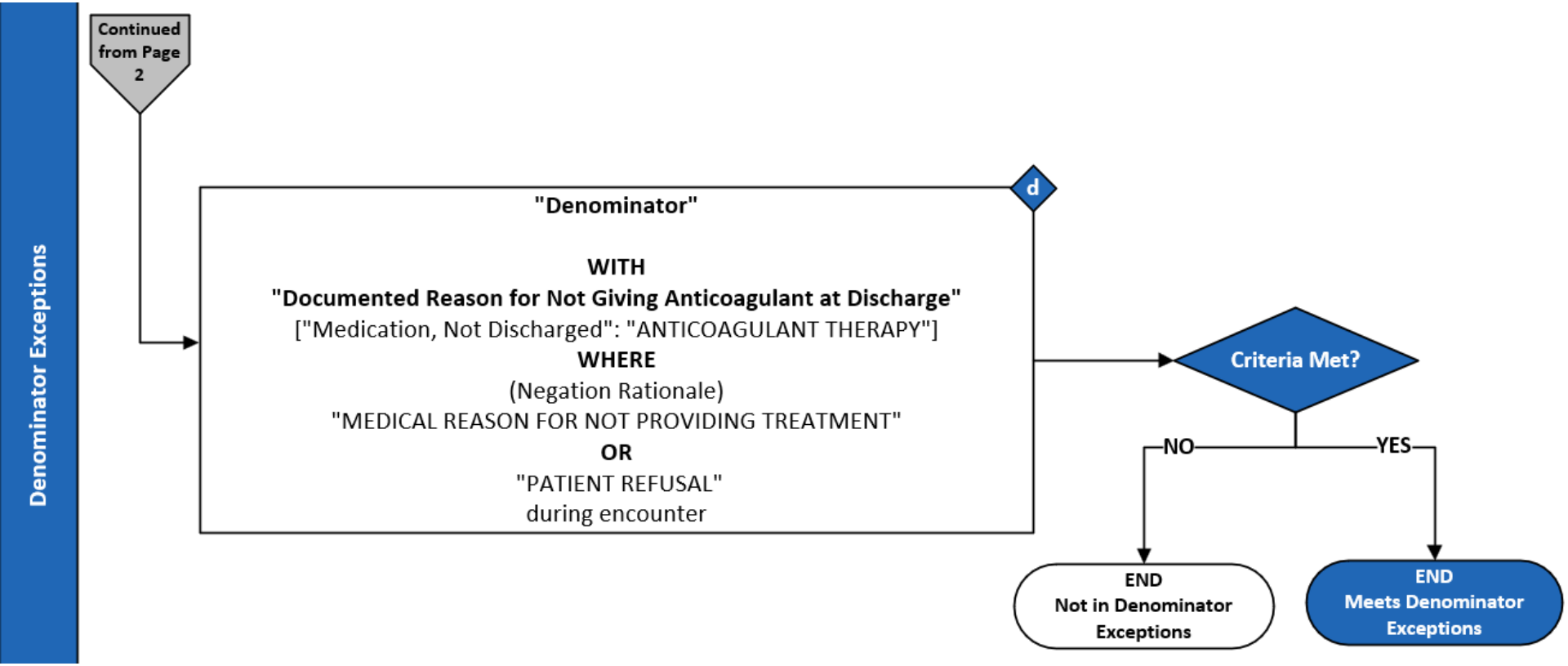
Measure Flow Diagram – STK-3 (cont. 4)



Measure Flow Diagram – STK-3 (cont. 5)



Measure Flow Diagram – STK-3 (cont. 6)



Sample Calculation

$$\text{Performance Rate} = \frac{\text{Numerator (c = 50)}}{\text{Denominator (a1 + a2 = 100)} - \text{Denominator Exclusions (b1 + b2 = 20)} - \text{Denominator Exceptions (d = 20)}} = 83\%$$

Denominator – STK-3

"Encounter with a History of Atrial Ablation ~~Procedure~~"

Union

~~"Encounter with a History of Atrial Fibrillation or Flutter"~~

union

"Encounter with Prior or Present ~~Current~~ Diagnosis ~~Code~~ of Atrial Fibrillation or Flutter"

Denominator – STK-3 (cont. 2)

" Encounter with a History of Atrial Ablation ~~Procedure~~ "

```
TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
  with ["Procedure, Performed": "Atrial Ablation"] AtrialAblationProcedure
    such that Global."NormalizeInterval"(AtrialAblationProcedure.relevantDatetime,
      AtrialAblationProcedure.relevantPeriod ) starts before start of
      IschemicStrokeEncounter.relevantPeriod
)
union ( TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
    with ["Diagnosis": "History of Atrial Ablation"] AtrialAblationDiagnosis
      such that AtrialAblationDiagnosis.prevalencePeriod starts before start of
      IschemicStrokeEncounter.relevantPeriod
)
union ( TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
   with ["Assessment, Performed": "History of Atrial Ablation"]
AtrialAblationAssessment
          such that Global."EarliestOf" (
               AtrialAblationAssessment.relevantDatetime,
               AtrialAblationAssessment.relevantPeriod ) on or before
                    end of IschemicStrokeEncounter.relevantPeriod
```

Denominator – STK-3 (cont. 3)

"Encounter with Prior or Present ~~Current~~ Diagnosis ~~Code~~ of Atrial Fibrillation or Flutter"

TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
with ["Diagnosis": "Atrial Fibrillation or Flutter"] AtrialFibrillationFlutter such that AtrialFibrillationFlutter.prevalencePeriod starts on or before end of IschemicStrokeEncounter.relevantPeriod)

union

(TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
where exists (IschemicStrokeEncounter.diagnoses Diagnosis
where (Diagnosis.code in "Atrial Fibrillation **or** Flutter")

Numerator – STK-3

"Denominator" Encounter
  with ~~“Anticoagulant Therapy at Discharge”~~
    ~~["Medication, Discharge": "Anticoagulant Therapy"]~~
    DischargeAnticoagulant
      such that DischargeAnticoagulant.authorDatetime
      during Encounter.relevantPeriod

~~“Anticoagulant Therapy at Discharge”~~
~~["Medication, Discharge": "Anticoagulant Therapy"]~~

Denominator Exceptions – STK-3

"Denominator" Encounter
with **"Documented Reason for Not Giving Anticoagulant at Discharge"**
NoDischargeAnticoagulant
such that NoDischargeAnticoagulant.authorDatetime
during Encounter.relevantPeriod

"Documented Reason for Not Giving Anticoagulant at Discharge"
["Medication, Not Discharged": "Anticoagulant Therapy"] NoAnticoagulant
where NoAnticoagulant.negationRationale in "Medical Reason **For Not Providing Treatment**"
or NoAnticoagulant.negationRationale in "Patient Refusal"

Frequently Asked Questions for STK-3

Question: STK 3

Would a patient with a history of atrial fibrillation and a left atrial appendage closure device be excluded? The patient was discharged on aspirin and clopidogrel.

Answer: Patients with a history of or current finding/diagnosis of atrial fibrillation/flutter (AF/F) are included in the measure. Some patients with AF/F may be eligible for a left atrial appendage (LAA) closure device or procedure to decrease the risk of developing cardiac emboli; however, anticoagulation therapy may be indicated prior to and after such procedures for select patients. Therefore, patients who undergo these procedures are not excluded from the measure, unless the procedure is linked with negation rationale for the patient refusal or medical reason value sets. While aspirin and clopidogrel are considered antiplatelet/antithrombotic medications, they are not classified as anticoagulant medications or included in the anticoagulant value set.

STK-5 Antithrombotic Therapy By End of Hospital Day 2
CMS72

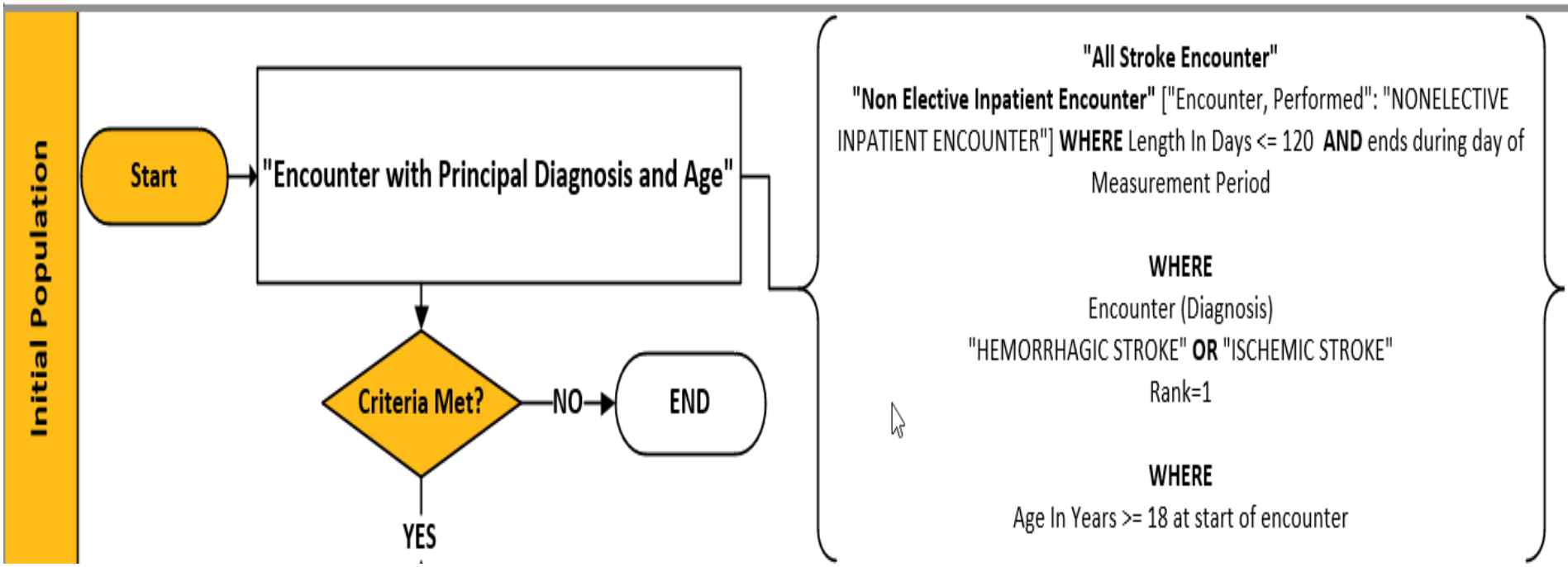
STK-5 Rationale
Antithrombotic Therapy By End of Hospital Day 2

- Aspirin administration is recommended within 24 to 48 hours of acute ischemic stroke onset.
- Aspirin slows the coagulation cascade, interrupting platelet aggregation and reducing the risk of blood clot formation.
- When IV alteplase treatment is administered, aspirin administration is generally delayed 24 hours to reduce bleeding risk.
- For patients unable to swallow or take aspirin by mouth, rectal or nasogastric administration is appropriate, (Powers, et al., 2018).

