Pioneers in Quality
Expert to Expert:
STK 6 – Discharged on Statin Medication
STK 8 – Discharge Education
STK 10 – Rehabilitation Therapy

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The Objectives of this Webinar

- Learning Objectives:
  - Explain logic specifications for STK-6, 8, and 10
  - Discuss frequently asked questions about STK-6, 8, and 10
  - Describe changes to measure specifications applicable for 2017 reporting
STK-6: DISCHARGED ON STATIN MEDICATION
Introduction STK-6

- 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. Both women and men with clinical ASCVD are at increased risk for recurrent ASCVD and ASCVD death.

- Intensive statin therapy is recommended for patients with atherosclerosis and LDLc \( \geq 100 \text{ mg/dL} \) with or without evidence of ASCVD (Stone NJ, et. al., 2013)

- Intensive statin therapy is recommended for patients with atherosclerosis, LDLc <100 mg/dL, and no evidence of ASCVD (Kernan WN, et. al., 2014)
STK-6: Initial Patient Population (CMS105v4)

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

- **Initial Population =**
  - AND: Age >= 18 year(s) at: Occurrence A of $EncounterInpatientNonElective
  - AND: Union of:
    - "Diagnosis, Active: Ischemic Stroke (ordinality: Principal)"
    - "Diagnosis, Active: Hemorrhagic Stroke (ordinality: Principal)"
    - starts during Occurrence A of $EncounterInpatientNonElective
STK-6: Denominator (CMS105v4)

- Patients with a principal diagnosis of ischemic stroke.

- **Denominator =**
  - AND: Initial Population
  - AND: "Diagnosis, Active: Ischemic Stroke (ordinality: Principal)" starts during Occurrence A of $EncounterInpatientNonElective
STK-6: Numerator (CMS105v4)

- Patients prescribed statin medication at hospital discharge.

Numerator =
  - AND: "Medication, Discharge: Statin" starts during Occurrence A of $EncounterInpatientNonElective
STK-6: Denominator Exclusions

- Patients with an LDL-c of less than 70 mg/dL <30 days prior to arrival or any time during the hospital stay
  - *This is part of the “Reason for Not Prescribing Statin Medication at Discharge”*

- Patients with a discharge disposition of:
  - Discharged to another hospital
  - Left against medical advice
  - Expired
  - Discharged to home for hospice care
  - Discharged to a health care facility for hospice care

- Patients with comfort measures documented
STK-6: Denominator Exclusions (CMS105v4)

• Denominator Exclusions =
  • OR: "Occurrence A of Laboratory Test, Performed: LDL-c" satisfies all
    ▪ (result < 70 mg/dL)
    ▪ satisfies any
      ▪ <= 30 day(s) ends before start of $EncounterInpatientNonElective
      ▪ starts during $EncounterInpatientNonElective
  • OR: Intersection of:
    ▪ Occurrence A of $EncounterInpatientNonElective
    ▪ "Encounter, Performed: Non-Elective Inpatient Encounter" satisfies any
      ▪ (discharge status: Discharge To Acute Care Facility)
      ▪ (discharge status: Left Against Medical Advice)
      ▪ (discharge status: Patient Expired)
      ▪ (discharge status: Discharged to Home for Hospice Care)
      ▪ (discharge status: Discharged to Health Care Facility for Hospice Care)
  • OR: $InterventionComfortMeasures starts during
    ▪ "Encounter, Performed: Emergency Department Visit" <= 1 hour(s) ends before or concurrent
  • OR: $InterventionComfortMeasures starts during Occurrence A of $EncounterInpatientNonElective
Denominator Exceptions (CMS105v4)

- The denominator exceptions reflect the remaining Reasons for Not Prescribing Statin Medication at Discharge:
  - Statin medication allergy
  - Patient refusal
  - Medical reason

- Denominator Exceptions =
  - OR: "Medication, Allergy: Statin Allergen" starts before or concurrent with end of Occurrence
  - OR: Union of:
    - "Medication, Discharge not done: Patient Refusal" for "Statin ingredient specific"
    - "Medication, Discharge not done: Medical Reason" for "Statin ingredient specific"
    - starts during Occurrence A of $EncounterInpatientNonElective
2017 Changes Specific to STK-6 (CMS105v5)

- Statin value set 2.16.840.1.113883.3.117.1.7.1.225
  - replaced by Statin Grouper 2.16.840.1.113762.1.4.1110.19
STK-6: Review of Must Know Items

