Pioneers in Quality™ Expert to Expert Series: STK-2, -3, & -6

9-10 am (PT)

10-11 am (MT)

11 am-12 pm (CT)

12-1 pm (ET)

December 11, 2018

The Joint Commission

For those participating that would like to use the Closed Captioning Service:

- http://www.captionedtext.com/client/event.aspx?CustomerID=1519&EventID=3845192
- 3845192

- We will also include the information in the Chat box when we open the session.

The Joint Commission

At the end of this session, participants will be able to:

- Apply concepts learned about the new Clinical Quality Language (CQL) expression language for the STK-2, -3, & -6 eCQMs

- Identify common issues and questions regarding STK-2, -3, & -6 eCQMs and

- Prepare to implement the CQL expression language for the 2019 eCQM reporting year (2020 data submission)
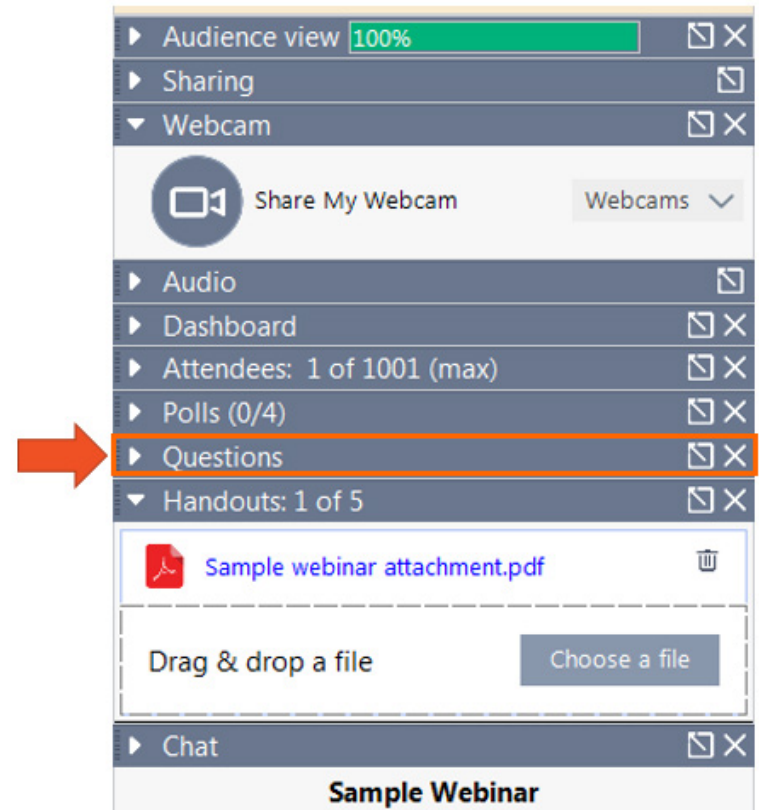
The Joint Commission

Slides are available for download now!

- See the GoToWebinar "Handouts" Section

- Click the arrow to open the Handouts list, select the slides for today's session, and download.

The Joint Commission
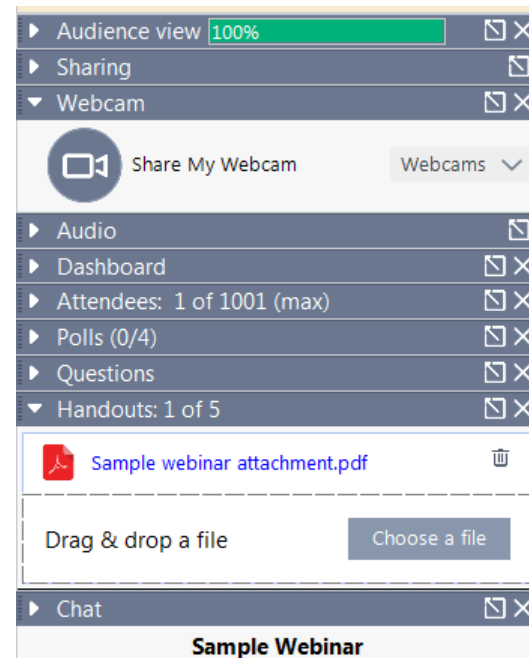
This program is designed to be interactive.

– All participants are connected in listen-only mode; we are not recognizing the raised hands feature

– Ask questions through the Questions function in the Dashboard

– Visit any links or resources noted in the slides

– Download the slides and share the recording

▶ Audience view 100%
▶ Sharing
▼ Webcam
　Share My Webcam　Webcams ∨
▶ Audio
▶ Dashboard
▶ Attendees: 1 of 1001 (max)
▶ Polls (0/4)
▶ Questions
▼ Handouts: 1 of 5
　Sample webinar attachment.pdf
　Drag & drop a file　Choose a file
▶ Chat
Sample Webinar

5

Pioneers in Quality™
Expert to Expert Series: STK -2, -3, & -6

In January, the webinar recording and slide deck will be accessible on The Joint Commission website via the Expert to Expert landing page (https://www.jointcommission.org/piq_expert_to_expert_series/).

When follow-up items are posted, an email will be sent to all individuals that registered.

6

We are providing CE credits for the Expert to Expert Series Webinars.

This webinar is approved for 1.0 Continuing Education Credit from:

– Accreditation Council for Continuing Medical Education (ACCME)

– American Nurses Credentialing Center (ANCC)

– American College of Healthcare Executives (ACHE)

– California Board of Registered Nursing

– International Association for Continuing Education and Training (IACET) (.1 credit)

Continuing Education credits are available for the <u>live webinar presentation only.</u> Credits <u>will not </u>be available for webinar replays.

To claim credits, you must have:

- 1) <u>Individually registered</u> for the webinar.
- 2) <u>Listened to the webinar in its entirety.</u> Only those listening live during the session are eligible to receive credit*.
- 3) <u>Completed a post-program evaluation/attestation**.</u>

* If you are listening with colleagues and did not use your own link/phone line to join, you can still claim CE credit if you meet these criteria. An automated email after this session will provide information how to access the survey.

** The program evaluation/attestation survey link will be sent to your email after the webinar. For those completing the evaluation - printable certificates will be sent via email 2 weeks after the session; all participant CE certificates will be sent at the same time.

Disclosure Statement

These staff and speakers have disclosed that neither they nor their spouses/partners have any financial arrangements or affiliations with corporate organizations that either provide educational grants to this program or may be referenced in this activity:

- Lisa Anderson, MSN, RN Project Director, eClinical, Department of Quality Measurement

- Mia Nievera, MSN, eClinical Associate Project Director, Department of Quality Measurement

- Karen Kolbusz, BSN, MBA, Associate Project Director, Department of Quality Measurement

Mia Nievera, MSN

Karen Kolbusz, MBA, BSN

STK-2 Discharged on Antithrombotic Therapy (CMS104v7)

December 11, 2018

The Joint Commission

Introduction
Discharged on Antithrombotic Therapy

- Long-term antithrombotic therapy is recommended for secondary stroke prevention in patients with ischemic stroke.

- Four antiplatelet drugs have been approved by the FDA for prevention of vascular events among patients with a stroke or TIA (i.e., aspirin, combination aspirin/dipyridamole, clopidogrel, and ticlopidine).

- On average, these agents reduce the relative risk of stroke, MI, or death by ≈22% (Kernan WN, et. al., 2014).