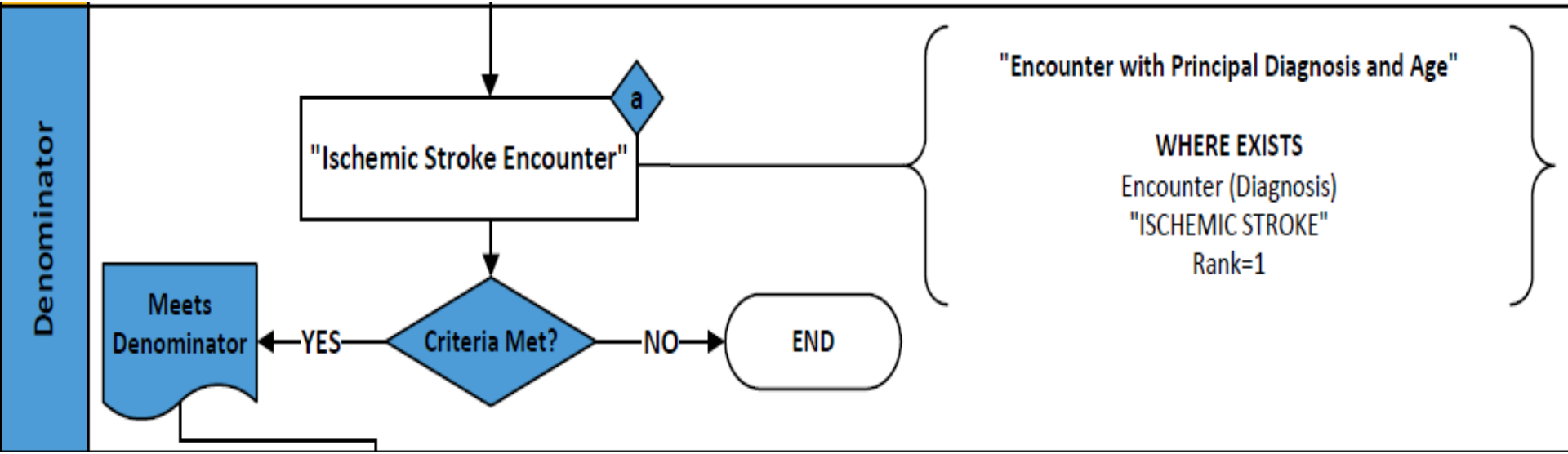
STK-5 Measure Changes

Measure Components	2023 Reporting Year	2024 Reporting Year
Denominator Exceptions	"No Antithrombotic Ordered or Administered Day Of or Day After Hospital Arrival" renamed to ….	"Encounter with Documented Reason for No Antithrombotic Ordered or Administered Day Of or Day After Hospital Arrival"
Denominator Exceptions	"No Antithrombotic Ordered or Administered'" renamed to…	"Documented Reason for No Antithrombotic Ordered or Administered"
Global Value sets	-	Special characters in value set titles were removed (i.e., parentheses)
Global Value Sets	Value Set "Antithrombotic Therapy" renamed to …	"Antithrombotic Therapy for Ischemic Stroke"
Global Value Set	Value set "Medical Reason" renamed to …	"Medical Reason For Not Providing Treatment"

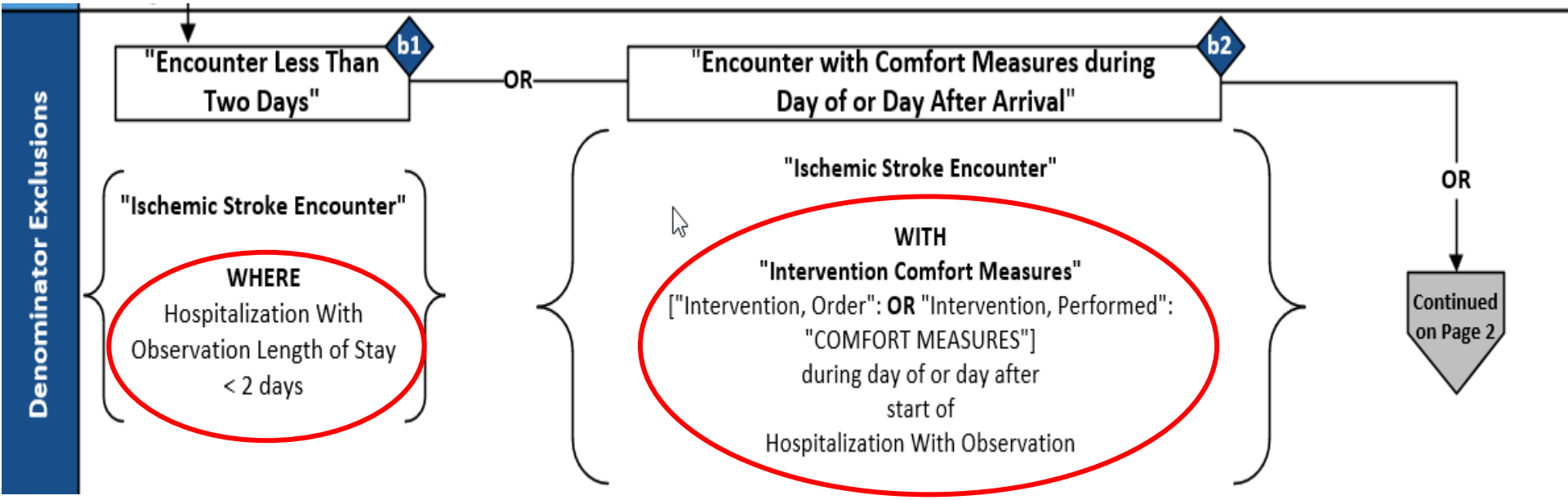
Measure Flow Diagram – STK-5



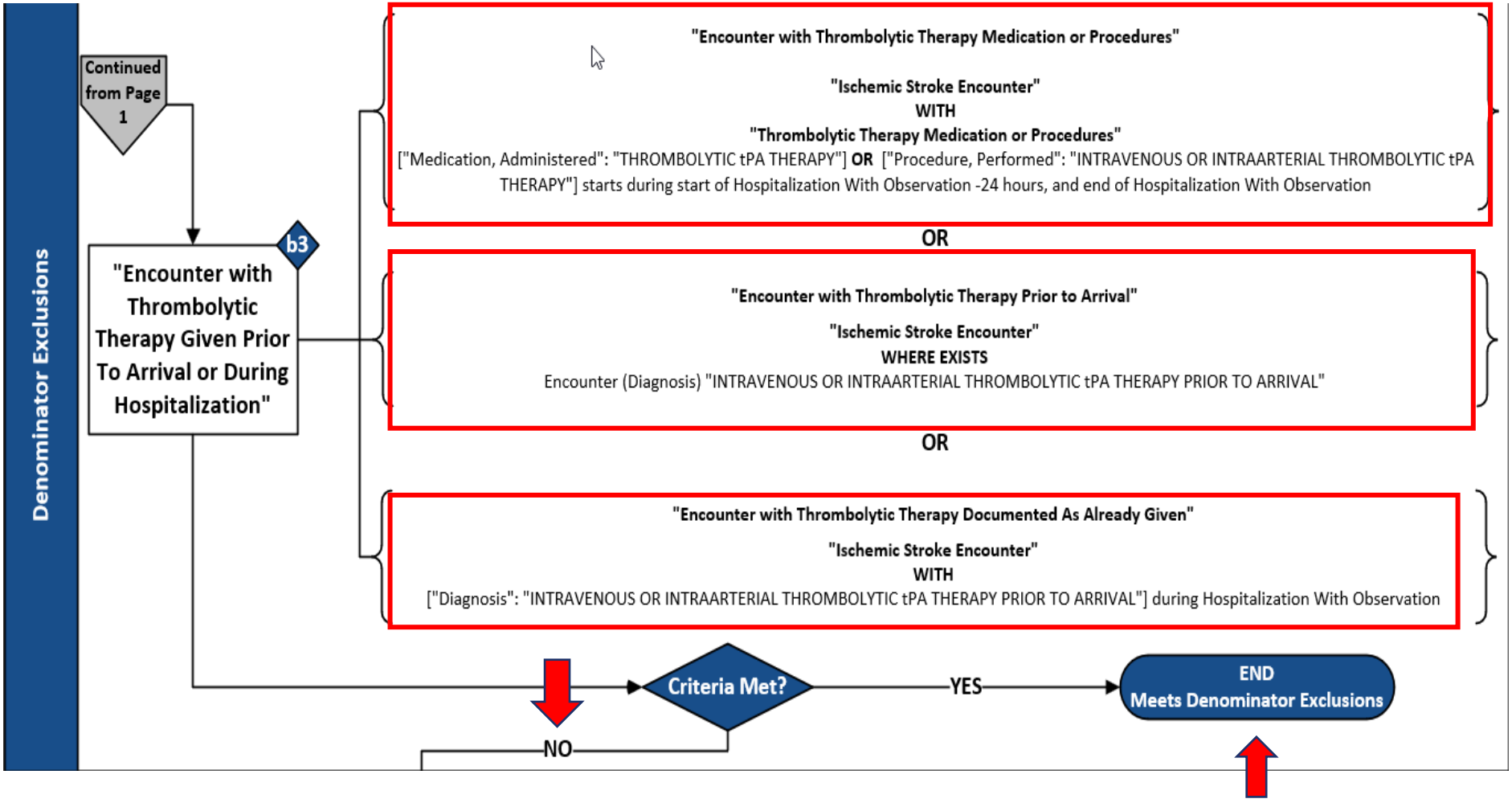
Measure Flow Diagram – STK-5 (cont. 2)



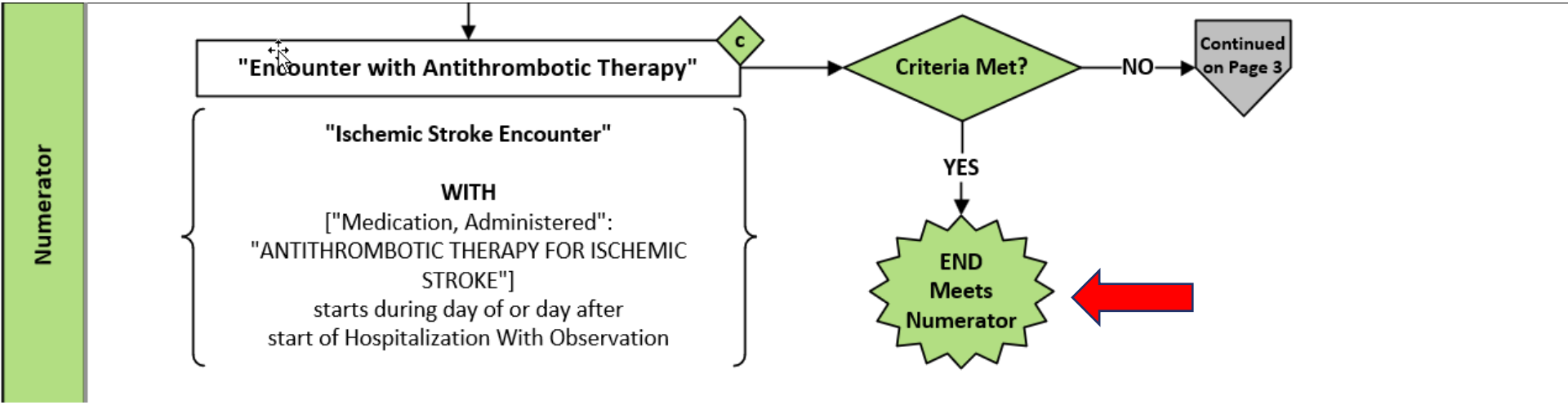
Measure Flow Diagram – STK-5 (cont. 3)



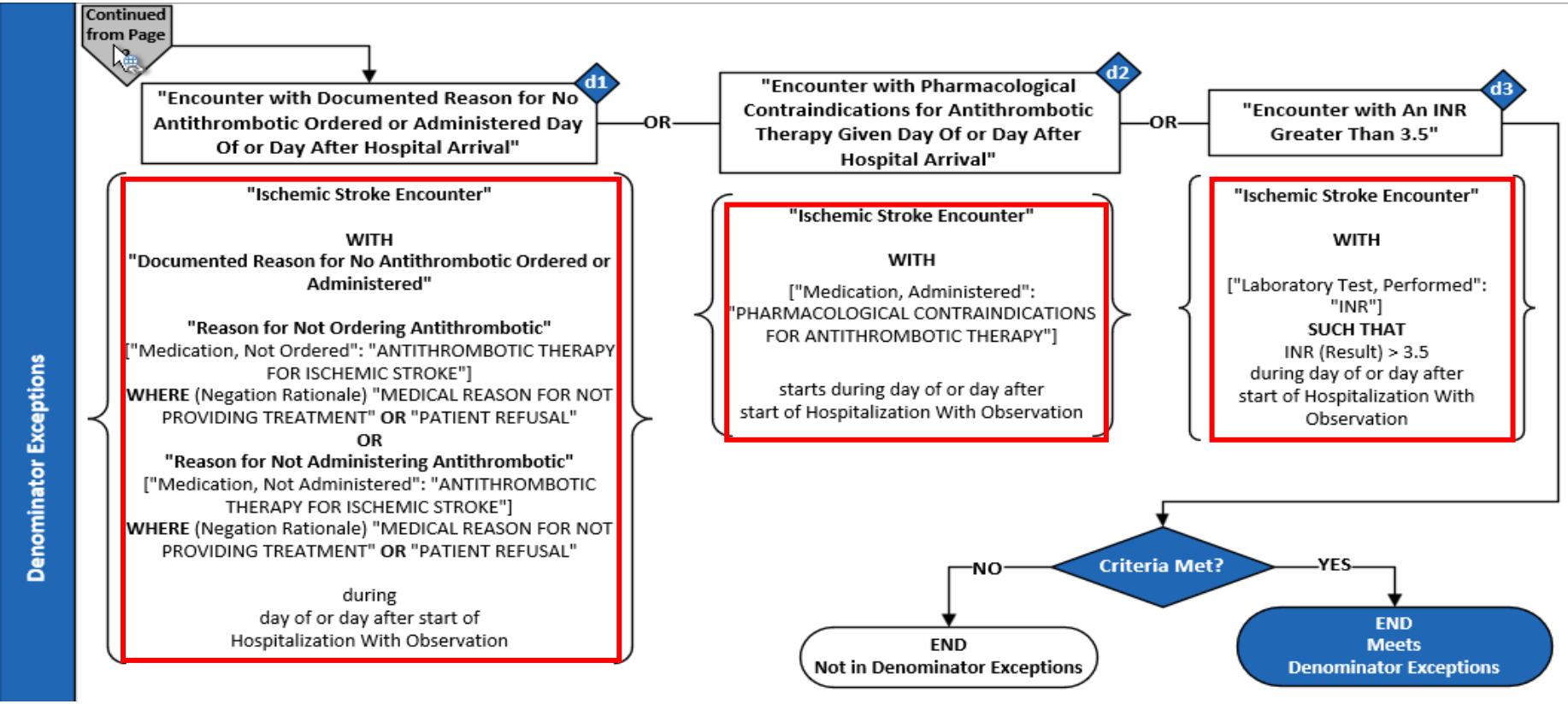
Measure Flow Diagram – STK-5 (cont. 4)



