Quality Data Model (QDM) v5.3 Annotated Standard

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Objective

» The Centers for Medicare & Medicaid Services (CMS) has released an annotated version of the Quality Data Model (QDM) standard, Version 5.3, for use with Clinical Quality Language (CQL), pending outcome of CQL testing

» Support for these features and modifications, pending outcomes of CQL testing, is expected to be implemented in the production version of the Measure Authoring Tool (MAT) with an anticipated release in Fall 2017 (version 5.4)
Background

» QDM is an information model that defines relationships between patients and clinical concepts in a standardized format to enable electronic quality performance measurement

» Previously published versions of the QDM (through version 4.3) included the information model and logic

» Beginning with the QDM v5.0 Draft for use with CQL testing, the QDM includes only the information model and requires the use of the CQL standard as a separate method for expressing logic

» CQL is a high-level human readable authoring language that allows measure authors to express data criteria and represent it in a way that is suitable for language processing
QDM v5.3 Annotated Standard High Level Updates (1 of 2)

» There are no model changes from the QDM v5.3 release, which represents a significant change from prior production versions as it no longer contains any logic expressions

» High Level Updates:
  – Added Relevant Period to Medication, Order and Medication, Dispensed
  – Removed Active dateTime from Medication, Order
  – Changed QDM attributes with cardinality greater than 1 to plural (i.e., diagnosis to diagnoses, component to components, and facility location to facility locations for Encounter, Performed)
  – Added description of how QDM 5.3 data elements are expressed in tooling and in the HQMF and the CQL logic
  – Added explanation for new timing attributes – periods
QDM v5.3 Annotated Standard High Level Updates (2 of 2)

Added:

» Explanation for new cardinality specification for QDM attributes
» Explanations for special cases – use of components, specifying results with value sets, and considerations for cumulative medication duration
» Clarifications for attributes relatedTo, Target Outcome, Result, Facility Locations, Location Period, and Code
» id attribute to all datatypes to allow expression of specific instances for any QDM data element in the CQL logic
Resources

» QDM DRAFT v5.0, DRAFT v5.01, DRAFT v5.02, and v5.3 are located on the eCQI Resource Center CQL Space
  – https://ecqi.healthit.gov/cql

» Past versions of production QDM Specifications and QDM User Group meeting information can be found on the eCQI Resource Center QDM Space
  – https://ecqi.healthit.gov/qdm

» For questions or comments on the QDM, please contact the ESAC QDM team
  – qdm@esacinc.com

» To submit an issues ticket, please visit the ONC JIRA site
  – https://oncprojecttracking.healthit.gov/support/projects/QDM/