- Data suggest that antithrombotic therapy should be prescribed at discharge following acute ischemic stroke to reduce stroke mortality and morbidity as long as no contraindications exist.

eCQM
Evolving eCQM Standards

The Joint Commission

	Metadata	Data Model	Logic
Current Specifications (through CY2018)	HQMF (Metadata, Population Structure)	Quality Data Model	
New Specifications (Effective CY2019)	HQMF (Metadata, Population Structure)	Quality Data Model	Clinical Quality Language

eCQM
HUMAN READABLE

Population Criteria

◢ Initial Population

TJC."Encounter with Principal Diagnosis and Age"

◢ Denominator

TJC."Ischemic Stroke Encounter"

◢ Denominator Exclusions

TJC."Ischemic Stroke Encounters with Discharge Status"
        union TJC."Comfort Measures during Hospitalization"

◢ Numerator

TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
        with "Antithrombotic Therapy at Discharge" DischargeAntithrombotic
                such that DischargeAntithrombotic.authorDatetime during IschemicStrokeEncounter.relevantPeriod

Definitions

◢ Antithrombotic Not Given at Discharge

["Medication, Not Discharged": "Antithrombotic Therapy"] NoAntithromboticDischarge
        where NoAntithromboticDischarge.negationRationale in "Medical Reason"
                or NoAntithromboticDischarge.negationRationale in "Patient Refusal"

◢ Antithrombotic Therapy at Discharge

["Medication, Discharge": "Antithrombotic Therapy"]

◢ Denominator

TJC."Ischemic Stroke Encounter"

◢ Denominator Exceptions

TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
        with "Antithrombotic Not Given at Discharge" NoDischargeAntithrombotic
                such that NoDischargeAntithrombotic.authorDatetime during IschemicStrokeEncounter.relevantPeriod

Functions

◢ Global.CalendarAgeInYearsAt(BirthDateTime DateTime, AsOf DateTime)

years between ToDate(BirthDateTime)and ToDate(AsOf)

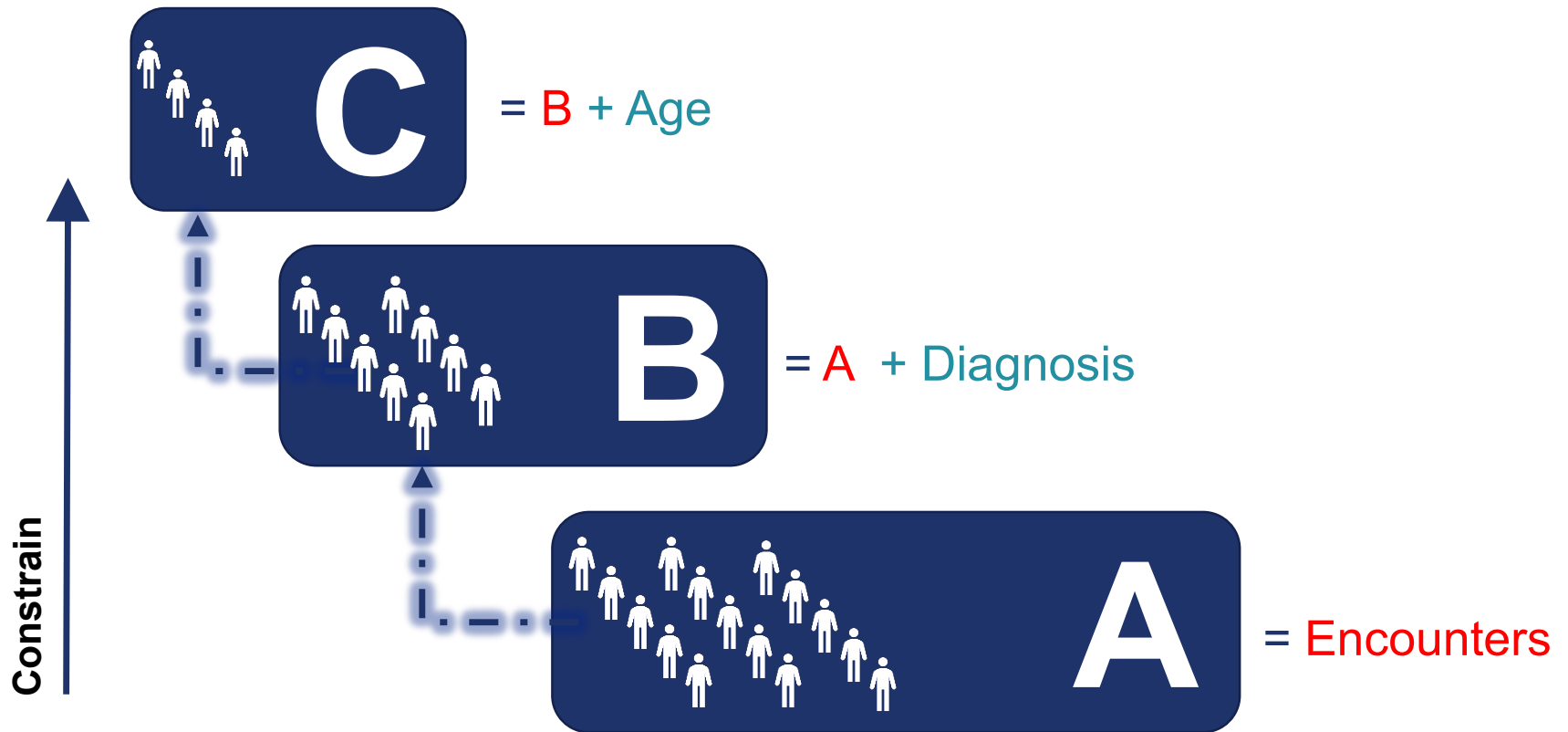### ◢ Global.Hospitalization(Encounter "Encounter, Performed")

(singleton from (["Encounter, Performed": "Emergency Department Visit"] EDVisit
                where EDVisit.relevantPeriod ends 1 hour or less on or before start of Encounter.relevantPeriod
)) X
                return if X is null then Encounter.relevantPeriod else Interval[start of X.relevantPeriod, end of Encounter.relevantPeriod]

Building Blocks

—— 13

CQL Definition
Example of Generic Population Criteria

Initial Population= C

C = B + Age

B = A + Diagnosis

A = Encounters

Constrain

CQL Definition

Initial Population:

TJC.Encounter with Principal Diagnosis and Age

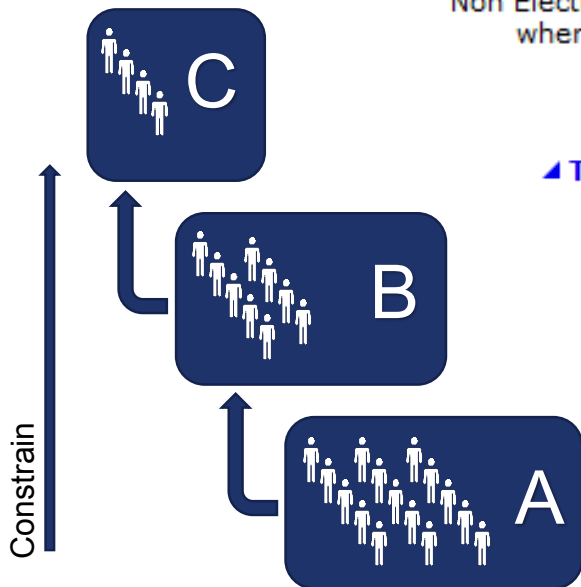▲ **TJC.Encounter with Principal Diagnosis and Age**

"All Stroke Encounter" AllStrokeEncounter
    with ["Patient Characteristic Birthdate"] BirthDate
        such that Global."CalendarAgeInYearsAt"(BirthDate.birthDatetime, start of AllStrokeEncounter.relevantPeriod)>= 18

▲ **TJC.All Stroke Encounter**

"Non Elective Inpatient Encounter" NonElectiveEncounter
    where NonElectiveEncounter.principalDiagnosis in "Hemorrhagic Stroke"
        or NonElectiveEncounter.principalDiagnosis in "Ischemic Stroke"

▲ **TJC.Non Elective Inpatient Encounter**

["Encounter, Performed": "Non-Elective Inpatient Encounter"] NonElectiveEncounter
    where Global."LengthInDays"(NonElectiveEncounter.relevantPeriod)<= 120
        and NonElectiveEncounter.relevantPeriod ends during "Measurement Period"