Measure Flow Diagram – STK-5 (cont. 5)



Measure Flow Diagram – STK-5 (cont. 6)



Sample Calculation

$$\text{Performance Rate} = \frac{\text{Numerator (c = 50)}}{\text{Denominator (a = 100) - Denominator Exclusions (b1 + b2 + b3 = 20) - Denominator Exceptions (d1 + d2 + d3 = 20)}} = 83\%$$

Denominator Exclusions – STK-5

"Encounter Less Than Two Days“

union

"Encounter with Comfort Measures during Day of or Day After Arrival"

union

"Encounter with Thrombolytic Therapy Given Prior To Arrival Or During Hospitalization"

Denominator Exclusions – STK-5 (cont. 2)

"Encounter Less Than Two Days"

TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
where Global."HospitalizationWithObservationLengthofStay"
(IschemicStrokeEncounter) < 2

Denominator Exclusions – STK-5 (cont. 3)

"Encounter with Comfort Measures during Day of or Day After Arrival"

```
TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
    with TJC."Intervention Comfort Measures" ComfortMeasures
    such that Coalesce(start of Global."NormalizeInterval"(
                                        ComfortMeasures.relevantDatetime,
                                        ComfortMeasures.relevantPeriod),
                                        ComfortMeasures.authorDatetime)
    during day of TJC."CalendarDayOfOrDayAfter"
        (start of Global."HospitalizationWithObservation"
        (IschemicStrokeEncounter ) )


                TJC."Intervention Comfort Measures"
                ["Intervention, Order": "Comfort Measures"]
                  union ["Intervention, Performed": "Comfort Measures"]
```

Denominator Exclusions – STK-5 (cont. 4)

"Encounter with Thrombolytic Therapy Given Prior To Arrival Or During Hospitalization"

"Encounter with Thrombolytic Therapy Medication or Procedures"

union

"Encounter with Thrombolytic Therapy Prior to Arrival"

union

"Encounter with Thrombolytic Therapy Documented As Already Given"

Denominator Exclusions – STK-5 (cont. 5)

"Encounter with Thrombolytic Therapy Medication or Procedures"

```
TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
    with "Thrombolytic Therapy Medication or Procedures“ ThrombolyticTherapy
        such that Global."NormalizeInterval“(ThrombolyticTherapy.relevantDatetime,
                                                ThrombolyticTherapy.relevantPeriod )
        starts during Interval [start of Global."HospitalizationWithObservation"
            ( IschemicStrokeEncounter ) - 24 hours,
        end of  Global."HospitalizationWithObservation“(IschemicStrokeEncounter ) )
```

"Thrombolytic Therapy Medication or Procedures"

["Medication, Administered": "Thrombolytic ~~(t-PA)~~ tPA Therapy"]
union
["Procedure, Performed": "Intravenous or Intra-arterial Thrombolytic ~~(t-PA)~~ tPA Therapy"]

Denominator Exclusions – STK-5 (cont. 6)

"Encounter with Thrombolytic Therapy Prior to Arrival"

TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
where exists IschemicStrokeEncounter.diagnoses Diagnosis
where Diagnosis.code in "Intravenous or Intra arterial Thrombolytic ~~(~~tPA~~)~~ Therapy Prior to Arrival"

Denominator Exclusions – STK-5 (cont. 7)

"Encounter with Thrombolytic Therapy Documented As Already Given"

TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
with [Diagnosis: "Intravenous or Intra arterial Thrombolytic ~~(~~tPA~~)~~ Therapy Prior to Arrival"] PriorTPA
such that PriorTPA.authorDatetime during
Global."HospitalizationWithObservation"
(IschemicStrokeEncounter)

Numerator – STK-5

"Encounter with Antithrombotic Therapy"

```
TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
    with ["Medication, Administered": "Antithrombotic Therapy for Ischemic
    Stroke"] Antithrombotic
      such that Global."NormalizeInterval“(Antithrombotic.relevantDatetime,
    Antithrombotic.relevantPeriod ) starts during day of
    TJC."CalendarDayOfOrDayAfter" (start of
    Global."HospitalizationWithObservation" ( IschemicStrokeEncounter ) )
```

Denominator Exceptions – STK-5

"**Encounter with Documented Reason for** No Antithrombotic Ordered or Administered Day Of or Day After Hospital Arrival"

union

"Encounter with Pharmacological Contraindications for Antithrombotic Therapy Given Day Of or Day After Hospital Arrival"

Union

"Encounter with An INR Greater Than 3.5"

Denominator Exceptions – STK-5 (cont. 2)

"Encounter with Documented Reason for No Antithrombotic Ordered or Administered Day Of or Day After Hospital Arrival"

TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
with "Documented Reason for No Antithrombotic Ordered or Administered"
NoAntithrombotic
such that NoAntithrombotic.authorDatetime during day of
TJC."CalendarDayOfOrDayAfter" (start of
Global."HospitalizationWithObservation" (IschemicStrokeEncounter))

"Documented Reason for No Antithrombotic Ordered or Administered"
"Reason for Not Ordering Antithrombotic"
union "Reason for Not Administering Antithrombotic"

Denominator Exceptions – STK-5 (cont. 3)

"Reason for Not Ordering Antithrombotic"

["Medication, Not Ordered": "Antithrombotic Therapy for Ischemic Stroke"]
NoAntithromboticOrder
where NoAntithromboticOrder.negationRationale in "Medical Reason For Not Providing Treatment"
or NoAntithromboticOrder.negationRationale in "Patient Refusal"

"Reason for Not Administering Antithrombotic"

["Medication, Not Administered": "Antithrombotic Therapy for Ischemic Stroke"]
NoAntithromboticGiven
where NoAntithromboticGiven.negationRationale in "Medical Reason For Not Providing Treatment"
or NoAntithromboticGiven.negationRationale in "Patient Refusal"

Denominator Exceptions – STK-5 (cont. 4)

"Encounter with Pharmacological Contraindications for Antithrombotic Therapy Given Day Of or Day After Hospital Arrival"

```
TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
  with ["Medication, Administered":
        "Pharmacological Contraindications For Antithrombotic Therapy"]
                                                PharmacologicalContraindications
  such that Global."NormalizeInterval"
                        (PharmacologicalContraindications.relevantDatetime,
                         PharmacologicalContraindications.relevantPeriod )
  starts during day of TJC."CalendarDayOfOrDayAfter"
                        (start of Global."HospitalizationWithObservation"
                                                (IschemicStrokeEncounter ) )
```

Denominator Exceptions – STK-5 (cont. 5)

"Encounter with An INR Greater Than 3.5"

```
TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
    with ["Laboratory Test, Performed": "INR"] INR
      such that INR.resultDatetime during day of
      TJC."CalendarDayOfOrDayAfter" (start of
      Global."HospitalizationWithObservation" (IschemicStrokeEncounter ) )
          and INR.result > 3.5
```

Frequently Asked Questions for STK-5

Question: STK-5

Therapeutic enoxaparin was administered on the day after hospital arrival. Will a therapeutic dose of enoxaparin on Day 2 meet Antithrombotic Therapy Administered By End of Hospital Day 2?

Answer:

Enoxaparin is in the "Antithrombotic Therapy" value set and the code can be mapped to one of the RxNorm codes there. Also, the timing must meet the requirement of the day of or day after the start of the hospitalization. So, enoxaparin will meet STK-5 measure requirements.

However, enoxaparin at lower dosages used for VTE prophylaxis are not sufficient for early antithrombotic therapy. Stroke patients should receive BOTH antithrombotic therapy (usually aspirin) and VTE prophylaxis (usually enoxaparin 40 mg SQ).

Additional Resources

eCQI Resource Center – EH Measures:
https://ecqi.healthit.gov/eligible-hospital/critical-access-hospital-ecqms

Teach Me Clinical Quality Language (CQL) Video Series
https://ecqi.healthit.gov/cql?qt-tabs_cql=2

- Coalesce
- Normalize Interval
- Time Zone Considerations
- Latest, LatestOf, Earliest, EarliestOf, HasStart, HasEnd

Pioneers In Quality
https://www.jointcommission.org/measurement/pioneers-in-quality/

Expert to Expert
https://www.jointcommission.org/measurement/quality-measurement-webinars-and-videos/expert-to-expert-webinars/

ONC Issue Tracking System
https://oncprojectracking.healthit.gov/

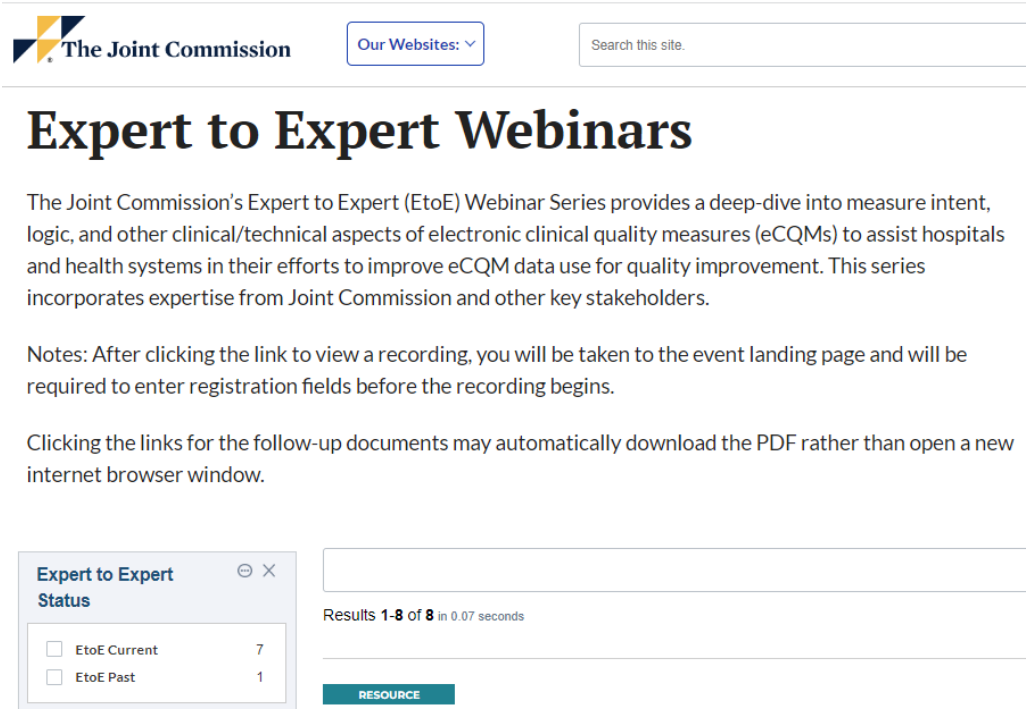
Live Q&A Segment

- Please submit questions via the question pane
- Click the Question mark icon in the audience toolbar
- A panel will open for you to type and submit your question
- Include slide reference number when possible
- All questions not answered verbally during the live event will be addressed in a written follow-up Q&A document
- The follow-up document will be posted to the Joint Commission website several weeks after the live event

Webinar recording

All Expert to Expert webinar recording links, slides, transcripts, and Q&A documents can be accessed within several weeks of the live event on the Joint Commission's webpage via this link:

https://www.jointcommission.org/measurement/quality-measurement-webinars-and-videos/expert-to-expert-webinars/



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Acronyms

AHA	American Heart Association
CY	Calendar Year
eCQM	Electronic Clinical Quality Measure
ED	Emergency Department
EHR	Electronic Health Record
FY	Fiscal Year
GWTG	Get With the Guidelines
HIQR	Hospital Inpatient Quality Reporting
ICD10	International Classification of Diseases, Tenth Revision
IPP	Initial Patient Population
HIQR	Hospital Inpatient Quality Reporting
ORYX	The Joint Commission's ORYX initiative integrates performance measurement data into the accreditation process.
RXNORM	Drug terminology authored by National Library of Medicine
SME	Subject Matter Expert
STK	Stroke
SNOMED CT	Systematized Nomenclature of Medicine - Clinical Terms
VSAC	Value Set Authority Center

Pioneers in Quality Expert to Expert Series 2023 Annual Update Webinar for STK-2, STK-3, and STK-5

Broadcast date: October 31, 2023

00:00:05

Welcome, everyone, and thank you for joining us today for our Expert to Expert Series Webinar - 2024 Annual Updates for Stroke eCQMs.