- **Reason for Not Discharging on Statin Medication** is split between the Denominator Exclusions and Denominator Exceptions
- The 2017 reporting measure version (CMS105v5) includes a new OID for statin medications
  - But the codes included are the same.
STK-6 Question: CQM-1798

- The statin allergen value set includes multiple statin medications. It is possible to document allergies in the patient’s record using the drug category (ex. Allergy to Statins) instead of allergy to specific medication (ex. Allergy to Lipitor). Could the documentation of allergy to the Statin Category be used as a denominator exclusion? How can this be mapped to the ‘Statin Allergen’ value set?
- CQM-1798
CQM-1798 Answer

- You could map your statin allergy local code to one of the specific codes contained in the value set.
- RxNorm does not contain medication class codes.
- The CMS Blueprint for the Measures Management System, guides us to use RxNorm term types:
  - Brand Name (BN)
  - Ingredient (IN)
  - Multiple Ingredient (MIN)
  - Precise Ingredient (PIN)
STK-8: STROKE EDUCATION
Introduction STK-8

- Patient education programs for specific chronic conditions have increased healthful behaviors, improved health status, and/or decreased health care costs of their participants.

- Clinical practice guidelines include recommendations for patient and family education during hospitalization (Lorig KR, et. al., 1999)

- Information about the following topics should be provided to stroke patients and their families (American Heart Association/American Stroke Association, 2016):
  - Warning signs and symptoms of stroke
  - Activation of the Emergency Medical System (EMS) if stroke symptoms are noted or suspected
  - Risk factors for stroke and risk factor modification
  - Medication instructions
  - Follow-up with a physician/APN/PA after hospital discharge
Initial Patient Population (CMS107v4)

- Same as STK-6
- Patients age 18 and older discharged from inpatient care (non-elective admissions) with a principal diagnosis of ischemic or hemorrhagic stroke and a length of stay less than or equal to 120 days.

Initial Population =
  - AND: Age >= 18 year(s) at: Occurrence A of $EncounterInpatientNonElective
  - AND: Union of:
    - "Diagnosis, Active: Ischemic Stroke (ordinality: Principal)"
    - "Diagnosis, Active: Hemorrhagic Stroke (ordinality: Principal)"
    - starts during Occurrence A of $EncounterInpatientNonElective
STK-8 Denominator

- Ischemic stroke or hemorrhagic stroke patients discharged to home, home care, or court/law enforcement
STK-8 Numerator

- Patients with written documentation that they received education materials addressing 5 factors

Numerator =

AND:

OR:

AND: "Communication: From Provider to Patient: Activation of Emergency Medical System Education" starts during Occurrence A of $EncounterInpatientNonElective

AND: "Communication: From Provider to Patient: Instructions for Follow Up After Discharge" starts during Occurrence A of $EncounterInpatientNonElective

AND: "Communication: From Provider to Patient: Prescribed Medications Education" starts during Occurrence A of $EncounterInpatientNonElective

AND: "Communication: From Provider to Patient: Risk Factors Education" starts during Occurrence A of $EncounterInpatientNonElective

AND: "Communication: From Provider to Patient: Warning Signs and Symptoms Education" starts during Occurrence A of $EncounterInpatientNonElective

AND: "Communication: From Provider to Patient: Written Information Given" starts during Occurrence A of $EncounterInpatientNonElective

OR: "Communication: From Provider to Patient not done: Patient Refusal" for "Written Information Given" starts during Occurrence A of $EncounterInpatientNonElective
STK-8 Denominator Exclusions

- Patients with comfort measures documented

• Denominator Exclusions =
  - OR: $InterventionComfortMeasures starts during
    "Encounter, Performed: Emergency Department Visit" <= 1 hour(s) ends before or concur $EncounterInpatientNonElective
  - OR: $InterventionComfortMeasures starts during Occurrence A of $EncounterInpatientNonElective

• $InterventionComfortMeasures =
  - Union of:
    - "Intervention, Order: Comfort Measures"
    - "Intervention, Performed: Comfort Measures"
Changes Specific to STK-8 in 2017 (CMS107v5)

- Value set Instructions for Follow Up After Discharge (2.16.840.1.113883.3.117.1.7.1.378): Added 1 SNOMEDCT code (183616001) and deleted 1 SNOMEDCT code (61342007).
STK-8 Question: CQM-1911

- In order for the numerator to be satisfied, 5 components need to be met. In terms of submission, do all 5 elements have to be included as separate documents or an it be one document that may include all of those components?