C

B

A

Constrain

15
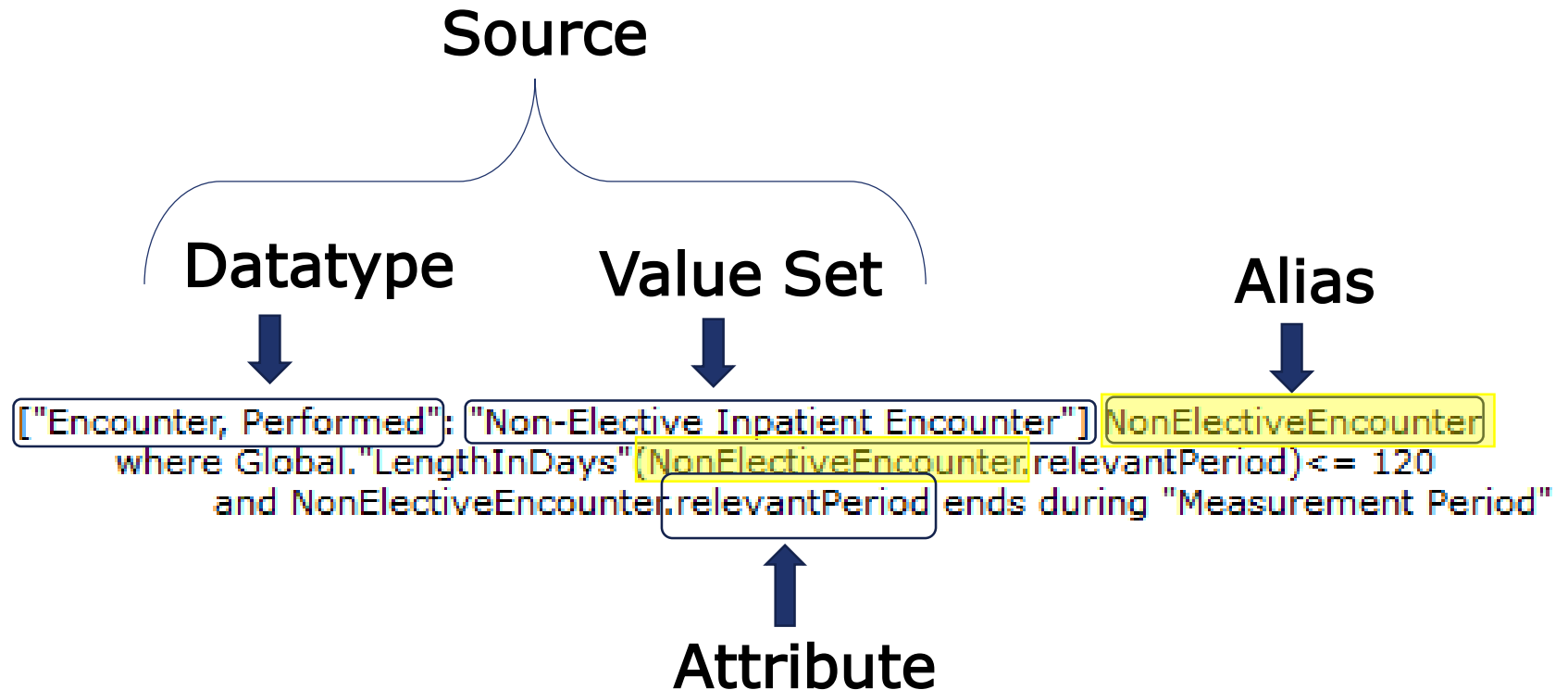
Definition Anatomy

Definitions are made up of:

Library Alias

Name

TJC.**Non Elective Inpatient Encounter**

["Encounter, Performed": "Non-Elective Inpatient Encounter"] NonElectiveEncounter
    where Global."LengthInDays"(NonElectiveEncounter.relevantPeriod)<= 120
    and NonElectiveEncounter.relevantPeriod ends during "Measurement Period"

Expression

Source

Datatype   Value Set   Alias

["Encounter, Performed": "Non-Elective Inpatient Encounter"] NonElectiveEncounter
  where Global."LengthInDays"(NonElectiveEncounter.relevantPeriod)<= 120
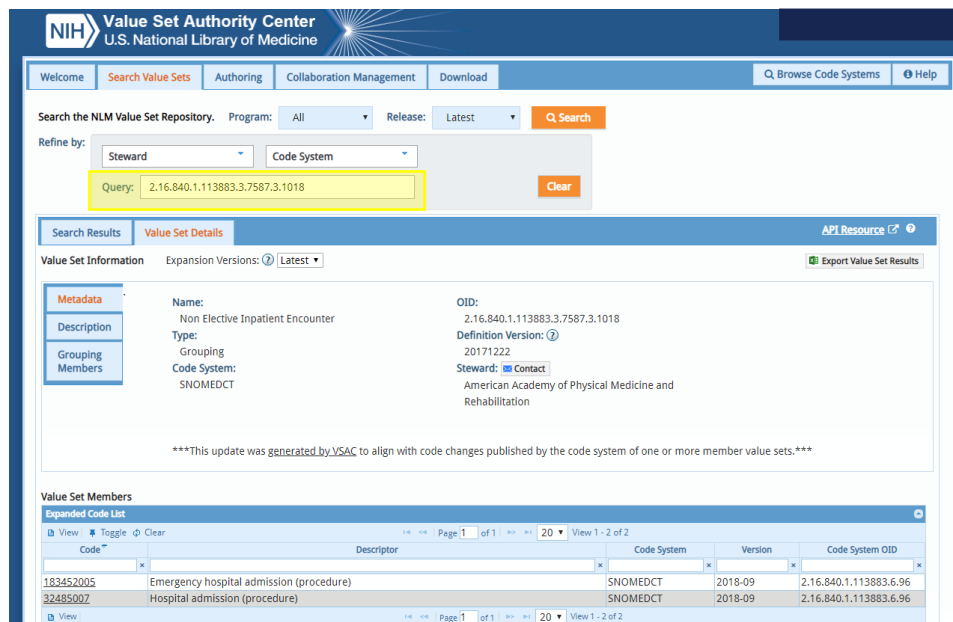   and NonElectiveEncounter.relevantPeriod ends during "Measurement Period"

Attribute

Definition Anatomy- Value Sets

Terminology

- valueset "Antithrombotic Therapy" using "2.16.840.1.113883.3.117.1.7.1.201"
- valueset "Comfort Measures" using "1.3.6.1.4.1.33895.1.3.0.45"
- valueset "Discharge To Acute Care Facility" using "2.16.840.1.113883.3.117.1.7.1.87"
- valueset "Discharged to Health Care Facility for Hospice Care" using "2.16.840.1.113883.3.117.1.7.1.207"
- valueset "Discharged to Home for Hospice Care" using "2.16.840.1.113883.3.117.1.7.1.209"
- valueset "Emergency Department Visit" using "2.16.840.1.113883.3.117.1.7.1.292"
- valueset "Ethnicity" using "2.16.840.1.114222.4.11.837"
- valueset "Hemorrhagic Stroke" using "2.16.840.1.113883.3.117.1.7.1.212"
- valueset "Ischemic Stroke" using "2.16.840.1.113883.3.117.1.7.1.247"
- valueset "Left Against Medical Advice" using "2.16.840.1.113883.3.117.1.7.1.308"
- valueset "Medical Reason" using "2.16.840.1.113883.3.117.1.7.1.473"
- valueset "Non-Elective Inpatient Encounter" using "2.16.840.1.113883.3.117.1.7.1.424"
- valueset "ONC Administrative Sex" using "2.16.840.1.113762.1.4.1"
- valueset "Patient Expired" using "2.16.840.1.113883.3.117.1.7.1.309"
- valueset "Patient Refusal" using "2.16.840.1.113883.3.117.1.7.1.93"
- valueset "Payer" using "2.16.840.1.114222.4.11.3591"
- valueset "Race" using "2.16.840.1.114222.4.11.836"