00:00:15

Before we start, just a few comments about today's webinar platform. Audio is by Voice Over Internet Protocol only. Click the button that reads listen in, click for audio, then use your computer, speakers, or headphones to listen. There are no dial in lines. Participants are connected in listen-only mode. Feedback or dropped audio are common for live streaming events. Refresh your screen or rejoin the event if this occurs. We will not be recognizing the raise of hand or the chat features. To ask a question, click on the Question Mark icon in the audience toolbar. A panel will open for you to type your question and submit. These slides are designed to follow Americans with Disability Act rules.

00:01:00

We would like to welcome you to our webinar. Before we get started, we do want to explain that this webinar is fairly technical in nature and requires a baseline understanding of eCQMs. Participant feedback from previous webinars indicated that the content may have been too technical for individuals that are new to eCQMs. If you are new to eCQMs, we recommend that you visit the eCQI Resource Center at the hyperlink listed on this slide. You will find a collection of resources to help you get started with eCQMs.

00:01:33

The slides are available now and can be found within the viewer toolbar. To access the slides, click the icon that looks like a document. Select the file name and the document will open in a new window. You can print or download and save the slides. Slides will also be available several weeks after the session at the link denoted on this slide.

00:01:55

CE credit is offered for this webinar. This webinar is approved for 1.5 Continuing Education credits for the entities listed on this slide. The Accreditation Council for Continuing Medical Education, American Nurses Credentialing Center, American College of Healthcare Executives, California Board of Registered Nursing, and the International Association for Continuing Education and Training.

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00:02:36

The Program Evaluation and Attestation Survey is accessible on the final slide via a QR code. You can scan with your mobile device and tomorrow an email will be sent to the address each participant used to register.

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For more information on The Joint Commission's continuing education policies, visit the link at the bottom of this slide.

00:03:32

The learning objectives for this session are: Navigate the measure specifications, Value Sets, measure flow diagrams and technical release notes. Apply concepts learned about the logic and intent for the Stroke eCQMs. Prepare to implement the Stroke eCQMs for the 2024 eCQM reporting period and identify common issues and questions regarding the Stroke eCQMs.

00:04:00

Topics that will not be covered today include: Basic eCQM concepts, topics related to chart abstracted measures, process improvement efforts related to this measure, and eCQM validation.

00:04:14

These staff and speakers have disclosed that they do not have any conflicts of interest, for example, financial arrangements, affiliations with or ownership of organizations that provide grants, consultancies, honoraria, travel, or other benefits that would impact the presentation of today's webinar content.

Sheila Aguilar, Raquel Belarmino, Melissa Breth, Susan Funk, Karen Kolbusz, and Susan Yendro.

00:04:44

The agenda for today's discussion follows: Demonstrate eCQI Resource Center navigation to the measure specifications, Value Sets, measure flow diagrams, and Technical Release Notes. Review the measure flow, and algorithm. Review changes made to the Stroke eCQMs. Review the Frequently Asked Questions. And there will be a facilitated audience Q&A segment.

00:05:11

Before we get started with our measures, we would like to highlight some of the resources available on the CMS eCQI Resource Center. The eCQI Resource Center provides a centralized location for news, information, tools, and standards related to eCQMs. The majority of the tools and resources referenced within the Resource eCQI Center are openly available for stakeholder use and provide a foundation for the development, testing, certification, implementation, reporting, and continuous evaluation of eCQMs. We will now share a demo that illustrates navigation to the eCQI Resource Center.

00:06:08

This video will demonstrate how to navigate the eCQI Resource Center website to locate the measure specifications, Value Sets and Technical Release Notes for all measures in the CMS program.

Here is a landing page for the eCQI Resource Center. Note the web address of eCQI.HealthIT.gov. Click on the orange horizontal rectangle for Eligible Hospital, Critical Access Hospital eCQM. Here you can select the Reporting Period that you are interested in. For the purposes of this demo, I will select 2024. Click Apply Filters and you will see multiple resources listed.

00:06:58

Click on the EH/CAH eCQM tab. Here you will see a list of the 12 eCQMs available for Eligible Hospital and Critical Access Hospitals. Let's select the caesarean birth. eCQM, which is also referred to as PC-02 for short or CMS334.

00:07:28

Here you will see all the measure information for this particular measure. We're going to click on the Specifications and Data Elements tab. Here you can find the HTML file, the Measure Package Zip file, and the Technical Release Notes for this measure. The Value Sets are also listed here. We will take a quick look at the HTML document, which is also referred to as the Human Readable, by clicking on the file name. The HTML file opens. This is where you find all details related to the measure. The top portion of the document highlighted in gray is referred to as the metadata or header information. Here you will find relevant data for the measure, including the Version Number of the measure, the Measure Steward, the Measure Developer, additional information like related to the rationale. The clinical recommendation statement.

And here you see all the references that were used when building the eCQM measure. Scrolling through all the references, you will find additional guidance for implementing the measure. And down at the bottom of the metadata, you will find definitions for each of the population criteria. Beyond the metadata, you will find the definitions for the population criteria. And then further down you will see the definitions that are used making up the logic. Continuing to scroll, you will see all the functions that are used by the measure. Then we get into the terminology.

00:09:23

Notice these first couple of lines are the direct reference codes that are used by the measure. And then the value sets are listed here. Then we get into the QDM data elements. The supplemental data elements. And if this is a risk adjusted measure, that information would be listed here.

00:09:47

This is your source of truth for all of the measured details. I went through this very quickly, but wanted you to be aware of how to locate this document and to have a basic understanding of its contents.

00:10:02

So back to the eCQI Resource Center. The next item is the zip file. Click on this link and then click to open the zip file. Here you will see all the files that make up the measure package. Note the first file is the HTML file we just looked at. I will not go into detail on all of these files, but if you want to know more, go to the get started with eCQM site on this eCQI Resource Center.

00:10:39

Next we look at the Technical Release Notes. By clicking on this link and opening up the Excel spreadsheet. Here is a nice, concise list of all of the changes to the measures for the 2024 reporting period. In the first column, you will see the details of the change listed here. The next column indicates the type of change. Did it impact the header, the logic, or the Value Set?

00:11:03

The next column is the specific section of the measure that was impacted. In this last column, you will see the source of change. Going back to the eCQI Resource Center website again, we can access the Value Sets by clicking the link under Value Sets. You are now taken to the Value Set Authority Center, also known as the VSAC. You will see all the Values Sets used for this eCQM. Please notice that you must be signed in to the Value Set Authority Center to see the details within each Value Set. I will log in to the VSAC now by clicking on Sign in, and then by clicking the Log in button. If I would like to see the details of the abnormal presentation Value Set. I click on the. And all of the codes making up that Value Set are displayed.

Please note that if you prefer to download the values sets, select all Value Sets by clicking in this box, and click download. This will return a zip file containing each Value Set in a separate Excel document.

If you prefer to have all of the Value Sets in one file, go back to the home page. Select the Eligible Hospital/Critical Access Hospital eCQM tab again. Select the Reporting Period that you're interested in. I'm going to stick with 2024. And click Apply Filters. On this page you will see eCQM and Hybrid Measure Value Sets as well as eCQM Direct Reference Code list. Let's look at the Value Sets. Open the most recent Reporting Year or whatever year you're interested in. I'm going to stick with 2024 and then click on the May 2023 release. You will see several available downloads. Choosing the first option, I will select data sorted by CMS ID in Excel format. Opening the downloaded Excel file. So open the Excel spreadsheet here. And here you will see all the tabs for all the different measures. Let's stick with CMS344. And here you see the CMS ID, NQF Number, Value Set name, and Value Set OID; for every code for every Value Set within the measure.

00:14:16

Scrolling over to column L. You will see the actual codes within each Value Set. The code description and the code system. Note that direct reference codes are not listed here, as they are not included in Value Sets. You will find information on direct reference codes in the measure specifications, or from the file on the eCQM resources tab that I just called out.

This concludes our eCQI Resource Center navigation demo.

Karen. Thanks everyone! We were able to share that demo with you. And now, Karen, when you're ready and the presentation is up, feel free to take it away.

Thank you Susan.

00:15:11

The Stroke measure set consists of three measures: STK-2 Discharged on Antithrombotic Therapy, STK-3 Anticoagulation Therapy for Atrial Fibrillation or Flutter, and STK-5Antithrombotic Therapy by End of Hospital Day 2.

00:15:32

STK-2 and STK-3, focus on medications that should be taken after discharge to prevent a second Stroke. These medications capture the percentage of Ischemic Stroke patients prescribed the appropriate medication at discharge. The Clinical Practice Guidelines for Secondary Stroke Prevention supporting these measures were updated in 2021. There is strong evidence for the recommendation supporting these three measures, with recommendations. Graded class one Level of Evidence A by the American Heart Association and American Stroke Association.

STK-5 is also supported by Class One Level of Evidence A recommendation. This measure captures the percentage of Ischemic Stroke patients who are administered Antithrombotic

Therapy on the day of, or the day after hospital Arrival, as recommended for the early treatment of Acute Ischemic Stroke.

2021 national averages for all hospitals. In the CMS dataset that reported 25 or more cases were 95.2% for STK-2, 71.6% for STK-3, and 91.2% for STK-5.

00:16:59

Now we will dive into the Stroke population definitions. This table shows a side-by-side comparison of all three Stroke measures and their corresponding population descriptions. We apologize for the small font, but we thought this might be a handy reference tool to compare the measures. The Stroke measures all use the same Initial Population. The table shows that the Denominator for STK-2 and STK-5 is the same. The Initial Population is narrowed down to Ischemic Stroke patients only, and the Hemorrhagic Stroke patients are dropped. The Denominator Exclusions for STK-2 and STK-3 are also the same. The Numerator and Denominator Exceptions are specific to each of the Stroke measures. Raquel, I'm going to turn it over to you.

Thank you Karen.

00:17:57

As Karen just shared, all the Stroke measures share the same Initial Population. STK-2 and 5 share the same Denominator and STK-2 and 3 share the same Denominator Exclusions. We will now review the common logic shared across the measures.

Logic changes for Reporting Year 2024 are highlighted in red and Value Sets are indicated in aqua blue.

00:18:24

Let's start with the Initial Population. The Initial Population for all Stroke measures consists of the definition Encounter with Principal Diagnosis and Age, and that definition is found in the TJC library. There was a removal of the parens in the AgeInYears logic.

Encounter with Principal Diagnosis in Age calls TJC Definition All Stroke Encounter to return all encounters with Principal Diagnosis code of either Hemorrhagic or Ischemic Stroke. On the next slide, we will look at the Non Elective Inpatient Encounter definition called by the All Stroke Encounter.

00:19:05

All Stroke Encounter calls TJC Non Elective Inpatient Encounter. Note the dash was removed from the Value Set title.

Non Elective Inpatient Encounter gathers all non-elective inpatient encounters. Please note that the Non-elective admission implicitly excludes patients with elective procedures, such as a carotid procedure. Whose length of stay is less than or equal to 120 days, and encounter ends during a day in the measurement period.