- **CQM-1911**
CQM-1911 Answer

- Implementers may map a single reference to the educational materials in the EHR to each of the educational components for reporting purposes, as long as:

1. The materials address each and every one of the stroke education components specified in the eCQM logic

2. EHR documentation shows that the patient was given a copy of the materials satisfying all the education components (written instructions, as opposed to verbal education).
STK-8 Question: CQM-2180

- eCQM logic does not count Stroke Education completed during an Observation phase of an ER-Observation-Inpatient encounter (all under one account number).

- [CQM-2180](#)
CQM-2180 Answer

- This is an issue common to all eCQMs that we are currently unable to address within eCQM logic.
- See CQM-1608 for details
STK-10: ASSESSED FOR REHABILITATION
Stroke is the No. 5 cause of death and a leading cause of serious, long-term disability in America (American Heart Association, 2015).

Forty percent of stroke patients are left with moderate functional impairment and 15 to 30 percent with severe disability.

More than 60% of those who have experienced stroke, serious injury, or a disabling disease have never received rehabilitation.

Stroke rehabilitation should begin as soon as the diagnosis of stroke is established and life-threatening problems are under control (Veterans Health Administration, Department of Defense; 2010).
STK-10 Initial Population

- Same as STK-6 and STK-8
- Patients age 18 and older discharged from inpatient care (non-elective admissions) with a principal diagnosis of ischemic or hemorrhagic stroke and a length of stay less than or equal to 120 days.

  Initial Population =
  - AND: Age >= 18 year(s) at: Occurrence A of $EncounterInpatientNonElective
  - AND: Union of:
    - "Diagnosis, Active: Ischemic Stroke (ordinality: Principal)"
    - "Diagnosis, Active: Hemorrhagic Stroke (ordinality: Principal)"
    - starts during Occurrence A of $EncounterInpatientNonElective
STK-10 Denominator

- Same as the Initial Population

- Note: STK-10 may have a larger denominator count than the rest of the STK measures
  - STK 2, 3, 4, 5, 6: Ischemic Stroke patients
  - STK-8 Ischemic and Hemorrhagic discharged to home or police
  - STK-10: ALL Ischemic and Hemorrhagic
STK-10 Numerator

- Patients assessed for or who received rehabilitation services
- Patients who refused rehabilitation assessment

Numerator =

AND:

OR: Union of:
- "Procedure, Performed: Rehabilitation Assessment"
- "Procedure, Performed: Rehabilitation Therapy"
- "Procedure, Performed not done: Patient Refusal" for "Rehabilitation Assessment" starts during Occurrence A of $EncounterInpatientNonElective

OR: Intersection of:
- Occurrence A of $EncounterInpatientNonElective
- "Encounter, Performed: Non-Elective Inpatient Encounter (discharge status: Discharged to Rehabilitation Facility)"
STK-10 Denominator Exclusions

- Patients with comfort measures documented
- Patients with a discharge disposition of:
  - Discharged to another hospital
  - Left against medical advice (AMA)
  - Expired
  - Home for hospice care
  - Health care facility for hospice care
STK-10 Denominator Exclusions

- Denominator Exclusions =
  - OR: Intersection of:
    - Occurrence A of $EncounterInpatientNonElective
    - "Encounter, Performed: Non-Elective Inpatient Encounter" satisfies any
      - (discharge status: Discharge To Acute Care Facility)
      - (discharge status: Left Against Medical Advice)
      - (discharge status: Discharged to Home for Hospice Care)
      - (discharge status: Patient Expired)
      - (discharge status: Discharged to Health Care Facility for Hospice Care)
  - OR: $InterventionComfortMeasures starts during Occurrence A of $EncounterInpatientNonElective
  - OR: $InterventionComfortMeasures starts during
    - "Encounter, Performed: Emergency Department Visit" <= 1 hour(s) ends before or concurrently
      $EncounterInpatientNonElective
Changes Specific to STK-10 in 2017 (CMS102v5)

- Added numerator logic for medical reasons for no rehabilitation therapy assessment
- Based on Jira request:
  - Added 9 additional SNOMEDCT codes to Rehabilitation Assessment value set (removed 1 code)
  - Added 4 additional codes to Rehabilitation Therapy value set
STK-10 Question: CQM-1594

- What if stroke assessment was started but not completed due to a patient condition? Should such cases be included in the numerator?