Initial Population- STK-2 (CMS104v7)

Patients age 18 and older discharged from inpatient care (non-elective admissions) with a principal diagnosis of Ischemic or Hemorrhagic Stroke and a length of stay less than or equal to 120 days that ends during the measurement period

Initial Population:

　　　TJC Encounter with Principal Diagnosis and Age

TJC.Encounter with Principal Diagnosis and Age:

- "All Stroke Encounter" AllStrokeEncounter with ["Patient Characteristic Birthdate"] BirthDate such that Global."CalendarAgeInYearsAt"(BirthDate.birthDatetime, start of AllStrokeEncounter.relevantPeriod)>= 18

  TJC.All Stroke Encounter:
  - "Non Elective Inpatient Encounter" NonElectiveEncounter where NonElectiveEncounter.principalDiagnosis in "Hemorrhagic Stroke" or NonElectiveEncounter.principalDiagnosis in "Ischemic Stroke"

    TJC.Non Elective Inpatient Encounter:
    - ["Encounter, Performed": "Non-Elective Inpatient Encounter"] NonElectiveEncounter where Global."LengthInDays"(NonElectiveEncounter.relevantPeriod)<= 120 and NonElectiveEncounter.relevantPeriod ends during "Measurement Period"

Initial Population

Patients age 18 and older discharged from inpatient care (non-elective admissions) with a principal diagnosis of Ischemic or Hemorrhagic Stroke and a length of stay less than or equal to 120 days that ends during the measurement period

Initial Population:

TJC Encounter with Principal Diagnosis and Age

TJC.Non Elective Inpatient Encounter:
- *["Encounter, Performed"*: "*Non-Elective Inpatient Encounter*"] NonElectiveEncounter where Global."LengthInDays"(NonElectiveEncounter.*relevantPeriod)<= 120* and NonElectiveEncounter.relevantPeriod ends during "Measurement Period"

Initial Population

Patients age 18 and older discharged from inpatient care (non-elective admissions) with a principal diagnosis of Ischemic or Hemorrhagic Stroke and a length of stay less than or equal to 120 days that ends during the measurement period

Initial Population:

TJC Encounter with Principal Diagnosis and Age

TJC.Non Elective Inpatient Encounter:
- ["Encounter, Performed": "Non-Elective Inpatient Encounter"] NonElectiveEncounter where Global."*LengthInDays*"(NonElectiveEncounter.relevantPeriod*)<= 120* and NonElectiveEncounter.relevantPeriod ends during "Measurement Period"

Initial Population

Patients age 18 and older discharged from inpatient care (non-elective admissions) with a principal diagnosis of Ischemic or Hemorrhagic Stroke and a length of stay less than or equal to 120 days that ends during the measurement period

Initial Population:

> TJC Encounter with Principal Diagnosis and Age

TJC.All Stroke Encounter:

- *"Non Elective Inpatient Encounter"* NonElectiveEncounter where NonElectiveEncounter.principalDiagnosis in "Hemorrhagic Stroke" or NonElectiveEncounter.principalDiagnosis in "Ischemic Stroke"

  TJC.Non Elective Inpatient Encounter:

  - *["Encounter, Performed": "Non-Elective Inpatient Encounter"] NonElectiveEncounter where Global."LengthInDays"(NonElectiveEncounter.relevantPeriod)<= 120 and NonElectiveEncounter.relevantPeriod ends during "Measurement Period"*

Initial Population

Patients age 18 and older discharged from inpatient care (non-elective admissions) with a principal diagnosis of Ischemic or Hemorrhagic Stroke and a length of stay less than or equal to 120 days that ends during the measurement period

Initial Population:

TJC Encounter with Principal Diagnosis and Age

TJC.All Stroke Encounter:
- "Non Elective Inpatient Encounter" *NonElectiveEncounter* where *NonElectiveEncounter.*principalDiagnosis in "Hemorrhagic Stroke" or NonElectiveEncounter.principalDiagnosis in "Ischemic Stroke"

   TJC.Non Elective Inpatient Encounter:
   - *["Encounter, Performed": "Non-Elective Inpatient Encounter"] NonElectiveEncounter where Global."LengthInDays"(NonElectiveEncounter.relevantPeriod)<= 120 and NonElectiveEncounter.relevantPeriod ends during "Measurement Period"*

Initial Population

Patients age 18 and older discharged from inpatient care (non-elective admissions) with a principal diagnosis of Ischemic or Hemorrhagic Stroke and a length of stay less than or equal to 120 days that ends during the measurement period

Initial Population:

       TJC Encounter with Principal Diagnosis and Age

TJC.All Stroke Encounter:

- "Non Elective Inpatient Encounter" NonElectiveEncounter where *NonElectiveEncounter.principalDiagnosis in "Hemorrhagic Stroke" or NonElectiveEncounter.principalDiagnosis in "Ischemic Stroke"*

  TJC.Non Elective Inpatient Encounter:

  - *["Encounter, Performed": "Non-Elective Inpatient Encounter"] NonElectiveEncounter where Global."LengthInDays"(NonElectiveEncounter.relevantPeriod)<= 120 and NonElectiveEncounter.relevantPeriod ends during "Measurement Period"*

Initial Population

Patients age 18 and older discharged from inpatient care (non-elective admissions) with a principal diagnosis of Ischemic or Hemorrhagic Stroke and a length of stay less than or equal to 120 days that ends during the measurement period

> **Initial Population:**
>
> TJC Encounter with Principal Diagnosis and Age

TJC.Encounter with Principal Diagnosis and Age:

- *"All Stroke Encounter"* AllStrokeEncounter with ["Patient Characteristic Birthdate"] BirthDate such that Global."CalendarAgeInYearsAt"(BirthDate.birthDatetime, start of AllStrokeEncounter.relevantPeriod)>= 18

    TJC.All Stroke Encounter:
    - *"Non Elective Inpatient Encounter" NonElectiveEncounter where NonElectiveEncounter.principalDiagnosis in "Hemorrhagic Stroke" or NonElectiveEncounter.principalDiagnosis in "Ischemic Stroke"*

        TJC.Non Elective Inpatient Encounter:
        - *["Encounter, Performed": "Non-Elective Inpatient Encounter"] NonElectiveEncounter where Global."LengthInDays"(NonElectiveEncounter.relevantPeriod)<= 120 and NonElectiveEncounter.relevantPeriod ends during "Measurement Period"*

Initial Population

Patients age 18 and older discharged from inpatient care (non-elective admissions) with a principal diagnosis of Ischemic or Hemorrhagic Stroke and a length of stay less than or equal to 120 days that ends during the measurement period

Initial Population:

TJC Encounter with Principal Diagnosis and Age

TJC.Encounter with Principal Diagnosis and Age:

- "All Stroke Encounter" AllStrokeEncounter with ["Patient Characteristic Birthdate"] BirthDate such that Global.*"CalendarAgeInYearsAt"(BirthDate.birthDatetime, start of AllStrokeEncounter.relevantPeriod)>= 18*

  TJC.All Stroke Encounter:
  - *"Non Elective Inpatient Encounter" NonElectiveEncounter where NonElectiveEncounter.principalDiagnosis in "Hemorrhagic Stroke" or NonElectiveEncounter.principalDiagnosis in "Ischemic Stroke"*

    TJC.Non Elective Inpatient Encounter:
    - *["Encounter, Performed": "Non-Elective Inpatient Encounter"] NonElectiveEncounter where Global."LengthInDays"(NonElectiveEncounter.relevantPeriod)<= 120 and NonElectiveEncounter.relevantPeriod ends during "Measurement Period"*

Denominator

Patients with a principal diagnosis of Ischemic Stroke

Denominator:

TJC."Ischemic Stroke Encounter"

TJC.Ischemic Stroke Encounter:

- *"Encounter with Principal Diagnosis and Age"* EncounterWithAge where EncounterWithAge.principalDiagnosis in "Ischemic Stroke"

Denominator

Patients with a principal diagnosis of Ischemic Stroke

Denominator:

> TJC."Ischemic Stroke Encounter"

TJC.Ischemic Stroke Encounter:

- "Encounter with Principal Diagnosis and Age" EncounterWithAge
  where EncounterWithAge.principalDiagnosis in "Ischemic Stroke"

TJC.Encounter with Prinicipal Diagnosis and Age:
- "All Stroke Encounter" AllStrokeEncounter with ["Patient Characteristic Birthdate"] BirthDate such that Global."CalendarAgeInYearsAt"(BirthDate.birthDatetime, start of AllStrokeEncounter.relevantPeriod)>= 18

TJC.All Stroke Encounter:
- "Non Elective Inpatient Encounter" NonElectiveEncounter where NonElectiveEncounter.principalDiagnosis in "Hemorrhagic Stroke" or NonElectiveEncounter.principalDiagnosis in "Ischemic Stroke"

TJC.Non Elective Inpatient Encounter:
- ["Encounter, Performed": "Non-Elective Inpatient Encounter"] NonElectiveEncounter where Global."LengthInDays"(NonElectiveEncounter.relevantPeriod)<= 120 and NonElectiveEncounter.relevantPeriod ends during "Measurement Period"

28

Denominator

Patients with a principal diagnosis of Ischemic Stroke

Denominator:

      TJC."Ischemic Stroke Encounter"

TJC.Ischemic Stroke Encounter:

- "Encounter with Principal Diagnosis and Age" EncounterWithAge
  where *EncounterWithAge.principalDiagnosis in "Ischemic Stroke"*

Denominator Exclusions

Patients admitted for elective carotid intervention (Implicitly modeled by only including non-elective hospitalizations)

Patients discharged to another hospital

Patients who left against medical advice

Patients who expired

Patients discharged to home for hospice care

Patients discharged to a health care facility for hospice care

Patients with comfort measures documented

Denominator Exclusions: TJC."Ischemic Stroke Encounters with Discharge Status"
union TJC."Comfort Measures during Hospitalization"

TJC.Ischemic Stroke Encounters with Discharge Status:

- (("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"))

TJC.Comfort Measures during Hospitalization:

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

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

Denominator Exclusions

Patients admitted for elective carotid intervention (Implicitly modeled by only including non-elective hospitalizations)
Patients discharged to another hospital
Patients who left against medical advice
Patients who expired
Patients discharged to home for hospice care
Patients discharged to a health care facility for hospice care
Patients with comfort measures documented

Denominator Exclusions: TJC."Ischemic Stroke Encounters with Discharge Status"
union TJC."Comfort Measures during Hospitalization"

TJC.Ischemic Stroke Encounters with Discharge Status:

- (("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

Patients admitted for elective carotid intervention (Implicitly modeled by only including non-elective hospitalizations)
Patients discharged to another hospital
Patients who left against medical advice
Patients who expired
Patients discharged to home for hospice care
Patients discharged to a health care facility for hospice care
Patients with comfort measures documented

Denominator Exclusions: TJC."Ischemic Stroke Encounters with Discharge Status"
union TJC."Comfort Measures during Hospitalization"

TJC.Ischemic Stroke Encounters with Discharge Status:

- *(("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"))

TJC.Comfort Measures during Hospitalization:

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

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

Denominator Exclusions

Patients admitted for elective carotid intervention (Implicitly modeled by only including non-elective hospitalizations)

Patients discharged to another hospital

Patients who left against medical advice

Patients who expired

Patients discharged to home for hospice care

Patients discharged to a health care facility for hospice care

Patients with comfort measures documented

Denominator Exclusions: TJC."Ischemic Stroke Encounters with Discharge Status" union TJC."Comfort Measures during Hospitalization"

TJC.Ischemic Stroke Encounters with Discharge Status:

- *(("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"))*

TJC.Comfort Measures during Hospitalization:

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

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

Denominator Exclusions

Patients admitted for elective carotid intervention (Implicitly modeled by only including non-elective hospitalizations)

Patients discharged to another hospital

Patients who left against medical advice

Patients who expired

Patients discharged to home for hospice care

Patients discharged to a health care facility for hospice care

Patients with comfort measures documented

Denominator Exclusions: TJC."Ischemic Stroke Encounters with Discharge Status"
union TJC."Comfort Measures during Hospitalization"

TJC.Ischemic Stroke Encounters with Discharge Status:

- *(("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"))

TJC.Comfort Measures during Hospitalization:

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

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

Denominator Exclusions

Patients admitted for elective carotid intervention (Implicitly modeled by only including non-elective hospitalizations)
Patients discharged to another hospital
Patients who left against medical advice
Patients who expired
Patients discharged to home for hospice care
Patients discharged to a health care facility for hospice care
Patients with comfort measures documented

> **Denominator Exclusions:** TJC."Ischemic Stroke Encounters with Discharge Status"
> union TJC."Comfort Measures during Hospitalization"

TJC.Ischemic Stroke Encounters with Discharge Status:

- *(("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"))

TJC.Comfort Measures during Hospitalization:

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

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

Denominator Exclusions

Patients admitted for elective carotid intervention (Implicitly modeled by only including non-elective hospitalizations)
Patients discharged to another hospital
Patients who left against medical advice
Patients who expired
Patients discharged to home for hospice care
Patients discharged to a health care facility for hospice care
Patients with comfort measures documented

> **Denominator Exclusions:** TJC."Ischemic Stroke Encounters with Discharge Status"
> union TJC."Comfort Measures during Hospitalization"

TJC.Ischemic Stroke Encounters with Discharge Status:

- *(("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"))

TJC.Comfort Measures during Hospitalization:

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

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

Numerator

Patients prescribed or continuing to take antithrombotic therapy at hospital discharge

> **Numerator:** TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
> with "Antithrombotic Therapy at Discharge" DischargeAntithrombotic
> such that DischargeAntithrombotic.authorDatetime during
> IschemicStrokeEncounter.relevantPeriod

Numerator

- TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
  with "Antithrombotic Therapy at Discharge" DischargeAntithrombotic
  such that *DischargeAntithrombotic.authorDatetime during
  IschemicStrokeEncounter.relevantPeriod*

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

Denominator Exceptions

Patients with a documented reason for not prescribing antithrombotic therapy at discharge

Denominator Exceptions: TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
with "Antithrombotic Not Given at Discharge" NoDischargeAntithrombotic
such that NoDischargeAntithrombotic.authorDatetime during
IschemicStrokeEncounter.relevantPeriod

Antithrombotic Not Given at Discharge:

- ["Medication, Not Discharged": "Antithrombotic Therapy"] NoAntithromboticDischarge
where NoAntithromboticDischarge.*negationRationale* in "Medical Reason"
or NoAntithromboticDischarge.negationRationale in "Patient Refusal"

Mia Nievera, MSN

Karen Kolbusz, MBA, BSN

STK-3 Anticoagulation Therapy for Atrial Fibrillation (CMS71v8)

The Joint Commission

December 11, 2018

Introduction

Anticoagulation Therapy for Atrial Fibrillation/Flutter

- Atrial fibrillation / flutter (AF/AFF) increases an individual's risk for stroke five-fold. Nearly 20% of all strokes are attributed to this arrhythmia (CDC, 2017).

- Multiple clinical trials have demonstrated that relative risk of thromboembolic stroke was reduced by 68% for atrial fibrillation patients treated with warfarin. Recent studies indicate that newer direct oral anticoagulant medications may be administered to select patients for secondary prevention of cardioembolic stroke. (Kernan WN, et. al., 2014)

- For most patients with acute ischemic stroke in the setting of atrial fibrillation, it is reasonable to initiate oral anticoagulation within 4 to 14 days after the onset of neurological symptoms (Class IIa; Level of Evidence B-NR) (Powers WJ, et. al., 2018).