00:19:38

Now we will take a look at a Frequently Asked Question for the IPP. What is considered a non-elective inpatient encounter. Answer Non-elective encounters are captured using the Non Elective Inpatient Encounter Value Set. The Value Set intends to capture all non-scheduled hospitalizations. This Value Set is a subset of the inpatient encounter Value Set, excluding concepts that specifically refer to elective hospital admissions. Non-elective admissions include: Emergency, urgent, and unplanned admissions.

00:20:19

STK-2 and 5 share the same Denominator. Their Denominator uses the same definitions as the initial population, but requires only Principal Diagnosis of Ischemic Stroke.

In other words, the Initial Patient Population contains principal diagnoses of both Ischemic and Hemorrhagic Stroke, and the Denominator contains only the Principal Diagnosis of Ischemic Stroke.

00:20:46

STK-2 and 3 measures check for discharged medication and use the same Denominator Exclusion. The TJC library definition is Ischemic Stroke Encounters with Discharge Disposition or Encounter with Comfort Measures during Hospitalization are Denominator Exclusions and occur if either definition is true.

Let's take a closer look at the first library definition, TJC Ischemic Stroke Encounters with Discharge Disposition. An encounter is excluded from the Denominator if one of the following is true: The discharge disposition is to an Acute care facility, Left Against Medical Advice, Patient Expired, Discharge to Home for Hospice Care, or to a to a Health Care Facility for Hospice Care.

00:21:42

Now let's look at the second definition that qualifies for the Denominator Exclusion Encounter, TJC Encounter with Comfort Measures During Hospitalization. First selects encounters that have a principal diagnosis of Ischemic Stroke. Then it checks to see if there was a Comfort Measure Intervention. Let's take a look at the Intervention Comfort Measures definition. This gathers all comfort measure interventions ordered, or performed.

The coalesce logic looks complicated, but coalesce in global NormalizeInterval ensures that the available data is used in a consistent manner. First Global.NormalizeInterval looks for a relevant DateTime or a period and creates an interval from that. The start of the interval is then used by the coalesce function as well as the author date time. Note that the coalesce chooses the first, not null value that it finds. If global.NormalizeInterval returns a null because both relevant date time and period start were null, then coalesce would select author date time. Please see the resources slide at the end of the presentation for links to excellent video shorts on coalesce and NormalizeInterval functions.

Lastly, the comfort measure intervention timing must be during the Hospitalization. There were no changes to this logic. Now we will transition to presenting logic unique to the individual Stroke measures.

00:23:20

We will start with review of STK-2 Discharged on Antithrombotic Therapy. But first Karen will present the rationale for this measure.

Thank you. Raquel.

00:23:32

The STK-2 measure focuses on long term Antithrombotic Therapy. Multiple clinical studies have demonstrated that Antithrombotic medications help improve patient outcomes after an Ischemic Stroke by thinning the blood and reducing the possible clot formation that can result in another Stroke. Although both antiplatelet and anticoagulant medications are included in the Antithrombotic drug category, antiplatelet agents are preferred for Ischemic Stroke patients that do not have nonvalvular Atrial fibrillation.

00:24:13

Aspirin, clopidogrel, and aspirin/extended release Dipyridamole are frequently prescribed Antithrombotic medications for long term Antithrombotic Therapy. Dual antiplatelet therapy, for example, aspirin and clopidogrel are not generally recommended after an Ischemic Stroke. However, short term administration of Ticagrelor and aspirin may be appropriate for some patients. The THALES trial concluded that in patients with mild to moderate Acute non cardioembolic Ischemic Stroke, defined as a National Institute for Health Stroke scale score less than or equal to five who are not candidates for thrombolytic therapy or mechanical thrombectomy. The risk of Stroke or death within 30 days was lower, with Ticagrelor and Aspirin than aspirin alone. Severe bleeding was more frequent, though, with Ticagrelor. Ticagrelor alone without aspirin is not recommended. Back to you, Raquel.

Thanks, Karen.

00:25:22

Here is a table of the changes to STK-2 for 2024. First you see a Denominator Exception definition rename to be consistent with recommendations from clinical experts. Next, the Antithrombotic Therapy at Discharge definition was replaced with the in-line reference to QDM data type Medication Discharge in the Numerator definition to improve readability.

In addition to the terminology updates, there are additional global changes that includes updates to all Value Set titles to not include any special characters, for example hyphens or dashes. Value Set names to follow the recommended naming conventions. Antithrombotic Therapy is updated to enter Antithrombotic Therapy for Ischemic Stroke. Medical Reason is updated to Medical Reason for not providing treatment.

00:26:15

Next, we would like to share the measure flow diagram with you. The measure flow diagrams provide a high-level overview of the algorithm flows and can be found on the eCQI Resource Center. The measure specifications are the source of truth, but the measure flow diagrams can be helpful in understanding the main concepts. Navigate to the eCQI Resource Center at ecqi.HealthIT.gov and click on the Eligible Hospital Critical Access Hospital eCQM.

00:26:48

Next, select the Reporting Year Reporting Period you are interested in and click on the resources tab.

00:26:59

Now scroll down through the eCQM resources and click on the eCQM flows zip file. Once you open the zip file, you will see the measure flows for all measures in the CMS Hospital Inpatient Quality reporting (HIQR) program.

00:27:15

Let's review the STK-2 Measure Flow Diagram. Starting with the Initial Population encounter with Principal Diagnosis in age. On the right hand side of the diagram, you see definitions that are called and the logic expressed at a very high level. So, in order to be in the initial population, the patient must have a non-elective inpatient encounter with a Length of Stay less than or equal to 120 days, and the encounter ends during the measurement period. There must be a Principal Diagnosis of Hemorrhagic or Ischemic Stroke, as indicated with a rank of one. The patient must be 18 years or older. If Initial Population criteria is not met, processing ends there. If Initial Population is met, the encounter is an Initial Population.

00:28:08

The Denominator Exclusion is looking for an encounter with an Ischemic Stroke and a Discharge Disposition, meeting criteria or comfort measures during the hospitalization. If either of those criteria are met, the patient is excluded from the Denominator. If they are not met, processing continues to the Numerator.

00:28:32

Now we check the Denominator criteria. If the Principal Diagnosis is Ischemic Stroke as indicated by rank 1, then the patient encounter is in the Denominator population and processing continues to look for any Denominator Exclusion.

00:28:51

The Numerator. The Numerator looks to see if an Antithrombotic was prescribed at discharge. If it was the case. That will meet the Numerator if not processing continues to look for a Denominator Exception.

00:29:13

The Denominator Exception looks for a documented reason for not providing treatment or Patient Refusal for not prescribing an Antithrombotic, or if there is a pharmacological contraindication for not prescribing an Antithrombotic. If either of these Exceptions are met, the case meets the Denominator Exception and processing ends.

Then a sample calculation is provided to show how the performance rate is calculated. The Numerator is divided by the Denominator, less Denominator Exclusions. Less Denominator Exceptions. The letter values in the formula are indicated on the previous slides and represents the various populations.

00:30:00

Moving on to the details of the logic. Since we already reviewed the common logic across the Stroke measures, we will not cover the inpatient, the Initial Population, Denominator or Denominator Exclusions again. We will start with the review of the Numerator. The Numerator calls the Denominator, which is: Encounters with Principal Diagnosis of Ischemic Stroke. Then if Antithrombotic Therapy discharge medication was prescribed that is authored during the encounter, it passes the Numerator.

Note that we simplify the logic by calling the medication discharge data type directly instead of referring to a separate definition, which was eliminated as shown on the bottom of this slide.

00:30:50

If the Numerator does not pass, Denominator Exceptions are checked for STK-2. We can see that there are two definitions that could qualify an encounter for Denominator Exceptions. Encounters with Documented Reason for No Antithrombotic at Discharge and Encounters with Pharmacological Contraindications for Antithrombotic Therapy at Discharge. A definition name update was the only change made to the Denominator Exceptions.

00:31:18

Let's look at the first definition, Encounter with Documented Reason for No Antithrombotic at Discharge. This definition checks to see if there was a documented reason for not giving Antithrombotic Therapy. This documentation must be authored during the relevant period of the Ischemic encounter. The red highlighting shows that the definition name changed also in order to align with the definitions with similar functionality in the other Stroke measures.

The definition, Reason for not giving Antithrombotic at Discharge is called by the definition, and checks to see if the NegationRationale matches any of the Value Set codes in Medical Reason or Patient Refusal.

The definition name, as well as the Value Set names are the only changes indicated to the Denominator Exceptions.

00:32:16

The second definition that could qualify an encounter for STK-2 Denominator Exception is Encounter with Pharmacological Contraindications for Antithrombotic Therapy at Discharge. This definition checks to see if a discharged medication was authored during the Ischemic encounter that would contraindicate ordering one of the medications in the Antithrombotic Therapy Value Set.

A Frequently Asked Question: The discharge summary and discharge medication list include one Aspirin 81 milligram chewable tablet to be taken for two days after discharge, followed by Apixaban five milligram tablet twice daily starting on day three, post discharge. Will this meet Antithrombotic Therapy at discharge? Since aspirin was prescribed for only two days?

Answer: Aspirin prescribed at discharge for two days will meet STK-2. Aspirin is in the Antithrombotic Therapy Value Set, as long as it is prescribed as a discharge medication and offered during the Ischemic Stroke Encounter. It will be included in the Numerator.

Now we will review STK-3 Anticoagulation Therapy for Atrial Fibrillation and Flutter. I turn it back to you, Karen.

Thank you Raquel.

00:33:43

In Ischemic Stroke patients that have nonvalvular Atrial Fibrillation, Anticoagulation therapy is preferred over Antithrombotic Therapy. These patients are at significantly increased risk of Stroke due to an embolic event. Stroke risk for this group has been estimated to be five times higher. For this reason, more potent blood thinners are recommended for them.

Updated American Heart/American Stroke Association clinical guideline recommendations from Kleindorfer and colleagues last year now suggest that DOACs should be considered for most of these patients. Ischemic Stroke patients with moderate or severe mitral stenosis or mechanical heart valve would be an Exception. Although these medications are more costly than warfarin, they may be taken once or twice a day and do not require the routine INR monitoring and drug dosage adjustments needed with warfarin therapy. So, there may be advantages in terms of long-term patient compliance.

00:34:55

Several large clinical trials have demonstrated the safety and efficacy of DOACs. For example, the RE-LY trial, ROCKET-AF, Aristotle, and ENGAGE AFib TIMI trials. DOACs includes several different FDA approved medications, specifically Apixaban, Edoxaban, and Rivaroxaban, which are all Oral Factor Xa Inhibitors and one direct thrombin inhibitor dabigatran.

The updated clinical practice guidelines also recommend maintaining an INR between 2 and 3 if warfarin is selected for Anticoagulation therapy. This range is acceptable for most Ischemic Stroke patients with Atrial Fibrillation or Flutter. Patients with mitral stenosis or mechanical heart valve may require higher INR values greater than three. Back to you Raquel.

Thanks, Karen.

00:35:57

Here is a table of the changes to STK-3 measures for 2024 and include: Renaming the Denominator Exception definitions to be consistent with recommendations from clinical experts.

Two definitions were combined, Encounter with History of Atrial Fibrillation or Flutter and Encounter with Current Diagnosis Code of Atrial Fibrillation or Flutter, and renamed to: Encounter with Prior or Present Diagnosis of Atrial Fibrillation or Flutter, to align with logic intent.

The QDM data types, “Assessment, Performed” and “Diagnosis” were added to the new Value Set, "History of Atrial Ablation". To provide additional approaches for identifying patients with a history of Atrial Ablation to reduce burden. Anticoagulant Therapy at Discharge definition was replaced with the inline reference to QDM datatype 'Medication, Discharge’ in the Numerator definition to improve readability.

00:36:58

These are the Value Set changes for the STK-3 measures for 2024. In addition to the terminology updates, there are additional Global changes that include updates to: All value set titles to not include any special characters an example, hyphens or dashes. Value set names to follow the recommended naming conventions. Medical reason is updated to: Medical Reason For Not Providing Treatment for STK-2, 3, and 5.

STK-3 Value Set updates includes: Terminology added to Atrial Fibrillation Flutter to include two SNOMED codes to define History of Atrial Fib or Flutter. New Value Set added, History of Atrial Ablation to provide additional approaches for identifying history of Atrial Ablation.

00:37:52

Let's review the STK-3 Measure Flow Diagram. As mentioned previously, the Initial Population for STK-3 is the same across the measures, so I will not review this again in detail.

