# 11/30/2017 - Cooking with CQL: or How to Incorporate CQL into HQMF for eCQMs Qs&As – SESSION 20

#### **Tooling and Implementation**

# Q. How is terminology maintained? For Example, List of Values (LOVs).

**A.** Measure developers maintain and publish terminologies to the Value Set Authority Center (VSAC). They are distributed with measure definitions as part of the overall process. Those value sets are updated not just when the measures are published, but also periodically to capture additional terminology changes.

# Q. How do I indicate a change version of the LOVs?

**A.** The VSAC maintains the value set definitions including codes involved and versions of the terminology those codes came from, hence extensions are determined with versioning in mind.

# Q. Any source code implementing CQL? What programming language(s) are samples written in?

**A.** The CQL specification defines the high level CQL grammar as well as the schema for Expression Logical Model (ELM). For source code, we have reference implementations in production use in the Measure Authoring Tool and Bonnie testing tool. The source code for the translator from CQL to ELM is available in the Clinical Quality Framework GitHub repository. For evaluation, a JavaScript CQL interpreter is used to evaluate the measures within the Bonnie testing tool. There is also a .NET-based framework that was built as part of the Heath eDecisions initiative. It is a little outdated but provides a general framework for language processing applications for ELM.

# **Measure Representation**

# Q. Are occurrences still a concept that will be used?

**A.** CQL takes a different approach to representing what specific occurrences were achieving, namely identifying a specific instance and associating criteria with that instance. Because CQL can describe queries and their results, and then use those results in subsequent operations, specific occurrences are not required to tie the different appearances of a data element together throughout the measure definition. Rather, with CQL, additional criteria are applied to specific instances of a data element by referencing the same expressions. For more information and examples, see the <a href="Specific Occurrences">Specific Occurrences</a> topic in the Formatting and Usage Wiki.

# **General Clinical Quality Language**

#### Q. Is there any sample available for CQL to DRL (drools) conversion?

**A.** There are no publicly available examples. However, a pilot in the Clinical Quality Framework initiative built a translator from CQL to Drools.

# **Getting Started**

#### Q. Do you know of any CQL classes made available in person?

**A.** There are currently no in-person classes available. However, presentations will be provided in conferences such as the CMS Quality Conference and there is a scheduled interoperability course that will include a CQL session in February 2019. More details will be posted to the <a href="ecQl Resource Center">eCQL Resource Center</a>.

# Q. Will there be any CQL related activities at the HL7 work group meeting - the connectathon?

A. Yes. The Clinical Reasoning track regularly runs CQL for both decision support and quality measurement scenarios at the connectathons.