“Read Me First” Guide to Understanding Electronic Clinical Quality Measure (eCQM) Flows For Eligible Hospitals and Critical Access Hospitals (CAHs)

The Centers for Medicare & Medicaid Services has released new electronic clinical quality measure (eCQM) flows for eligible hospitals and critical access hospitals (CAHs). These flows provide a concise overview of the Clinical Quality Language (CQL) used to express logic in the measures and the data elements, drawn from Version 5.4 of the Quality Data Model, used to express clinical concepts. The eCQM flows highlight relevant data criteria and organize the specifications to help you interpret the logic and understand how performance rates are calculated.

You can view the eCQM flows at a high level or at a more detailed level. 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 in the logic statements. Where possible, the annotations are kept similar to how they appear in the human-readable measure specification. The eCQM flows are also divided into rows, or swim lanes, to make it easier to see the data criteria for each measure population. At the end of each eCQM flow is a brief narrative that provides an overview of the entire measure flow and corresponds with the header in each measure specification.

These eCQM flows are intended to be an additional resource to help hospitals implement eCQMs and do not 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 you 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:

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

- **Definitions** are in boldface and quotation marks.
    - Example: **"Ischemic Stroke Encounter"**
- **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: "DISCHARGE TO ACUTE CARE FACILITY"
- **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":
      "GENERAL SURGERY" **OR**
      "GYNECOLOGICAL SURGERY" **OR**
      "HIP FRACTURE SURGERY" **OR**
      "HIP REPLACEMENT SURGERY" **OR**
      "INTRACRANIAL NEUROSURGERY" **OR**
      "KNEE REPLACEMENT SURGERY" **OR**
      "UROLOGICAL SURGERY"]
- **Attributes** appear in parentheses and are capitalized.
    - Example: (Negation Rationale)
- **Functions/other data components** are capitalized.
    - Examples: Hospitalization, Measurement Period
- **Keywords** are in boldface and all caps.
    - Examples: **WITH, WHERE, OR**
- **Timing elements** are in lowercase.
    - Example: starts during encounter
- **Population criteria** are color coded and marked with a letter if they are used in the sample calculation. Multiple clauses in each population criterion are marked with numbers.

Population criteria	**Color**	**Letter**
Initial population	Light Orange	Not applicable
Denominator/ measure population		**a** (a1, a2, a3)
Denominator exclusions/ measure population exclusions		**b** (b1, b2, b3)
Numerator/ measure observation		**c** (c1, c2, c3)
Denominator exceptions		**d** (d1, d2, d3)