- CQM-1594
CQM-1594 Answer

- The numerator logic looks for a start date and time of a rehabilitation assessment
- The measure does not specify any parameters as to the level of completeness of a rehabilitation assessment
- Documentation of patient refusal meets numerator criteria
- In 2017, logic has been added so patients who can not tolerate or are not appropriate for rehab are also included in the numerator
STK-10 Question: CQM-2024

- Our vendor states we can use either the Rehabilitation Order or the Rehabilitation Assessment for the SNOMED CT values sets. Can you please clarify?

- CQM-2024

- Also, CQM-2189
An order alone is not sufficient

The numerator logic uses the datatype “Procedure, Performed” to represent both assessment and therapy

Patients who have only had the assessment or therapy ordered (and not completed and performed) should not be included in the numerator
STK-10 Question: CQM-2248

- Data Criteria include BOTH:
  - Procedure, Performed: Rehabilitation Assessment
  - Procedure, Performed: Rehabilitation Therapy
- Are both data elements required to meet this measure?
- CQM-2248
CQM-2248 Answer

- No, either may be used.
- The eCQM logic uses a “Union” operator
- To satisfy a Union, *at least one* of the data elements being unioned must be present

\[
\text{Numerator} = \text{AND:}
\]

\[
\text{OR: Union of:}
\]

- "Procedure, Performed: Rehabilitation Assessment"
- "Procedure, Performed: Rehabilitation Therapy"
- "Procedure, Performed not done: Patient Refusal" for "Rehabilitation Assessment"
- starts during Occurrence A of $\text{EncounterInpatientNonElective}$
GENERAL STK CHANGES FOR 2017
General STK changes for 2017

- Introduced encounter diagnoses, including principal
- Respecified *Diagnosis* datatypes
- Ischemic Stroke value set:
  - Added 3 SNOMEDCT codes
  - Deleted 5 SNOMEDCT codes
  - Deleted 18 ICD10CM codes
- Medical Reason (2.16.840.1.113883.3.117.1.7.1.473)
  - Deleted 1 SNOMEDCT code
QDM 4.2: Encounter Diagnoses

- *Encounter, Performed (principal diagnosis)*
  - The coded diagnosis/problem established after study to be chiefly responsible for occasioning the admission of the patient to the hospital for care
  - Expectation: Only 1 principal diagnosis per encounter
QDM 4.2: Encounter Diagnoses

- **Encounter, Performed (diagnosis)**
  - A coded diagnosis/problem addressed during the encounter
QDM 4.2: Respecified *Diagnosis*

- Consolidated active, inactive, and resolved into *one* Diagnosis datatype
- Status is determined by the absence or presence of the abatement datetime (effective time high)
Example: Encounter Diagnoses

- STK-6 Denominator changed from:

  - Denominator =
    - AND: Initial Population
    - AND: "Diagnosis, Active: Ischemic Stroke (ordinality: Principal)" starts during Occurrence A of $EncounterInpatientNonElective

- To:

  - Denominator =
    - AND: Initial Population
    - AND: Intersection of:
      - Occurrence A of $EncounterInpatientNonElective
      - "Encounter, Performed: Non-Elective Inpatient Encounter (principal diagnosis: Ischemic Stroke)"
Question

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

- CQM-1631
Answer

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

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

- Why don’t the 2015 eCQMs requiring negation for a medication comply with QRDA-1 Release 3 and logic guidance documents?
  - Example: Denominator Exceptions:
    - Medication, Order not done: Patient Refusal for “t-PA ingredient specific”:
    - Shouldn’t the logic be rewritten to use the nullflavor?
Answer

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

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

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

- If a patient is cared for in one facility’s ED and then moved to another facility for their inpatient care, is the expectation that relevant eCQM’s would be calculated across those separate visits?
  - Example: The encounters are documented in the same EHR database and the facilities are both part of the same TIN?
Answer

- If each facility within the healthcare system has its own CCN, then each facility must report their data separately under their own CCN.
- However, if the healthcare system and its entities share a CCN number, then they should report as one entity.
Please send additional feedback on the content of this program, and your suggestions to improve future programs, to:

PioneersInQuality@jointcommission.org