"Read Me First" Guide to Understanding Electronic Clinical Quality Measure (eCQM) Flows
For Hospital – Inpatient and Hospital – Outpatient

The Centers for Medicare & Medicaid Services has released new electronic clinical quality measure (eCQM) flows for Hospital – Inpatient and Hospital – Outpatient. The eCQM flows provide a concise overview of the Clinical Quality Language (CQL) used to express logic and clinical concepts in the measures and the data elements, drawn from Version 5.6 of the Quality Data Model. These flows highlight relevant data criteria and are organized to help interested parties interpret the logic and understand how performance rates are calculated.
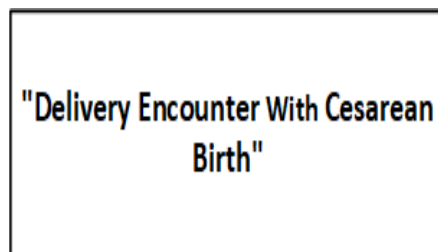
At a high level, the large rectangular boxes in the flows summarize the eCQM data criteria. This usually includes the CQL definition of the population criteria or a brief summary of the logic. At a more detailed level, brackets alongside or below the rectangular boxes summarize any additional details and data criteria included in the logic statements. Where possible, annotations appear similar to how they appear in the human-readable measure specification. The eCQM flows are divided into rows, or swim lanes, to make it easier to see the data criteria for each measure component. At the end of each eCQM flow is a brief narrative that provides an overview of the entire measure flow. The narrative aligns with the header in each measure specification.

These eCQM flows are intended to be an additional resource to help hospitals implement eCQMs. They are not intended to replace the eCQM specifications for reporting purposes. These eCQM flows are a condensed representation of the measure specifications and may not include all definitions, data elements, functions, or timing criteria.

Below are general notes to help interested parties interpret the eCQM flow diagrams.
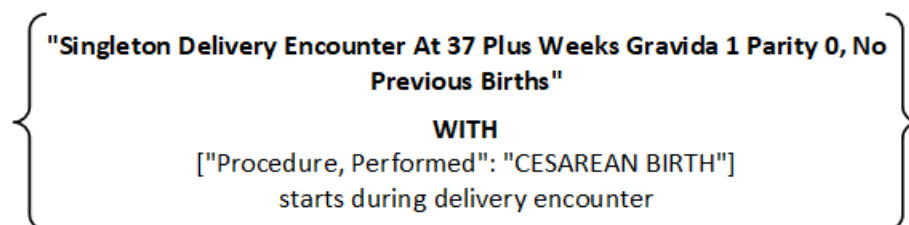
- **Rectangular boxes** contain the CQL definition of the population criteria or a brief summary of the CQL logic statement.
    - Example:

"Delivery Encounter With Cesarean Birth"

- **Brackets** contain more in-depth details from the CQL logic, such as nested definitions, value sets, data types, attributes, and timing elements.
    - Example:

"Singleton Delivery Encounter At 37 Plus Weeks Gravida 1 Parity 0, No Previous Births"

WITH
["Procedure, Performed": "CESAREAN BIRTH"]
starts during delivery encounter

- **Definitions** are in boldface and quotation marks.
  - Example: **"Singleton Delivery Encounter At 37 Plus Weeks Gravida 1 Parity 0, No Previous Birth"**

- **Value sets** or direct reference codes are in all caps and quotation marks. Note that value sets are not in all caps in the published measure specifications.
  - Example: "CESAREAN BIRTH"

- **Data criteria (data types from the Quality Data Model)** appear in brackets and quotation marks, followed by a colon and the associated value set.
  - Example:
    ["Procedure, Performed": "CESAREAN BIRTH"]

- **Attributes** appear in parentheses and are capitalized.
  - Example: (Negation Rationale)

- **Functions/other data components** are capitalized.
  - If the function is spelled out, it is denoted using quotation marks
    - Example:
      - "Calculated Gestational Age" (CMS1028)
      - "Global Noise Value" (CMS1074 and CMS1206)
  - Otherwise, capitalize the first letter of each word in the function
    - Examples:
      - Hospitalization, Measurement Period

- **Keywords** are in boldface and all caps.
  - Examples: **WITH, WHERE, OR**

- **Timing elements** are in lowercase.
  - Example: starts during encounter

- **Comments** are italicized.
  - Example: *Captures encounters of patients with an opioid and/or benzodiazepine at discharge*

- **Population criteria** are color coded and marked with a letter if they are used in the sample calculation. Multiple clauses within a given population criterion are marked with numbers.
  - See Table 1, Electronic Clinical Quality Measure (eCQM) Flow Legend for Hospitals – Inpatient and Hospitals – Outpatient, below for information regarding specific colors used to identify population criteria and letters.

**Table 1. Electronic Clinical Quality Measure (eCQM) Flow Legend
for Hospitals – Inpatient and Hospitals – Outpatient**

Population criteria	Color	Letter
Initial Population	Gold	Not applicable
Denominator/ Measure Population	Light Blue	**a** (a1, a2, a3)
Denominator Exclusions/ Measure Population Exclusions	Dark Blue	**b** (b1, b2, b3)
Numerator/ Measure Observation	Light Green	**c** (c1, c2, c3)
Denominator Exceptions	Medium Blue	**d** (d1, d2, d3)
Numerator Exclusions	Light Yellow	**e** (e1, e2, e3)
Stratification	White	Not applicable
Supplemental Data Elements (Measure Specific)	Rose	Not applicable