00:38:05

Now we check the Denominator criteria. The Denominator is checking for an Encounter with a History of Atrial Ablation and a Principal Diagnosis of Ischemic Stroke, or a Prior or Present Diagnosis of Atrial Fibrillation or Flutter in a Principal Diagnosis of Ischemic Stroke.

If the encounter meets either criteria, it is the Denominator it is in the Denominator population and processing continues to look for any Denominator Exclusions.

00:38:37

As we mentioned previously, the Denominator Exclusions for STK-3 is the same as STK-2. So, I will not review this again in detail.

00:38:48

The Numerator looks to see if an anticoagulant was prescribed at discharge. If an anticoagulant was prescribed, the case meets the Numerator. If not, processing continues to look for the Denominator Exception.

00:39:05

The Denominator Exceptions look for a documented reason of a Medical Reason for Not Providing Treatment, or a Patient Refusal for not prescribing an anticoagulant at discharge. If the Exception is met, the case meets the Denominator Exception and processing ends.

Then a sample calculation is provided to show how the performance rate is calculated. The Numerator is divided by the Denominator, less Denominator Exclusions, less Denominator Exceptions. The letter values in the formula are indicated on the previous slide and represent the various populations.

00:39:46

Moving on to the details of the logic. Since we already reviewed the common logic across the Stroke measures, we will not cover the IP or Denominator Exclusions. Again, we will start with the review of the Denominator.

The Denominator for STK-3 definitions were renamed and updated to include only two definitions that if either are true, the encounter is in the Denominator. The two definitions include: an Encounter with the History of Atrial Ablation and Prior or Present Diagnosis of Atrial Fibrillation or Flutter.

This change was made to improve readability. This change resulted in addition of a Value Set to the Denominator to provide additional approach to identify an Encounter with the History of Atrial Ablation procedure based on diagnosis codes.

Let's review the first definition of the Denominator: Encounter with a History of Atrial Ablation. It starts by calling TJC Ischemic Stroke Encounter and looks to see if there was an Atrial Ablation procedure that started before the Ischemic Stroke encounter. The new addition to the definition will also consider if there is a diagnosis indicative of a history of Atrial Ablation. Note the new Value Set here of History of Atrial Ablation. Or the logic looks at clinical documentation using the 'Assessment, Performed' data type noting a history of Atrial Ablation.

00:41:19

Let's look at the second definition called the Denominator Encounter with Prior or Present Diagnosis of Atrial Fibrillation or Flutter.

This definition calls in all TJC Ischemic Stroke Encounter and uses prevalence period to call for diagnosis of Atrial Fibrillation or Flutter prior to or during their current encounter. Or the definition will look for the Encounter Diagnosis of Atrial Fibrillation or Flutter using the 'Diagnosis' attribute on the 'Encounter' data type to capture patients with a current diagnosis of AFib or Flutter.

So essentially, the change here is that this one definition now looks for a prior or present diagnosis of AFib or Flutter.

00:42:07

Let's review for the logic, Numerator. The Numerator calls a Denominator with a data type "Medication, Discharge" to check if any of the discharge medications mapped to a code in the Anticoagulant Therapy Value Set. Then the authorDatetime is checked to make sure that it was authored during the encounter.relevantPeriod.

Note that we simplify the logic by calling the 'Medication, Discharge" data type directly, instead of referring to a separate definition, which was eliminated as shown on the bottom of the slide. The Denominator Exceptions for STK-3 check the Value Set Anticoagulant Therapy to verify that it was not prescribed on a discharge due to documentation of a Medical Reason For Not Providing Treatment or Patient Refusal that was authored during the encounter. Note the change to the definition name by adding 'documented' and the changed Value Set by adding 'or not providing treatment'.

00:43:09

Frequently Asked Question: "Would a patient with a history of Atrial fibrillation and a left Atrial appendage closure device be excluded? The patient was discharged on aspirin and clopidogrel."

Answer: Patients with a history of, or current finding, Diagnoses of AFib or Flutter are included in the measure. Some patients with AFib or Flutter may be eligible for a left Atrial appendage closure device or procedure to decrease the risk of developing cardiac emboli. However, Anticoagulation therapy may be indicated prior to and after such procedures for select patients. Therefore, patients who undergo these procedures are not excluded from the measure unless the procedure is linked with the NegationRationale for the Patient Refusal or medical reason Value sets. While aspirin and clopidogrel are considered antiplatelet/antithrombotic medications, they are not classified as anticoagulant medications or included in the Anticoagulant Value Set.

00:44:17

Finally, we will review STK-5 Antithrombotic Therapy by End of Hospital Day 2 and Karen will provide the rationale. Thanks, Raquel.

00:44:28

Early Antithrombotic Therapy is recommended to reduce morbidity and mortality following an Acute Ischemic Stroke event. Aspirin is the recommended drug. Two large clinical trials established the safety and benefit of aspirin administered within the first 48 hours of Stroke onset in doses between 160mg and 300mg. Aspirin is usually given orally, but may also be administered via a NG tube or rectal suppository for patients who are NPO or have difficulty swallowing. Limited data exist on the use of alternative antiplatelet agents in the treatment of Acute Ischemic Stroke. However, in patients with a contraindication to aspirin administration, administering alternative antiplatelet agents may be reasonable.

Aspirin is not recommended as a substitute treatment for Acute Ischemic Stroke in patients who are eligible for IV thrombolytic therapy. However, aspirin administration may be delayed up to 24 hours to reduce the risk of bleeding in patients who receive thrombolytic therapy. For this reason, patients who receive IV t-PA at the hospital or within 24 hours prior to hospital arrival are excluded from STK-5.

Raquel, back to you.

00:45:55

Thank you Karen. Here's a table of the changes to STK-5 measure and Value sets for 2024 and include: renaming the Denominator Exception definitions to be consistent with recommendations from clinical experts.

In addition to the terminology updates, there are additional Global changes that include updates to all Value Set titles to not include any special characters, an example, hyphen or parentheses. Value Set names to follow the recommended naming conventions, and the Value Set name changes which you have already seen in the previous measures.

00:46:30

Let's review the STK-5 measure flow diagram. As mentioned previously, the Initial Population for STK-5 is the same across the measures, so I will not review that again in detail.

00:46:42

As mentioned previously, the Denominator for STK-5 is the same as STK-2, so I will not review this again in detail.

00:46:52

The Denominator Exclusion is looking for an Encounter with Ischemic Stroke and the Length of Stay less than two days, or an Order for Comfort Measures on the day of or day after the start of hospitalization, and one more condition found on the next slide.

00:47:09

Thrombolytic therapy is given during the hospitalization or thrombolytic therapy is given prior to Arrival of the hospital or Thrombolytic therapy is documented as already given prior to Arrival at the hospital.

If either of these criteria are met, the patient is excluded from the Denominator. If they are not met, processing continues to the Numerator.

00:47:35

The Numerator looks to see if an Antithrombotic was given the day of, or the day after the start of the hospital encounter. If it was the case, the case will meet the Numerator. If not, processing continues to look for a Denominator Exception.

00:47:55

The Denominator Exceptions looks for an Occurrence on the Day of or Day After Hospitalization for Not Ordering or Administering an Antithrombotic with Documentation of a Medical Reason For Not Providing Treatment or Patient Refusal, or a former pharmacological contraindication to an Antithrombotic or an “INR result greater than 3.5”.

If either of these Exceptions are met, the case meets the Denominator Exception and processing ends. Then a sample calculation is provided to show how the performance rate is calculated. The Numerator is divided by the Denominator, less the Denominator Exclusions, less the Denominator Exceptions. The letter values in the formula are indicated on the previous slides and represents the various populations.

*Moving on to the details of the logic. Since we already reviewed the common logic across the Stroke measures, we will not cover the IP or Denominator again. We will start with the review of the Denominator. Exclusions.

Let's talk about the three Denominator Exclusions. The Denominator Exclusions call three definitions. And, if any are true, the encounter is in the Denominator Exclusions population. The three definitions are Encounter Less Than Two Days, Encounters with Comfort Measures, and Encounters with Thrombolytic Therapy Given Prior to Arrival or During Hospitalization.

00:49:32

The first definition is named Encounter Less Than Two Days. It is simply checks whether the hospitalization is less than two days long, using the 'HospitalizationWithObservationLengthOfStay' function. Recall that the HospitalizationWithObservation' function returns a total interval from the start of any immediately prior emergency department visit or observation to the discharge of the given encounter.

00:50:03

The second definition called by STK-5 Denominator Exclusion is named Encounter with Comfort Measures During Day of or Day After Arrival. It checks to see if there was an Intervention Ordered or Performed for Comfort Measures. This definition is very similar to the Denominator Exclusion for STK-2 and 3. However, for STK-2 and STK-3, the comfort measures intervention timing is any time during the hospitalization.

For STK-5, the comfort measure timing must be the day of or day after the hospitalization. There is a difference in STK-5 because this measure is looking for Antithrombotic by the End of a hospital day two. So, if comfort measures are in place within this time frame, the case will be excluded.

00:50:53

The third definition to qualify for STK-5 Denominator Exclusions is named Encounter with Thrombolytic Therapy Given Prior to Arrival or During Hospitalization. This is a nested definition that calls three sub criteria and will look at each of them. We see that the criterias are linked with 'union', which means the same thing as 'or'.

00:51:18

The first definition in Encounter with Thrombolytic Therapy Given Prior to Arrival or During Hospitalization is named Encounter with Thrombolytic Therapy, Medication or Procedures. It looks for Ischemic Stroke encounters with thrombolytic therapy, medications, or procedures. The definition named, Thrombolytic Therapy Medication or Procedures, checks Medication, Administered against the Thrombolytic t-PA Therapy Value Set, and checks Procedure Performed against the Intravenous or Intra Atrial Thrombolytic t-PA Therapy Value Set. Note the minor changes in value set names to align with naming conventions and these therapies. Timing must be during the 24 hours before the hospitalization through the end of the hospitalization.

00:52:10

The second definition, called by Encounter with Thrombolytic Therapy Given Prior to Arrival or During Hospitalization, is named Encounter with Thrombolytic Therapy Prior to Arrival. It checks the Ischemic Stroke Encounter diagnosis against the value set 'Intravenous or Intra Atrial Thrombolytic Therapy Prior to Arrival'. Note the slight change in this value set name with the removal of parentheses.

00:52:39

The third definition, called by Encounter with Thrombolytic Therapy Given Prior to Arrival or During Hospitalization, is named: Encounter with Thrombolytic Therapy Documented as Already Given.

It checks for Diagnosis of IV or IA t-PA prior to arrival. Again, note slight change in value set name and author during this hospitalization.

00:53:05

The STK-5 Numerator looks for Antithrombotic Therapy Medications administered the day of or day after the start of the hospitalization. "Day of" was added in order to restrict the comparison to the dates and not time or time zone offset. Note the change in the Antithrombotic Therapy for Ischemic Stroke Value Set name.

00:53:05

The Denominator Exceptions for STK-5 includes three definitions of encounter with "Documented Reason for No Antithrombotic Order or Administered Day of or Day After Hospital Arrival." This definition was renamed based on feedback received for better consistency with other measure definitions. Note the definition name change which was made for clarity purposes. "Pharmacological Contraindications for Antithrombotic Therapy Given Day of or Day After Hospital Arrival," or an "INR Greater Than 3.5." If the encounter does not pass the Numerator and any of these three definitions are true, then the encounter qualifies for the Denominator Exceptions.

00:54:15

The first definition of the Denominator Exception is "Encounter with Documented Reason for Antithrombotic, Ordered or Administered Day of or Day After Hospital Arrival". The logic checks for a reason for not ordering or not administering a Antithrombotic was authored on the day of, or day after the start of the hospitalization.

This definition calls Documented Reason for No Antithrombotic Ordered or Administered, and this definition was also renamed based on feedback received for a better consistency with other measure definitions. Let's take a closer look at this definition on the next slide.

Documented Reason for No Antithrombotic Ordered or Administered calls in the two definitions, Reason for Not Ordering Antithrombotic, and Reason for Not Administering Antithrombotic. To check for when no Antithrombotic Therapy is ordered or administered, there was a Medical Reason For Not Providing Treatment or Patient Refusal documented.

Now we will look at the second definition called by STK-5 Denominator Exceptions,Encounter with Pharmacological Contraindications for Antithrombotic Therapy Given Day of or Day After Hospital Arrival.

