Pioneers in Quality

Expert to Expert:

CAC- 3 – Home Management Plan of Care (HMPC) Document Given to Patient/Caregiver

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The Objectives of this Webinar

Learning Objectives:

- Explain logic specifications for CAC-3
- Discuss frequently asked questions about CAC-3
- Describe changes to measure specifications applicable for 2017 reporting
Introduction CAC-3

- Asthma is the most common chronic disease in children and a major cause of morbidity and health care costs nationally. Nearly two of every three children who currently have asthma had at least one attack in the past 12 months. Chronic asthma in children can account for an annual loss of more than 14 million school days per year, according to the Asthma and Allergy Foundation (Asthma Facts and Figures).
- Evidence from National Heart Lung and Blood Institute (NHLBI) guidelines that actual self-management of asthma by the patient or caregiver leads to more positive outcomes. Appropriate self-management is completely reliant upon patient education. Patient education is more effective when it aims at training self-management skills that will alter behavior (Norris, et al, 2001).
Purpose

Home Management Plan of Care (HMPC) Document Given to Patient/Caregiver

- An assessment that there is documentation in the medical record that a Home Management Plan of Care (HMPC) document was given to the pediatric asthma patient/caregiver.
- Improvement Noted as an increase in rate
CAC-3 Initial Patient Population (CMS26V3)

- Pediatric asthma inpatients with an age of 2 through 17 years, and length of stay less than or equal to 120 days.

- **Initial Population =**
  
  AND: "Diagnosis, Active: Asthma (ordinality: Principal)" starts during Occurrence A of $EncounterInpatient
  
  AND: Age >= 2 year(s) at: Occurrence A of $EncounterInpatient
  
  AND: Age <= 17 year(s) at: Occurrence A of $EncounterInpatient
CAC- 3 Denominator (CMS26V3)

- Patients discharged to home or police custody

  **Denominator =**
  - AND: Initial Population
  - AND: Intersection of:
    - Occurrence A of $EncounterInpatient
    - "Encounter, Performed: Encounter Inpatient (discharge status: Discharge To Home Or Police Custody)"

- **Denominator Exclusions =**
  - None
CAC-3 Numerator (CMS26V3)

Pediatric asthma inpatients with documentation that they or their caregivers were given a written Home Management Plan of Care (HMPC) document that addresses all of the following:

1. Arrangements for follow-up care
2. Environmental control and control of other triggers
3. Method and timing of rescue actions
4. Use of controllers
5. Use of relievers
Numerator CAC3 (CMS26V3)

- **Numerator =**
  - AND: Union of:
    - "Communication: From Provider to Patient: Asthma Management Plan"
    - "Communication: From Provider to Patient not done: Patient Refusal" for "Asthma Management Plan"
    - starts during Occurrence A of $EncounterInpatient
- **Numerator Exclusions =**
  - None
CAC3 Denominator Exceptions and Stratification (CMS26V3)

- Denominator Exceptions = None
- Stratification = None
Initial Patient Population changes for 2017 (CMS26V4.2)

- Introduced encounter diagnosis, including principal
- Added intersection
- Initial Population =
  - AND: Intersection of:
    - Occurrence A of $EncounterInpatient
    - "Encounter, Performed: Encounter Inpatient (principal diagnosis: Asthma)"
  - AND: Age>= 2 year(s) at: Occurrence A of $EncounterInpatient
  - AND: Age<= 17 year(s) at: Occurrence A of $EncounterInpatient
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
Please send additional feedback on the content of this program, and your suggestions to improve future programs, to:

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CMS31/EHDI-1a: Hearing Screening Prior to Hospital Discharge

Presented by Lantana Consulting Group in partnership with the Centers for Disease Control and Prevention

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Background

CDC funds Early Hearing Detection and Intervention (EHDI) programs to make sure that children who are deaf or hard of hearing receive critical services.

When children who are deaf or hard of hearing start getting critical services early, they are more likely to reach their full potential and live a healthy, productive adult life.

1 MONTH
All newborns should receive a hearing screening before 1 month of age.

3 MONTHS
All infants who are possibly deaf or hard of hearing should have a complete hearing evaluation before 3 months of age.

6 MONTHS
All infants identified as deaf or hard of hearing should receive critical services before 6 months of age.

Diagram created by Centers for Disease Control and Prevention, EHDI program
EHDI Quality Measure Set

- Hearing screening prior to hospital discharge (NQF#1354, EHDI-1a) – paper measure
- **Hearing Screening prior to hospital discharge** eMeasure (NQF#1354, EHDI-1a, CMS31) – eMeasure
- Audiological evaluation no later than 3 months of age (NQF#1360, EHDI-3)
- Signed Part C Individual Family Service Plan before 6 months of age (NQF#1361, EHDI-4a)
This measure assesses the proportion of births that have been screened for hearing loss before hospital discharge.
Performance benchmarks represent a consensus of expert opinion in the field of newborn hearing screening and intervention. Frequent measures of quality permit prompt recognition and correction of any unstable component of the EHDI process and may trigger hospital or jurisdictional compliance activities, such as re-writing of procedural guidelines or re-training of screening staff.