The Joint Commission

Initial Population- STK-3 (CMS71v8)

Patients age 18 and older discharged from inpatient care (non-elective admissions) with a principal diagnosis of Ischemic or Hemorrhagic Stroke and a length of stay less than or equal to 120 days that ends during the measurement period

Initial Population:

TJC.Encounter with Principal Diagnosis and Age

TJC.Encounter with Principal Diagnosis and Age:

- "All Stroke Encounter" AllStrokeEncounter with ["Patient Characteristic Birthdate"] BirthDate such that Global."CalendarAgeInYearsAt"(BirthDate.birthDatetime, start of AllStrokeEncounter.relevantPeriod)>= 18

  TJC.All Stroke Encounter:
  - "Non Elective Inpatient Encounter" NonElectiveEncounter where NonElectiveEncounter.principalDiagnosis in "Hemorrhagic Stroke" or NonElectiveEncounter.principalDiagnosis in "Ischemic Stroke"

    TJC.Non Elective Inpatient Encounter:
    - ["Encounter, Performed": "Non-Elective Inpatient Encounter"] NonElectiveEncounter where Global."LengthInDays"(NonElectiveEncounter.relevantPeriod)<= 120 and NonElectiveEncounter.relevantPeriod ends during "Measurement Period"

Denominator

Patients with a principal diagnosis of Ischemic Stroke, and a history of Atrial Ablation, or current or history of Atrial Fibrillation/Flutter

Denominator:

"Encounter with Atrial Ablation Procedure"
union "History of Atrial Fibrillation or Flutter"
union "Current Diagnosis Atrial Fibrillation or Flutter"

Encounter with Atrial Ablation Procedure:

- TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter with ["Procedure, Performed": "Atrial Ablation"] AtrialAblation such that *AtrialAblation*.relevantPeriod *starts before start of IschemicStrokeEncounter.*relevantPeriod

Denominator

Patients with a principal diagnosis of Ischemic Stroke, and a history of Atrial Ablation, or current or history of Atrial Fibrillation/Flutter

> **Denominator:**
>
> "Encounter with Atrial Ablation Procedure"
> union "History of Atrial Fibrillation or Flutter"
> union "Current Diagnosis Atrial Fibrillation or Flutter"

Encounter with Atrial Ablation Procedure:

- *TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter with ["Procedure, Performed": "Atrial Ablation"] AtrialAblation such that AtrialAblation.relevantPeriod starts before start of IschemicStrokeEncounter.relevantPeriod*

History of Atrial Fibrillation or Flutter:

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

Denominator

Patients with a principal diagnosis of Ischemic Stroke, and a history of Atrial Ablation, or current or history of Atrial Fibrillation/Flutter

Denominator:

"Encounter with Atrial Ablation Procedure"
union "History of Atrial Fibrillation or Flutter"
union "Current Diagnosis Atrial Fibrillation or Flutter"

Encounter with Atrial Ablation Procedure:

- *TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter with ["Procedure, Performed": "Atrial Ablation"] AtrialAblation such that AtrialAblation.relevantPeriod starts before start of IschemicStrokeEncounter.relevantPeriod*

History of Atrial Fibrillation or Flutter:

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

Current Diagnosis Atrial Fibrillation or Flutter

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

44

Denominator Exclusions

Patients admitted for elective carotid intervention (Implicitly modeled by only including non-elective hospitalizations)
Patients discharged to another hospital
Patients who left against medical advice
Patients who expired
Patients discharged to home for hospice care
Patients discharged to a health care facility for hospice care
Patients with comfort measures documented

Denominator Exclusions: ("Denominator" Encounter where
Encounter.dischargeDisposition in "Discharge To Acute Care Facility"
or Encounter.dischargeDisposition in "Left Against Medical Advice"
or Encounter.dischargeDisposition in "Patient Expired"
or Encounter.dischargeDisposition in "Discharged to Home for Hospice Care"
or Encounter.dischargeDisposition in "Discharged to Health Care Facility for Hospice Care")
union "Comfort Measures during Hospitalization"

Denominator:

- ("Denominator" Encounter where Encounter.dischargeDisposition in "Discharge To Acute Care Facility"
or Encounter.dischargeDisposition in "Left Against Medical Advice"
or Encounter.dischargeDisposition in "Patient Expired"
or Encounter.dischargeDisposition in "Discharged to Home for Hospice Care"
or Encounter.dischargeDisposition in "Discharged to Health Care Facility for Hospice Care")

TJC.Intervention Comfort Measures:

- "Denominator" Encounter with TJC."Intervention Comfort Measures" ComfortMeasure
such that Coalesce(start of ComfortMeasure.relevantPeriod,
ComfortMeasure.authorDatetime)during Global."Hospitalization"(Encounter)

  TJC.Intervention Comfort Measures:

  - ["Intervention, Order": "Comfort Measures"]
union ["Intervention, Performed": "Comfort Measures"]

Numerator

Patients prescribed or continuing to take anticoagulation therapy at hospital discharge

Numerator: "Denominator" Encounter with "Anticoagulant Therapy at Discharge" DischargeAnticoagulant such that DischargeAnticoagulant.authorDatetime during Encounter.relevantPeriod

Denominator:

- "Encounter with Atrial Ablation Procedure"
  union "History of Atrial Fibrillation or Flutter"
  union "Current Diagnosis Atrial Fibrillation or Flutter"

Anticoagulant Therapy at Discharge:

- ["Medication, Discharge": "Anticoagulant Therapy"]

Denominator Exceptions

Patients with a documented reason for not prescribing anticoagulant therapy at discharge

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

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

Mia Nievera, MSN

Karen Kolbusz, MBA, BSN

STK-6 Discharged on Statin Medication (CMS105v7)

December 11, 2018

The Joint Commission

Introduction

Discharged on Statin Medication

- There is an extensive and consistent body of evidence supporting the use of statins for secondary prevention in patients with clinically evident atherosclerotic cardiovascular disease (ASCVD), which includes individuals with ischemic stroke due to large artery atherosclerosis, individuals with ischemic stroke due to intrinsic small vessel disease, and individuals with ischemic stroke not directly due to atherosclerosis but with clinically evident atherosclerotic disease in an uninvolved cerebral or noncerebral bed.

- High-intensity statin therapy should be initiated or continued as first-line therapy in women and men $\leq$ 75 years of age who have clinical ASCVD, unless contraindicated (Class I; Level of Evidence A) (Powers WJ, et. al., 2018).

- Moderate-intensity statin therapy is a second option for patients unable to tolerate high-intensity statin therapy.

Initial Population- STK-6 (CMS105v7)

Patients age 18 and older discharged from inpatient care (non-elective admissions) with a principal diagnosis of Ischemic or Hemorrhagic Stroke and a length of stay less than or equal to 120 days that ends during the measurement period

Initial Population:

        TJC.Encounter with Principal Diagnosis and Age

TJC.Encounter with Principal Diagnosis and Age:

- "All Stroke Encounter" AllStrokeEncounter with ["Patient Characteristic Birthdate"] BirthDate such that Global."CalendarAgeInYearsAt"(BirthDate.birthDatetime, start of AllStrokeEncounter.relevantPeriod)>= 18

  TJC.All Stroke Encounter:
  - "Non Elective Inpatient Encounter" NonElectiveEncounter where NonElectiveEncounter.principalDiagnosis in "Hemorrhagic Stroke" or NonElectiveEncounter.principalDiagnosis in "Ischemic Stroke"

    TJC.Non Elective Inpatient Encounter:
    - ["Encounter, Performed": "Non-Elective Inpatient Encounter"] NonElectiveEncounter where Global."LengthInDays"(NonElectiveEncounter.relevantPeriod)<= 120 and NonElectiveEncounter.relevantPeriod ends during "Measurement Period"