It checks to see if any of the medications in the value set, Pharmacological Contraindications for Antithrombotic Therapy, were given during the day of, or day after the start of the Hospitalization.

00:55:47

The third definition, called by STK-5 Denominator Exception is ‘Encounter with an INR Greater Than 3.5”. Checks if there were any INR laboratory tests results on the day of, or day after start of hospitalization, and the results are greater than 3.5.

00:56:06

Frequently Asked Question. "Therapeutic Enoxaparin was administered on the day after hospital Arrival. Will a therapeutic dose of Enoxaparin on Day 2 meet Antithrombotic Therapy administered By End of Hospital Day 2?"

Answer: Enoxaparin is the Antithrombotic Therapy Value Set, and the code can be mapped to one of the RxNorm codes. Also, the timing must meet the requirements of the day of, or day after the start of the hospitalization, so Enoxaparin will meet STK-5 measure requirements. However, Enoxaparin, at lower dosage used for VTE prophylaxis, are not sufficient for early Antithrombotic Therapy. Stroke patients should receive both Antithrombotic therapies usually. Now I will hand the presentation back to Susan.

00:57:00

Thank you Raquel and Karen for your parts in today's presentation. We've included an additional resource slide here to direct our audience to the eCQI Resource Center Eligible Hospital measures page, the Teach Me Clinical Quality Language video series, the Pioneers in Quality landing page on The Joint Commission website, the Expert to Expert Webinar Series landing page, and the Issue Tracking system where clinical and technical questions about these eCQMs should be submitted after this webinar concludes. Next slide please.

00:57:39

We will now move into our live Q&A segment. And, as a reminder, this webinar is scheduled for 90 minutes, so we will try to get to as many of the questions submitted by the audience as possible. As a reminder how to submit questions, please submit your questions via the question pane. Click on the Question Mark icon in the audience toolbar, and a panel will open for you to type and submit your question. Include the measure to which your question pertains. And all questions not answered verbally today will be addressed in a written follow up Q&A document, and that follow up document will be posted to The Joint Commission's website several weeks after the live event.

Sheila and Susan, I will turn it over to you two to begin facilitating the Q&A segment. And Susan, I believe that we determined that we would have you go first. Thanks.

Thank you. Susan. Just a real quick check on my volume. You're coming in clear to me. Thanks. Great. Thank you.

00:58:43

So, our first question today is, "If a patient converted from observation to inpatient, do we need to reorder that statin or an Aspirin during inpatient encounter?" And the answer to that question is: you need to look at each Stroke measure intent and logic to find where the timeframe is restricted to just the inpatient encounter or instead of the entire hospitalization. So please visit the eCQI Resource Center to see the Stroke measure logic. The definition global.hospitalization with observation groups the ED observation and inpatient encounter into a hospitalization. It looks for an observation that ends within one hour of the start of an inpatient encounter. It then looks for an ED that ends with within one hour of the start of that result. Thanks. Sheila, over to you.

Sure.

00:59:51

The next question is, "Can you confirm which calendar year that STK-6 will be... Will last be allowed to be reported?" STK-6 will be retired from the CMS program for Reporting Year 2024. Reporting of the measure is accepted for the current reporting period, 2023. Thank you. Okay.

01:00:14

Our next question is in regard to STK-3 Anticoagulation Therapy for Atrial Fibrillation and Flutter. "Why does the lookback not include end date?" So, the answer to that question is that eSTK-3 logic checks whether the Atrial Fibrillation or Flutter diagnosis occurred on or before the Ischemic Stroke Relevant period. There is no time limit on the AFib Flutter diagnosis in eSTK-3. Clinically speaking, once patients have AFib, Flutter, Flutter, or AF, they are always at risk. For this reason, there is no end date. Great.

And we'll go on to the next question.

01:01:04

This question asks for clarification on the new Value Sets for History of Atrial Ablation for STK-3. And the answer is the Value Set. History of Atrial Ablation, was added to provide a way to meet the measure intent, Inpatient hospitalizations for patients with a Principal Diagnosis of Ischemic Stroke and a History of Atrial Ablation or Current or History of Atrial Fibrillation or Flutter. When there is documentation of History of the Procedure Performed instead of the actual procedure code, Atrial Ablation, which may not occur when taking an encounter history. So, this Value Set was added, so if the procedure was not performed at the intake facility, it can find the documentation. Okay.

01:02:01

Our next question asking about using TNK versus t-PA. So, both Alteplase and Tenecteplase which is TNK are thrombolytic agents. These drugs do not meet STK-2 Antithrombolytic Prescribed at Dscharge or STK-3 Anticoagulation Therapy for Atrial Fibrillation and Flutter.

Patients with IV or IA t-PA, Alteplase or TNK administered at the hospital within 24 hours prior to Arrival are excluded from STK-5. All right.

01:02:42

I'll take the next question here. It says, "Please clarify STK-3 in depth. I find patients with only the mention of AFib or suspected AFib. I'm failing as OFIs." Patients with a Documented History or Diagnosis of any Atrial Fibrillation, example, given remote, persistent or paroxysmal or Atrial Flutter, should be prescribed Anticoagulation therapy at discharge or require a documented reason to exclude the case. Okay.

01:03:22

This question asks, "Can we discuss the dangers of Anticoagulation bleeding when Sub-Q heparin and or Eliquis, Plavix, etcetera is ordered?" So, the answer is that clinicians should assess the individual patient's risk for Stroke. For example, emboli versus the risk of bleeding when prescribing Anticoagulation therapy. The risk of Stroke for patients with Ischemic Stroke and Atrial Fibrillation is five times greater than for non AF Stroke patients. For this reason, Anticoagulation therapy is recommended for Ischemic Stroke patients with Atrial Fibrillation Flutter rather than Antithrombotic, such as aspirin. Okay.

01:04:18

Next question is, "Can we use eCQMs instead of manually abstracting measures for TJC Comprehensive and Primary Stroke Center Certification?" eCQM data are not accepted for Joint Commission Comprehensive or Primary Stroke Center Certification. eCQMs are available for only three of the Stroke measures. The Stroke eCQMs are options to meet CMS, IPR, and ORYX Performance Measure Requirements for hospital accreditation. 11 performance measures are required for PSC certification. 15 for PSCs that do mechanical thrombectomy procedures and 18 for CSCs. Separate databases are used to store performance measure data for hospital accreditation: DDSP, and certification CMIP purposes. Thanks. Sheila?

01:05:21

Okay, this next question is another question about observation. Patients that are never transferred to inpatients, are they excluded from all eCQMs for the current reported reporting year? The answer is that you do need to review the measure intent and logic for each eCQM, which are available on the eCQI Resource Center. They will provide information on the timeframes and restrictions of the encounter.

01:05:55

Next question. "Can anyone obtain a login to VSAC?" The answer is Yes. You will need to obtain an account through the UMLS terminology services. Your UTS account provides access to the Unified Medical Language System, UMLS. The Value Set Authority Center, VSAC, RxNorm downloads, SNOMED CT downloads and more. Okay.

01:06:22

This next question asks about Ischemic Stroke. "Does it include TIA?" And the answer is that all ICD10 CM Principal Diagnosis codes I series are limited to Ischemic Stroke and do not include codes for TIAs, which are in the G series. Okay,

01:06:51

I'll take the next question here. "Why are Hemorrhagic Strokes included in the measure population?" The eSTK measures share an IPP and patients with a Principal Diagnosis of Hemorrhagic Stroke. The e-STK measures share an IPP, and patients with a Principal Diagnosis of Hemorrhagic Stroke are excluded from all of the current eSTK measure Denominators, but in the past, there were eSTK measures that included both Hemorrhagic and Ischemic Stroke patients in their Denominator. Okay. Thanks.

01:07:33

"So, the next question for STK-2, if a patient from OBS to IP to the RX for Antithrombotic is prescribed, initially dated during the OBs portion of the stay, but is then included at a discharge for the patient to be discharged on. Does this meet the measure?" So, the Antithrombotic. Sorry. Yes. And the Antithrombotic medication must be prescribed at discharge. Antithrombotic medication ordered and/or administered during the hospital stay, but not prescribed at discharge, do not meet the measure intent. All right.

01:08:28

Next question. "Sometimes patients who had Ablations or watchman procedures are not on Anticoagulation anymore after a couple of months. The way to capture this is with documentation of a medical reason." The answer is, that is correct, a Medical Reason is needed. Okay.

01:08:52,

Next question. "It would be helpful to give an example of what is considered Authored During the Encounter, and explain the logic why a med order under observation does not count in the Numerator when the patient converted to IP and discharged home on the required med does not meet the Numerator." So, this is a great suggestion, and we'll take that under consideration for an example to use in future webinars. So, thank you for that feedback.

01:09:28

The next question is, "Was there a change in the dose? We usually order ASA 81mg." The answer is Aspirin in doses between 162-300mg are recommended. Lower doses, example given 81mg are included in the Value Set.

01:09:50

Okay, "Where can we find a list of the names of the medications that meet each of these measures, especially STK-3?" So please go to the VSAC website and we will include that in the Q&A document. And search the medication Value Set specified in each measure. Each of

the Stroke measures. All qualifying medications are listed within each of the Value Sets. All right.

01:10:25

And so on to the next question. "We no longer use T-PA. We use TNK. Is that included now?" Answer: All Tenecteplase is an acceptable alternative to Alteplase and included in the Value Set. Okay. Thank you. Okay.

01:10:48

Oh, there's a question about the presentation slides. So, the slides are available in the Event Resources pane. Once you select the link for the PDF, your browser will open in a new window. And you'll be able to download those slides right now. They'll also be available later on The Joint Commission website. And Susan will review that as we close out in a few minutes.

01:11:14

The next question. "So, 100 milligram Lovenox Sub-Q would be sufficient for Antithrombotic medication by the End of Day Two. STK-5." Answer: Lovenox Sub-Q is generally not prescribed for long term Antithrombotic Therapy. However, if it is prescribed as a discharge medication at any dose, it will meet STK-2.Lower dosages administered for VTE prophylaxis during hospitalization are not sufficient for early Antithrombotic Therapy. An example, STK-5. Great. Thank you.

Sheila am not seeing any new questions currently answered within our question and answer forum here. There's a few questions, just to reassure you that the questions that we have not gotten to, we need a little more time to dig in and provide an appropriate answer to you. So, as we mentioned earlier, we will be posting the answer to these questions in a written Q&A document within a couple of weeks. So, with that, I would like to thank all of you for your really great questions and to all of our staff who are behind the scenes, quickly putting together answers for you. And with that, I will turn it back over to Susan Funk to provide you with the closeout slide information.

01:11:54

Thank you. Excellent. Thanks Sheila and Susan for facilitating the Q&A segment. As Susan mentioned, we will have a follow up document with the all the answers to the questions that you addressed today, that were addressed today or that were asked today. And we will also post the recording links, slides, transcripts, and Q&A documents to the link that's shown on this slide. That's where you will find all of those items.

Real quick just to plug the eCQM Annual Update series in general. The 2024 eCQM Annual Update Webinar series began with an On Dmand webinar released in August on Joint Commission's PC-01, 05, and 06 eCQMs. It continued with the PC measures in September, and today's Stroke eCQMs. We'll cover the VTE eCQMs on November 7th, the Glycemia eCQMs on December 7th, and then the Annual Update series will conclude in January with the Safe Use of Opioids - Concurrent Prescribing eCQM. In January and February of 2024, we

will also address new measures for 2024 implementation. And this series incorporates expertise from the Joint Commission, Centers for Medicare and Medicaid Services, Mathematica, and other measure stewards.

If you missed any of these topics, the link on the slide will provide you access to the recordings and slides when they are available. And as new webinars become available for registration, you can register via that link as well. Next slide please.

01:13:56

Before the session concludes, a few words about the survey. We use your feedback to inform future content and assess the quality of our educational programs. You can access the survey in two ways. On the next slide, we provide a QR code that you can scan with your mobile device to immediately access the survey. If you miss that QR code, tomorrow a link will be provided within an automated email that will be sent to the address you used to register. To obtain your CE certificate, at the end of the survey, when you click SUBMIT, you are redirected to a page from which you can print or download a PDF certificate. After completing that survey, you will also receive an automated email that includes the link to the certificate. Next slide please.

01:14:28

Thank you to Raquel and Karen for your parts in today's presentation. To Susan and Sheila for facilitating the Q&A segment and to our content experts that were in the background answering all of the submitted questions. Finally, thanks to all of you who attended today's broadcast. We will pause here for just a few moments for anyone that would like to scan the QR code for the survey. Have a great day.

