1/31/2019 - Cooking with CQL: or How to Incorporate CQL into HQMF for eCQMs Qs&As

Measure Representation

Date and Time Calculation
Q. In the Coalesce expression, if the patient record has an order performed date of 12/12 but the performed author DateTime is 12/07 what is the result?

https://github.com/esacinc/CQL-Formatting-and-Usage-Wiki/blob/master/Source/Cooking%20With%20CQL/31/88_CoalesceSemantics.cql#L27

```
Coalesce(start of ComfortMeasures.relevantPeriod, ComfortMeasures.authorDatetime)
```

A. For Coalesce, each argument is considered in order, and the first one with a value is returned. The use of "first" in this description is referring to the list of arguments to the Coalesce function. So in the example of a performed date of 12/12 and an author date of 12/07, since the performed date (start of relevantPeriod) is first in the list of arguments and has a value, that will be returned as the result.

Date and Time Calculation or Using QDM
Q. For the glucocorticoid dosage expression, is using Date appropriate in place of DateTime?

https://github.com/esacinc/CQL-Formatting-and-Usage-Wiki/blob/master/Source/Cooking%20With%20CQL/31/87_GlucocorticoidDosage.cql#L128

```
define function "Glucocorticoids Dosage Per Day"(glucocorticoids List<Tuple {
  code Code,
  daysInPeriod List<DateTime>,
  dailyDosage Quantity
}>):
```

A. Yes, in version 1.3 of CQL, the Date type can be used for the daysInPeriod argument (i.e. List<Date> instead of List<DateTime>).

Hospitalization
Q. Where can I find the hospitalization library?

A. The hospitalization global common functions can be found on the CQL Formatting and Usage Wiki. An example that uses global common functions will be included in a future cooking with CQL session.

Using QDM
Q. Is it accurate that if the glucocorticoid dosage expression was used for dispensed to ordered, results would be different because all the attributes are not available?

A. Correct, the main thing we are trying to get to is a daily dosage. Depending on what QDM medication type is used, different attributes will be available so the calculation will need to take that into account. Also note that in QDM 5.4, the daysSupplied attribute can be used as another way to get to the daily dosage.

Queries
Q. I am new to CQL, how do we run CQL queries - is it against C-CDA documents?

A. CQL can be used with any data model. In the examples in this series we are focused on using the Quality Data Model (QDM), which has a serialization as Quality Reporting Document Architecture (QRDA). QRDA is similar to C-CDA (they are both HL7 V3 standards), but not the same.

All CQL Q&As Resource Center Classifications
- **Getting Started**
- **General Clinical Quality Language**
- **Quality Data Model**
- **Measure Representation**
  Subtopics:
    - Date and Time Calculations
    - Functions
    - Hospitalization
    - Occurrences
    - Timing
    - eCQM Specifications
    - Queries
    - Using QDM
- **Roadmap**
- **Terminology**
- **Tooling and Implementation**
- **CQL and FHIR**