Denominator

Patients with a principal diagnosis of Ischemic stroke

Denominator:

TJC."Ischemic Stroke Encounter"

TJC.Ischemic Stroke Encounter:

- "Encounter with Principal Diagnosis and Age" EncounterWithAge
  where EncounterWithAge.principalDiagnosis in "Ischemic Stroke"

TJC.Encounter with Prinicipal Diagnosis and Age:
- "All Stroke Encounter" AllStrokeEncounter with ["Patient Characteristic Birthdate"] BirthDate such that
  Global."CalendarAgeInYearsAt"(BirthDate.birthDatetime, start of AllStrokeEncounter.relevantPeriod)>= 18

TJC.All Stroke Encounter:
- "Non Elective Inpatient Encounter" NonElectiveEncounter where NonElectiveEncounter.principalDiagnosis in
  "Hemorrhagic Stroke" or NonElectiveEncounter.principalDiagnosis in "Ischemic Stroke"

TJC.Non Elective Inpatient Encounter:
- ["Encounter, Performed": "Non-Elective Inpatient Encounter"] NonElectiveEncounter where
  Global."LengthInDays"(NonElectiveEncounter.relevantPeriod)<= 120 and
  NonElectiveEncounter.relevantPeriod ends during "Measurement Period"

Denominator Exclusions

Patients admitted for elective carotid intervention (Implicitly modeled by only including non-elective hospitalizations)
Patients discharged to another hospital
Patients who left against medical advice
Patients who expired
Patients discharged to home for hospice care
Patients discharged to a health care facility for hospice care
Patients with comfort measures documented

Denominator Exclusions: TJC."Ischemic Stroke Encounters with Discharge Status"
union TJC."Comfort Measures during Hospitalization"

TJC.Ischemic Stroke Encounters with Discharge Status:
- (("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"))

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

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

—— 52

Numerator

Patients prescribed or continuing to take statin medication at hospital discharge

Numerator: TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
with "Statin at Discharge" DischargeStatin
such that DischargeStatin.authorDatetime during IschemicStrokeEncounter.relevantPeriod

Statin at Discharge:
- ["Medication, Discharge": "Statin Grouper"]

Denominator Exceptions

Patients with a reason for not prescribing statin medication at discharge
Patients with a maximum LDL-c result of less than 70 mg/dL <= 30 days prior to arrival or any time during the hospital stay.

> **Denominator Exceptions:** (TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
> with "Statin Not Given at Discharge" NoDischargeStatin
> such that NoDischargeStatin.authorDatetime during
> IschemicStrokeEncounter.relevantPeriod)
> union (TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
> with "Statin Allergy" StatinAllergy
> such that StatinAllergy.prevalencePeriod starts on or before end of
> IschemicStrokeEncounter.relevantPeriod)
> union "Encounter with Max LDL less than 70 mg per dL"

Statin Not Given at Discharge:
- ["Medication, Not Discharged": "Statin Grouper"] NoStatinDischarge
  where NoStatinDischarge.negationRationale in "Medical Reason"
  or NoStatinDischarge.negationRationale in "Patient Refusal"

Statin Allergy:
- ["Allergy/Intolerance": "Statin Allergen"]

Encounter with Max LDL less than 70 mg per dL
- TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
  where Max(["Laboratory Test, Performed": "LDL-c"] Ldl
  where Ldl.resultDatetime during Interval[Global."ToDate"(start of
  IschemicStrokeEncounter.relevantPeriod - 30 days),
  end of IschemicStrokeEncounter.relevantPeriod]
  return Ldl.result as Quantity)< 70 'mg/dL'

Denominator Exceptions

Patients with a reason for not prescribing statin medication at discharge
Patients with a maximum LDL-c result of less than 70 mg/dL <= 30 days prior to arrival or any time during the hospital stay.

Denominator Exceptions: (TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
with "Statin Not Given at Discharge" NoDischargeStatin
such that NoDischargeStatin.authorDatetime during
IschemicStrokeEncounter.relevantPeriod)
union (TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
with "Statin Allergy" StatinAllergy
such that StatinAllergy.prevalencePeriod starts on or before end of
IschemicStrokeEncounter.relevantPeriod)
union "Encounter with Max LDL less than 70 mg per dL"

Statin Not Given at Discharge:
- *["Medication, Not Discharged": "Statin Grouper"] NoStatinDischarge*
  where NoStatinDischarge.negationRationale in "Medical Reason"
  or NoStatinDischarge.negationRationale in "Patient Refusal"

Statin Allergy:
- ["Allergy/Intolerance": "Statin Allergen"]

Encounter with Max LDL less than 70 mg per dL
- *TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter*
  where Max(["Laboratory Test, Performed": "LDL-c"] Ldl
  where Ldl.resultDatetime during Interval[Global."ToDate"(start of
  IschemicStrokeEncounter.relevantPeriod - 30 days),
  end of IschemicStrokeEncounter.relevantPeriod]
  return Ldl.result as Quantity)< 70 'mg/dL'

Denominator Exceptions

Patients with a reason for not prescribing statin medication at discharge

Patients with a maximum LDL-c result of less than 70 mg/dL <= 30 days prior to arrival or any time during the hospital stay.

> Denominator Exceptions: (TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
> with "Statin Not Given at Discharge" NoDischargeStatin
> such that NoDischargeStatin.authorDatetime during
> IschemicStrokeEncounter.relevantPeriod)
> union (TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
> with "Statin Allergy" StatinAllergy
> such that StatinAllergy.prevalencePeriod starts on or before end of
> IschemicStrokeEncounter.relevantPeriod)
> union "Encounter with Max LDL less than 70 mg per dL"

Statin Not Given at Discharge:
- *["Medication, Not Discharged": "Statin Grouper"] NoStatinDischarge*
  where NoStatinDischarge.negationRationale in "Medical Reason"
  or NoStatinDischarge.negationRationale in "Patient Refusal"

Statin Allergy:
- *["Allergy/Intolerance": "Statin Allergen"]*

Encounter with Max LDL less than 70 mg per dL
- TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
  where *Max*(*["Laboratory Test, Performed": "LDL-c"]* Ldl
  where Ldl.resultDatetime during Interval[Global."ToDate"(start of
  IschemicStrokeEncounter.relevantPeriod - 30 days),
  end of IschemicStrokeEncounter.relevantPeriod]
  return Ldl.result as Quantity)< 70 'mg/dL'

Denominator Exceptions

Patients with a reason for not prescribing statin medication at discharge
Patients with a maximum LDL-c result of less than 70 mg/dL <= 30 days prior to arrival or any time during the hospital stay.

> Denominator Exceptions: (TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
> with "Statin Not Given at Discharge" NoDischargeStatin
> such that NoDischargeStatin.authorDatetime during
> IschemicStrokeEncounter.relevantPeriod)
> union (TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
> with "Statin Allergy" StatinAllergy
> such that StatinAllergy.prevalencePeriod starts on or before end of
> IschemicStrokeEncounter.relevantPeriod)
> union "Encounter with Max LDL less than 70 mg per dL"

Statin Not Given at Discharge:

- *["Medication, Not Discharged": "Statin Grouper"] NoStatinDischarge*
  where NoStatinDischarge.negationRationale in "Medical Reason"
  or NoStatinDischarge.negationRationale in "Patient Refusal"

Statin Allergy:

- *["Allergy/Intolerance": "Statin Allergen"]*

Encounter with Max LDL less than 70 mg per dL

- TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
  where Max(["Laboratory Test, Performed": "LDL-c"] Ldl
  where Ldl.resultDatetime during Interval[Global."ToDate"(start of
  IschemicStrokeEncounter.relevantPeriod - 30 days),
  end of IschemicStrokeEncounter.relevantPeriod]
 *return Ldl.result as Quantity)< 70 'mg/dL'*

Denominator Exceptions

Patients with a reason for not prescribing statin medication at discharge

Patients with a maximum LDL-c result of less than 70 mg/dL <= 30 days prior to arrival or any time during the hospital stay.

