

Cooking with CQL Qs&As with Classifications for the RC – SESSION 27

7/26/2018 - Cooking with CQL: or How to Incorporate CQL into HQMF for eQMs Qs&As

Measure Representation

Q. In the ED encounter observation expression, can the union be used with both option 1 (use of an Encounter code to model observation) and option 2 (use of an Encounter facility location to model observation)?

```

--
/*
O) As a different type of Encounter, separate from the Inpatient and Emergency Department encounters:
*/
--
define "Observation (Approach O)":
  ["Encounter, Performed": "Observation"]
  --
/*
P) As a different location within the Inpatient Encounter:
*/
--
define "Observation (Approach P)":
  ["Encounter, Performed": "Encounter Inpatient"] E
  ...return E.facilityLocations L where L.code in "Observation"
--

```

A. The “union” in this question is referring to the common use of unions to bring together encounters from different value sets in to a single expression for consideration. With option 1, because the observation status is determined by looking at a facility code, the encounter codes are still used in the way that they are now (i.e. to represent the type of encounter: inpatient, outpatient, etc.). With option 2, however, “Observation” is represented as another type of encounter, so you wouldn’t be able to distinguish other types of encounters within Observation.

Q. Does the logic shown cover a scenario where the patient goes from outpatient status directly to inpatient?

```

define function "Hospitalization with Observation"(Encounter "Encounter, Performed" ):
  Encounter E
  let
    ObsVisit: Last(["Encounter, Performed": "Observation"] O
    where O.relevantPeriod ends 1 hour or less on or before start of E.relevantPeriod
    sort by end of relevantPeriod),
    VisitStart: Coalesce(start of ObsVisit.relevantPeriod, start of E.relevantPeriod),
    EDVisit: Last(["Encounter, Performed": "Emergency Department Visit"] ED
    where ED.relevantPeriod ends 1 hour or less on or before VisitStart
    sort by end of relevantPeriod
  )
  return Interval[Coalesce(start of EDVisit.relevantPeriod, VisitStart), end of E.RelevantPeriod]

```

A. Yes, because there would be no observation or ED visit. The outpatient visit can be compared to the start of the encounter's relevant period.

Q. Can the 'define function' pattern be used to customize measures where an outpatient visit is not to be considered as an episode of care?

A. Yes, in that case, you would use the Hospitalization with Observation function rather than the Hospitalization with Outpatient function. In addition, measures that did not consider observation status to be part of the episode of care would continue to use the current Hospitalization function.

[All CQL Q&As Resource Center Classifications](#)

- [Getting Started](#)
- [General Clinical Quality Language](#)
- [Quality Data Model](#)
- [Measure Representation](#)
- [Roadmap](#)
- [Terminology](#)
- [Tooling and Implementation](#)
- [CQL and FHIR](#)