Because of the accessibility of babies in the newborn nursery, hearing screening is best accomplished prior to hospital discharge.

Birthing facility staff should review the effectiveness and timeliness of screening relative to nursery discharge.
Logic statements that are reused throughout a measure

- Denoted with a "$
- Defined in the Data Criteria (QDM Variables) section

$\text{EncounterInpatient} =

- "Encounter, Performed: Encounter Inpatient" satisfies all
  - (length of stay $\leq$ 120 day(s))
  - ends during "Measurement Period"
The Encounter must be during the measurement period, with a length of stay \( \leq 120 \text{ days} \), and a diagnosis of live birth or liveborn newborn born in hospital.

- AND: Occurrence A of $EncounterInpatient ends during "Measurement Period"
- AND: Union of:
  - "Diagnosis, Active: Liveborn Newborn Born in Hospital"
  - "Diagnosis, Active: Livebirth"
  - starts during Occurrence A of $EncounterInpatient
All patients in the Initial Population are included in the Denominator.

\[\text{Denominator} = \quad \bullet \text{AND: Initial Population}\]
Patients that expired prior to discharge and did not have a hearing screen performed in either ear.

• OR:
  - AND: Union of:
    - Occurrence A of $EncounterInpatient
    - "Encounter, Performed: Encounter Inpatient (discharge status: Patient Expired)"
  - AND NOT: Union of:
    - "Diagnostic Study, Performed: Newborn Hearing Screen Left (result: Pass Or Refer)"
    - "Diagnostic Study, Performed: Newborn Hearing Screen Right (result: Pass Or Refer)"
    - during Occurrence A of $EncounterInpatient
Assesses hearing screens performed in both ears with a result of pass or refer, or medical reasons the hearing screen was not performed.

Medical reasons include:
- Medical contraindication
- Surgical contraindication
- Not indicated

- AND: Union of:
  - "Diagnostic Study, Performed: Newborn Hearing Screen Left (result: Pass Or Refer)"
  - "Diagnostic Study, Performed not done: Medical Reasons" for "Newborn Hearing Screen Left"
  - during Occurrence A of $EncounterInpatient

- AND: Union of:
  - "Diagnostic Study, Performed: Newborn Hearing Screen Right (result: Pass Or Refer)"
  - "Diagnostic Study, Performed not done: Medical Reasons" for "Newborn Hearing Screen Right"
  - during Occurrence A of $EncounterInpatient
Data Criteria (QDM Data Elements)

- "Diagnosis, Active: Livebirth" using "Livebirth SNOMEDCT Value Set (2.16.840.1.114222.4.1.214079.1.1.1)"
- "Diagnosis, Active: Liveborn Newborn Born in Hospital" using "Liveborn Newborn Born in Hospital Grouping Value Set (2.16.840.1.113762.1.4.1046.6)"
- "Diagnostic Study, Performed: Newborn Hearing Screen Left" using "Newborn Hearing Screen Left LOINC Value Set (2.16.840.1.114222.4.1.214079.1.1.3)"
- "Diagnostic Study, Performed: Newborn Hearing Screen Right" using "Newborn Hearing Screen Right LOINC Value Set (2.16.840.1.114222.4.1.214079.1.1.4)"
- "Diagnostic Study, Performed not done: Medical Reasons" using "Medical Reasons SNOMEDCT Value Set (2.16.840.1.114222.4.1.214079.1.1.7)"
- "Encounter, Performed: Encounter Inpatient" using "Encounter Inpatient SNOMEDCT Value Set (2.16.840.1.113883.3.666.5.307)"
- Attribute: "Result: Pass Or Refer" using "Pass Or Refer SNOMEDCT Value Set (2.16.840.1.114222.4.1.214079.1.1.6)"
- Attribute: "Discharge status: Patient Expired" using "Patient Expired SNOMEDCT Value Set (2.16.840.1.113883.3.117.1.7.1.309)"
Value Sets

Data element: "Diagnosis, Active: Livebirth"
Value set name: "Livebirth SNOMEDCT Value Set"
Object Identifier (OID): 2.16.840.1.114222.4.1.214079.1.1.1

This value set includes 24 SNOMED codes:

• 10760661000119109
• 10760701000119102
• 10760741000119100
• 10760781000119105
• 10760821000119100
• 10760861000119105
• 10760901000119104
• 112075006
• 15467003
• 169826009
• 169828005
• 169829002
• 169831006
• 169832004
• 169833009
• 22514005
• 25192009
• 281050002
• 30165006
• 34100008
• 38257001
• 390959009
• 39213008
• 87662006
Version 5 Changes – Header Guidance

Updated the IP header guidance to include 'with hospital stays $\leq 120$ days' during the measurement period.