> Denominator Exceptions: (TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
> with "Statin Not Given at Discharge" NoDischargeStatin
> such that NoDischargeStatin.authorDatetime during
> IschemicStrokeEncounter.relevantPeriod)
> union (TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
> with "Statin Allergy" StatinAllergy
> such that StatinAllergy.prevalencePeriod starts on or before end of
> IschemicStrokeEncounter.relevantPeriod)
> union "Encounter with Max LDL less than 70 mg per dL"

Statin Not Given at Discharge:

- *["Medication, Not Discharged": "Statin Grouper"] NoStatinDischarge*
  where NoStatinDischarge.negationRationale in "Medical Reason"
  or NoStatinDischarge.negationRationale in "Patient Refusal"

Statin Allergy:

- *["Allergy/Intolerance": "Statin Allergen"]*

Encounter with Max LDL less than 70 mg per dL

- TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
  where Max(["Laboratory Test, Performed": "LDL-c"] Ldl
  where Ldl.resultDatetime during *Interval[Global."ToDate"(start of*
  IschemicStrokeEncounter.relevantPeriod - 30 days),
  end of IschemicStrokeEncounter.relevantPeriod]
  return Ldl.result as Quantity)< 70 'mg/dL'

Denominator Exceptions

Patients with a reason for not prescribing statin medication at discharge

Patients with a maximum LDL-c result of less than 70 mg/dL <= 30 days prior to arrival or any time during the hospital stay.

> Denominator Exceptions: (TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
> with "Statin Not Given at Discharge" NoDischargeStatin
> such that NoDischargeStatin.authorDatetime during
> IschemicStrokeEncounter.relevantPeriod)
> union (TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
> with "Statin Allergy" StatinAllergy
> such that StatinAllergy.prevalencePeriod starts on or before end of
> IschemicStrokeEncounter.relevantPeriod)
> union "Encounter with Max LDL less than 70 mg per dL"

Statin Not Given at Discharge:

- *["Medication, Not Discharged": "Statin Grouper"] NoStatinDischarge*
  where NoStatinDischarge.negationRationale in "Medical Reason"
  or NoStatinDischarge.negationRationale in "Patient Refusal"

Statin Allergy:

- *["Allergy/Intolerance": "Statin Allergen"]*

Encounter with Max LDL less than 70 mg per dL

- TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
  where Max(["Laboratory Test, Performed": "LDL-c"] Ldl
  where *Ldl.resultDatetime during* Interval[Global."ToDate"(start of
  IschemicStrokeEncounter.relevantPeriod - 30 days),
  end of IschemicStrokeEncounter.relevantPeriod]
  return Ldl.result as Quantity)< 70 'mg/dL'

Resources

- CQL Specification - CQL Release 1, Standard for Trial Use (STU) 2
  - http://www.hl7.org/implement/standards/product_brief.cfm?product_id=400
  - http://cql.hl7.org/STU2/index.html
- CQL-Based HQMF IG – Release 1, STU 2.1
  - http://www.hl7.org/implement/standards/product_brief.cfm?product_id=405
- eCQI Resource Center
  - CQL Space, including the QDM v5.3 and v5.3 Annotated
    - https://ecqi.healthit.gov/cql
  - Check the eCQI Resource Center Events page and CQL Educational Resources page for more information
    - https://ecqi.healthit.gov/ecqi/ecqi-events
    - https://ecqi.healthit.gov/cql/cql-educational-resources
- Value Set Authority Center (VSAC)
  - https://vsac.nlm.nih.gov/
- CQL Formatting and Usage Wiki
  - https://github.com/esacinc/CQL-Formatting-and-Usage-Wiki/wiki
- CQL GitHub Tools Repository
  - https://github.com/cqframework/clinical_quality_language
- To submit an issue ticket for CQL, please visit the ONC JIRA site
  - https://oncprojecttracking.healthit.gov/support/projects/CQLIT
- To submit an issue ticket for CQM, please visit the
  - https://oncprojecttracking.healthit.gov/support/projects/CQM/issues

The Joint Commission

- Please submit questions now. Click the arrow next to "Questions" in the right hand navigation to expand the Questions pane.

- Include your name and organization with your question.

The Joint Commission
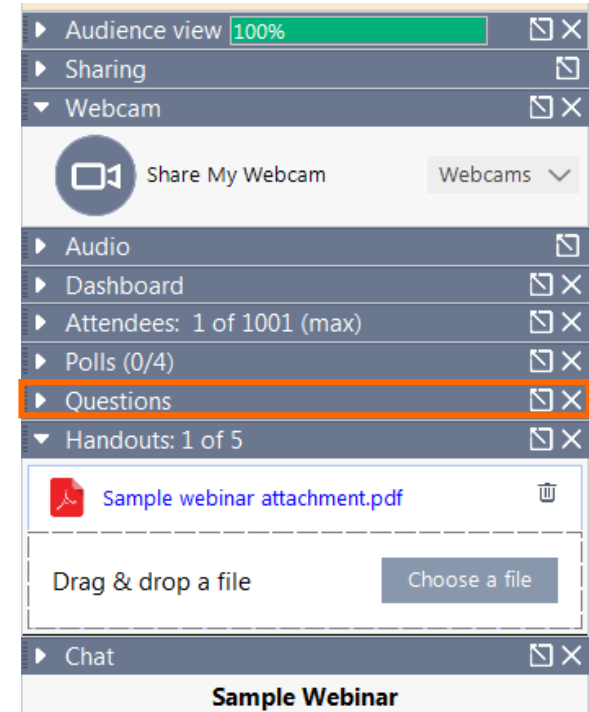
Reminder –

Slides are available for download now!

- − See the "Handouts" Section

- − Click the arrow to open the Handouts list, select the slides for today's session, and download.

Pioneers in Quality™
Expert to Expert Series: STK -2, -3, & -6

Visit
https://www.jointcommission.org/piq_expert_to_expert_series/ to register for future sessions and access slides, webinar recordings, and Q&A documents when available.

Session	Date	Registration Link	Slides	Recording	Q&A
EE#1: STK-2, -3, & -6	11-Dec-18	https://attendee.gotowebinar.com/register/5421084200868329987	To be posted following session	To be posted following session	To be posted following session
EE#2: STK-5 and AMI-8a	29-Jan-18	https://attendee.gotowebinar.com/register/39137406210683297 29	To be posted following session	To be posted following session	To be posted following session
EE#3: ED-1 and -2	12-Feb-19	https://attendee.gotowebinar.com/registe/8053319436273286145	To be posted following session	To be posted following session	To be posted following session
EE#4: VTE-1 and -2	26-Feb-19	https://attendee.gotowebinar.com/register/129573441984732417	To be posted following session	To be posted following session	To be posted following session
EE#5: CAC-3 and EDHI-1a	5-Mar-19	https://attendee.gotowebinar.com/register/7092534290085603329	To be posted following session	To be posted following session	To be posted following session
EE#6: PC-01 and 05	26-Mar-19	https://attendee.gotowebinar.com/register/1876921718893015041	To be posted following session	To be posted following session	To be posted following session

——— 63

Pioneers in Quality™
Expert to Expert Series: STK -2, -3, & -6

Visit https://www.jointcommission.org/topics/pioneers_in_quality.aspx for additional information about Pioneers in Quality and the Proven Practices Program.

CE Session Evaluation Survey and Certificate

Please click on the survey link as you exit GoToWebinar or in the automated email you will receive tomorrow. You will be directed to the evaluation survey.

We use your feedback to inform future content and assess the quality of our sessions.

The evaluation closes in 2 weeks.

After the evaluation period closes, a printable certificate will be emailed to all participants that complete the survey.

Thank you for attending this session.

PIONEERS IN QUALITY