PIONEERS IN QUALITY™

Questions Received During Pioneers in Quality Expert to Expert Stroke eCQM Webinar on October 31, 2023

Theme	Question	Answer
Anticoagulation Therapy	Can we discuss the dangers of anticoagulation - bleeding- when aspirin, (sq) heparin, and/or Eliquis, Plavix, etc. is ordered?	Clinicians should assess the individual patient's risk of stroke (e.g., emboli) vs. the risk of bleeding when prescribing anticoagulation therapy. The risk of a recurrent stroke for patients with ischemic stroke and atrial fibrillation is five times greater than for non-AF stroke patients. For this reason, anticoagulation therapy is recommended for ischemic stroke patients with atrial fibrillation/flutter rather than an antithrombotic, such as, aspirin.
Aspirin	Was there a change in the dose? We usually order Aspirin 81 mg.	No, there was not a change in the dose. Lower doses (e.g., 81mg) are included in the value set, but the recommendation is for Aspirin is in doses between 160 - 300 mg.
Atrial Fib/Flutter end date	STK-3 Anticoagulation Therapy for Atrial Fibrillation/Flutter. Why does the look back not include an end date?	eSTK-3 logic checks for a history of Atrial Fibrillation/Flutter (AF) occurring on or before the Ischemic stroke encounter. Additionally, a current diagnosis of AF will qualify the patient for the denominator. There is no time limit on the AF diagnosis in eSTK-3. Clinically speaking, once patients have AF they are always at risk. For this reason, there is no end date.
Comfort Measures Only	For Comfort Measures Only (CMO) / consideration for Hospice, is it only considered via the CMO orders / order set, or is more discrete documentation acceptable, for example, in a physician progress note, but CMO orders / panel not utilized?	The documentation must be found in a discrete data field in the medical record mapped to a SNOMED code within the Comfort measures value set. This can be an order performed or an intervention order or intervention performed.
Denominator Exclusions	Denominator exclusions for STK-2: If a palliative care consult is ordered, can that count for comfort measures?	No, the Comfort Measures value set excludes concepts that identify palliative care.

Theme	Question	Answer
Discharged (including Transfers to inpatient rehab) Medications	We have a skilled facility that is attached to our electronic health record. This has resulted in fall outs due to the way the meds are being transferred over. Meds are being omitted after they are transferred. Are you seeing a lot of hospitals with the same issue?	You may need to verify that all sources of medications are mapped for the cases that are transferred to the skilled facility.
Discharged on Antithrombotic Therapy	For STK-2: If a patient goes from Observation to IP and the prescription for an antithrombotic is prescribed initially dated during the Observation portion of the stay but is then included at discharge for the patient to be discharged on. Does this meet the measure?	The antithrombotic medication must be prescribed at discharge. Antithrombotic medications ordered and/or administered during the hospital stay but not prescribed at discharge do not meet the measure intent. Therefore, the described scenario meets the measure if the antithrombotic therapy is prescribed at discharge.
Discharged on Antithrombotic Therapy	STK-2: The patient is discharged on the required medication, but the medication was originally ordered under observation. It does not meet the numerator.	STK-2 uses the "Medication, Discharge" datatype which refers to the discharge medication list and is intended to express medications ordered for post-discharge use. The list of medications a patient should take after hospital discharge may come from multiple sources.
eCQM Measure Specs	Would you mind posting the link for the stroke (STK) measure specifications here?	The STK eCQM measure specifications are located on the eCQI Resource Center. https://ecqi.healthit.gov/eh-cah?qt-tabs_eh=1&globalyearfilter=2024&global_measure_group=3716
eCQM Measure Specs	Are observation patients that never transfer to inpatient excluded from all eCQMs for the current reporting year?	You will need to review the measure intent and logic for each eCQM which are available on the eCQI Resource Center. There, you will find information on the time frames and restrictions of the encounters considered for each eCQM.

Theme	Question	Answer
eCQMs for TJC	Can we use eCQMs instead of manually abstracted measures for TJC comprehensive and primary stroke center certification?	eCQM data are not accepted for Joint Commission comprehensive or primary stroke center (PSC) certification. eCQMs are available for only three of the STK measures. The STK eCQMs are options to meet CMS Inpatient Quality Reporting to meet ORYX performance measure requirements for hospital accreditation. Eleven performance measures are required for PSC certification: 15 for PSCs that do mechanical thrombectomy procedures; and 18 for CSCs or Comprehensive Stroke Centers. Separate databases are used to store performance measure data for hospital accreditation (Direct Data Submission Platform - DDSP) and for certification (Certification Measure Information Process - CMIP).
Fall Risk	Do you still advise anticoagulation even when a patient has a high risk for falls or has a history of falls?	Anticoagulation therapy is recommended for ischemic stroke patients with a history or current diagnosis of atrial fibrillation/flutter unless contraindicated. Documentation of a medical reason (i.e., not indicated due to a history of falls) mapped to the value set for Medical Reason for Not Providing Treatment is needed to exclude the case.
Hemorrhagic Stroke	Why are hemorrhagic strokes included in the measure populations?	The eSTK measures share the same Initial Patient Population, and patients with a principal diagnosis of hemorrhagic stroke are excluded from all the current eSTK measure denominators. Although in the past, there were eSTK measures that included both hemorrhagic and ischemic stroke patients in their denominators. The removal of hemorrhagic strokes may be considered for a future annual update.
Lovenox	For STK-5: Would 100 mg of Lovenox, SC be sufficient for antithrombotic medication by the end of day 2?	Lower doses of Lovenox (30-40 mg) prescribed for VTE prophylaxis are not acceptable for STK-5, but higher therapeutic doses (100 mg) will meet.
Mapping A-Fib	What if there is no mention of atrial fibrillation throughout the record, except when a cardiologist orders a cardiac event recorder on discharge to rule out a-fib?	A documented history or current diagnosis of a-fib will need to be mapped to the Atrial Fibrillation or Flutter value set. Documentation to monitor the patient for atrial fibrillation/flutter after discharge and NO other documentation of a confirmed diagnosis or history of atrial fibrillation/flutter in the medical record should be disregarded and not mapped to the Atrial Fibrillation or Flutter value set. The purpose of this value set is to represent concepts of diagnoses that identify patients with a history of atrial fibrillation/flutter or a current finding of atrial fibrillation/flutter.
Medical Reason for Not	For STK3, would provider discretion as a "medical reason" for not providing an anticoagulant meet the measure?	All medical reasons are determined based on the clinical knowledge and expertise of the physician/APN/PA or pharmacist. "Provider discretion" itself is not a medical reason included in the value set and would not meet the measure. Please refer to the Medical Reason For Not Providing Treatment value set for a list of eligible medical reason for not providing anticoagulation therapy.

Theme	Question	Answer
Medical Reason for Not	Often physicians write the reason for not prescribing antithrombotic or anticoagulant in the discharge note. How do we include that information for eCQM STK metrics?	The eCQM uses the Medical Reason for Not Providing Treatment value set which will need to be mapped to a discrete data field.
Medical Reason for Not	Sometimes patients who had an ablation or watchman procedure are not on anticoagulation anymore after a couple of months. Is this captured with documentation of medical reason?	Correct. A medical reason in a discrete field that is mapped to the Medical Reason for Not Providing Treatment value set is needed.
Medication Orders	If a patient converts from Observation to Inpatient, do we need to re-order that statin & aspirin during the inpatient encounter?	You need to look at each stroke measure intent and logic to find if the time frame is restricted to just the inpatient encounter or to the entire hospitalization. Please visit the eCQI Resource Center to see the stroke measure logic. For example, STK-2 looks for a patient to be discharged with an antithrombotic, whereas for STK-5, an administration of an anticoagulant by the end of hospital day 2 (which may include ED and/or observation if applicable).
National Benchmarks	Where can I find the national averages of all eCQMs?	2021 national averages for hospitals in the CMS data set that have 25 or more cases: STK-2 95.2%; STK-3 71.6%; STK-5 91.2%. Benchmarks can be found in the QPP Resource Library: QPP Resource Library (cms.gov). To access you will need to search under benchmarks.
Operations	Is this webinar being recorded?	Yes, the webinar was recorded. All Expert-to-Expert webinar recording links, slides, transcripts, and Q&A documents can be accessed within several weeks of the live event on the Joint Commission's webpage: https://www.jointcommission.org/measurement/quality-measurement-webinars-and-videos/expert-to-expert-webinars/#sort=%40resourcedate%20descending
STK-3 Opportunities	Please clarify STK-3 in depth. I find patient with only the mention of a-fib or suspected a-fib falling out as OFIs (Opportunities for Improvement).	Patients with a documented history or current diagnosis of ANY atrial fibrillation (e.g., remote, persistent, or paroxysmal) or atrial flutter should be prescribed anticoagulation therapy at discharge. Otherwise, a documented reason to exclude the case is required.
STK-6	Are patients discharged to an Inpatient Rehabilitation Unit (IRU) excluded for STK-6?	Patients discharged to an inpatient rehabilitation facility are included in the STK-6 denominator and not excluded.

Theme	Question	Answer
STK-6	Can you confirm which calendar year that STK-6 will last be reported?	STK-6 will be retired from the CMS program for reporting year 2024. Reporting of the measure is accepted for the current reporting period, (calendar year) 2023.
Tenecteplase	Is tenecteplase accepted in place of tPA? Tenecteplase is our thrombolytic.	Tenecteplase is an acceptable alternative to alteplase and is included in the value set.
Tenecteplase	Does tenecteplase exclude patients from the denominator like alteplase for STK 5?	Tenecteplase is an acceptable alternative to alteplase and is included in the value set. It will meet the STK-5 denominator exclusion if initiated prior to hospital arrival or within 24 hours of arrival.
TIA (Transient Ischemic Attack)	Does ischemic stroke include TIA (Transient Ischemic Attack)?	ICD-10-CM Principal Diagnosis Codes (I series) are limited to ischemic stroke and do not include codes for TIA (G series).
TNK vs. t-PA	Using TNK (tenecteplase) versus t-PA (alteplase)?	Both alteplase (t-PA) and tenecteplase (TNK) are thrombolytic agents. These drugs do not meet STK-2 antithrombotic prescribed at discharge or STK-3 anticoagulation therapy for atrial fibrillation/flutter. Patients with IV or IA alteplase or tenecteplase administered at the hospital or within 24 hours prior to arrival are excluded from STK-5.
Value Sets	Early in the webinar, there was a spreadsheet shown that had the different measures in each tab and contained measure details, including value set details. Do you have a link for this, or can you explain how to locate it on the eCQI Resource Center?	A spreadsheet containing all the eCQM value sets for Eligible Hospitals is available to download from the VSAC and can be accessed through the following link https://vsac.nlm.nih.gov/download/ecqm. Select the reporting period of interest for CMS eCQM & Hybrid Measure Value Sets, then locate the eCQM Value Sets for Eligible Hospitals and select the excel button in the column, “Sorted by CMS ID.” Alternatively, see the eCQI Resource Center for measure specifications and value sets: https://ecqi.healthit.gov/eh-cah?qt-tabs_eh=1&globalyearfilter=2024&global_measure_group=3716
Value Sets / STK-3	Clarification on the new value sets for History of Atrial Ablation for Stroke-3	The value set 'History of Atrial Ablation' was added to provide a way to meet the measure intent for "Inpatient hospitalizations for patients with a principal diagnosis of ischemic stroke and a history of atrial ablation, or current or history of atrial fibrillation/flutter." When there is documentation of a history of the procedure performed instead of the actual procedure code for atrial ablation.
Value Sets / Medications	Where can we find a list of the names of the medications that meet each of these measures?	Please go to VSAC website: https://vsac.nlm.nih.gov/welcome and search the medication value set specified in each STK measures. All qualifying medications are listed in each value set. Alternatively, see the eCQI Resource Center for measure specifications and value sets: https://ecqi.healthit.gov/eh-cah?qt-tabs_eh=1&globalyearfilter=2024&global_measure_group=3716

Theme	Question	Answer
VSAC access	Can anyone obtain a login to VSAC?	Yes, anyone can obtain a login to the VSAC. An account may be obtained through the UMLS Terminology Services (UTS). You can sign up via this site: https://uts.nlm.nih.gov/uts/signup-login . Your UTS account provides access to the Unified Medical Language System (UMLS), the Value Set Authority Center (VSAC), RxNorm downloads, SNOMED CT downloads and more.