- **Version 4**
  Live birth encounters at a hospital or birthing facility where the newborn was discharged during the measurement period.

- **Version 5**
  Live birth encounters at a hospital or birthing facility where the newborn was discharged with hospital stays $\leq 120$ days during the measurement period.
Introduction of 'Intersection of' operator

**Version 4**
Initial Population =
- AND: Occurrence A of $EncounterInpatient ends during "Measurement Period"
- AND: Union of:
  - "Diagnosis, Active: Liveborn Newborn Born in Hospital"
  - "Diagnosis, Active: Livebirth"
  - starts during Occurrence A of $EncounterInpatient

**Version 5**
Initial Population =
- AND:
  - OR: Intersection of:
    - Occurrence A of $EncounterInpatient
    - "Encounter, Performed: Encounter Inpatient (diagnosis: Live Birth Newborn Born in Hospital)"
  - OR: "Diagnosis: Live Birth Newborn Born in Hospital" starts during Occurrence A of $EncounterInpatient
Version 5 Changes – Diagnosis Attribute

Added new attribute 'diagnosis' to 'Encounter, performed' datatype to conform to QDM 4.2 changes

**Version 4**
Initial Population =
- AND: Occurrence A of $EncounterInpatient ends during "Measurement Period"
- AND: Union of:
  - "Diagnosis, Active: Liveborn Newborn Born in Hospital"
  - "Diagnosis, Active: Livebirth"
  - starts during Occurrence A of $EncounterInpatient

**Version 5**
Initial Population =
- AND:
  - OR: Intersection of:
    - Occurrence A of $EncounterInpatient
    - "Encounter, Performed: Encounter Inpatient (diagnosis: Live Birth Newborn Born in Hospital)"
  - OR: "Diagnosis: Live Birth Newborn Born in Hospital"
    starts during Occurrence A of $EncounterInpatient
Version 4

Initial Population =
- AND: Occurrence A of $EncounterInpatient ends during "Measurement Period"
- AND: Union of:
  - "Diagnosis, Active: Liveborn Newborn Born in Hospital"
  - "Diagnosis, Active: Livebirth"
- starts during Occurrence A of $EncounterInpatient

Version 5

Initial Population =
- AND:
  - OR: Intersection of:
    - Occurrence A of $EncounterInpatient
    - "Encounter, Performed: Encounter Inpatient (diagnosis: Live Birth Newborn Born in Hospital)"
  - OR: "Diagnosis: Live Birth Newborn Born in Hospital" starts during Occurrence A of $EncounterInpatient

Replaced ‘Diagnosis, Active’ with ‘Diagnosis’
Combined Livebirth and Liveborn Newborn Born in Hospital value sets to create Live Birth Newborn Born in Hospital (2.16.840.1.113762.1.4.1046.6)

Changed value sets to reflect terminology updates:

- Deleted ICD9CM codes
- Added 24 SNOMED codes
Frequently Asked Questions
Is the requirement to confirm 'testing' the newborn's hearing (which would result in 'pass') versus testing and the newborn 'passing' the test?

Does the 'refer' option translate to 'referral' of newborn to get hearing done at a later point, or to not test due to a 'medical reason'?
• EHDI-1a is intended to measure the number of births that are screened for hearing loss before hospital discharge.
• The numerator accounts for those patients not screened due to medical reasons.
• The refer attribute is the result status of the test for each ear: pass or refer.
• Refer means the patient did not pass the hearing test during the hospital stay and is being referred.
The Initial Population has two different references to the diagnosis element.

Initial Population =

• AND:
  • OR: Intersection of:
    - Occurrence A of $EncounterInpatient
      "Encounter, Performed: Encounter Inpatient
       (diagnosis: Live Birth Newborn Born in Hospital)"
  • OR: "Diagnosis: Live Birth Newborn Born in Hospital"
    starts during Occurrence A of $EncounterInpatient

These statements seem the same. Is there a difference between these two statements?
• These two sections of logic are equivalent.
• The intent is to provide flexibility for how the data is captured in the EHR:
  • A principal encounter diagnosis.
  • A diagnosis that occurred during the encounter.
Measure Specifications (eCQM Library):

Joint Commission Reporting Requirements:
https://www.jointcommission.org/performance_measurement.aspx

eCQI Resource Center – EH Measures:
https://ecqi.healthit.gov/eh
• HRSA Title V Block Grant MCHB Performance Measure: Percentage of newborns who have been screened for hearing before hospital discharge.