QUALITY DATA MODEL (QDM) V5.5
HIGH-LEVEL SUMMARY

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The Quality Data Model (QDM) is an information model that defines relationships between patients and clinical concepts in a standardized format to enable electronic quality performance measurement.

QDM describes clinical concepts in a standardized format to enable electronic quality measurement in support of federal programs and initiatives.

QDM’s purpose is to enable the automated retrieval of structured data captured through routine care in electronic health records, personal health records, and other electronic clinical sources.
QDM V5.5 RELEASE

• Electronic clinical quality measures (eCQMs) produced using the QDM v5.5 publication are anticipated for the 2021 reporting/performance period.
• The QDM has been aligned with the emerging standard Health Level Seven International (HL7) Fast Healthcare Interoperability Resources (FHIR).
• Support for these features and modifications are implemented in the production version of the Measure Authoring Tool (MAT) released in August 2019.
QDM V5.5 HIGH-LEVEL CHANGES

1. New Timing Options in QDM v5.5
2. QDM Entities
3. QDM v5.5 Change source attribute
4. QDM Entity use cases
5. New QDM datatype: Related Person
6. Addition of Present on Admission indicator for Encounter
   • Change to Encounter, Performed diagnosis modeling
7. Add priority attribute (Encounter, Procedure)
NEW TIMING OPTIONS

• Prior versions of some QDM datatype timing options limited timing to author dateTime.
• QDM v5.5 changes allows greater flexibility for measure developers to indicate the occurrence time.
• Modified timing options:
  • Add Relevant dateTime and Relevant Period timing to Assessment, Performed and Relevant dateTime to Immunization, Administered
  • Change Communication, Performed timing to directly reference sent dateTime and received dateTime
MODIFIED TIMING OPTIONS (CONTINUED):

- Add Relevant dateTime to
  - Adverse Event
  - Assessment, Performed
  - Device Applied
  - Diagnostic Study, Performed
  - Immunization, Administered
  - Intervention, Performed
  - Laboratory Test, Performed
  - Medication, Active
  - Medication, Administered
  - Medication, Dispensed
  - Medication, Order
  - Physical Exam, Performed
  - Procedure, Performed
  - Substance, Administered
MANAGING ACTIVITY PERFORMERS WITH QDM

• Replaced the previous QDM dataflow attribute source with a performer attribute for each QDM datatype.
• Added a new QDM item, called Entities, including Patient, Care Partner, Practitioner, and Organization to allow greater expressivity in requesting information about performer-type attributes.

Entities provide a clearer way to describe the source of a data element.
MANAGING ACTIVITY PERFORMERS WITH QDM (CONT’D)

• New attributes to express performers of activities

<table>
<thead>
<tr>
<th>New Attribute</th>
<th>QDM Datatypes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requester</td>
<td>*Assessment, Order, *Assessment, Recommended</td>
</tr>
<tr>
<td></td>
<td>*Device, Order, *Device, Recommended</td>
</tr>
<tr>
<td></td>
<td>*Diagnostic Study, Order, *Diagnostic Study, Recommended</td>
</tr>
<tr>
<td></td>
<td>*Encounter, Order, *Encounter, Recommended</td>
</tr>
<tr>
<td></td>
<td>*Immunization, Order, *Intervention, Order</td>
</tr>
<tr>
<td>Participant</td>
<td>*Encounter, Performed</td>
</tr>
<tr>
<td>Performer</td>
<td>*Assessment, Performed</td>
</tr>
<tr>
<td></td>
<td>*Care Goal</td>
</tr>
<tr>
<td></td>
<td>*Device, Applied, *Diagnostic Study, Performed</td>
</tr>
<tr>
<td></td>
<td>*Family History, *Immunization, Administered</td>
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<tr>
<td></td>
<td>*Intervention, Performed</td>
</tr>
</tbody>
</table>

Communication, Performed – already includes sender, recipient
Medication, Discharge; Medication, Order; Medication, Dispensed – prescriber
Medication, Dispensed – dispenser
[prescriber and dispenser replace prescriber.id and dispenser.id to take advantage of new QDM Entities]
Added a new QDM item, called *Entities* to allow greater expressivity in requesting information about performer-type attributes:

- **Patient**
- **Care Partner**
- **Practitioner**
- **Organization**
# NEW QDM DATATYPE: RELATED PERSON

- Added QDM datatype Related Person.

<table>
<thead>
<tr>
<th>Datatype</th>
<th>Definition</th>
<th>Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Related Person</td>
<td>A person who has a personal or non-healthcare-specific professional relationship to the patient. The “code” attribute references the relationship to the index patient. Timing: A Related Person has no associated timing. The Related Person QDM datatype references only an identifier and a relationship. The relationship references the nature of the relationship (e.g., a direct reference code or a value set for “Mother” using the example provided).</td>
<td>id, code, identifier, linkedPatientId</td>
</tr>
</tbody>
</table>
ADDITION OF PRESENT ON ADMISSION INDICATOR FOR ENCOUNTER

• Modified Encounter, Performed *diagnosis* attribute to reference two components: *diagnosis (code)* and a new item, *present on admission indicator*.

• The Diagnosis Present on Admission indicator is assigned to Inpatient Encounter Diagnosis and is used extensively in quality and patient safety measures.
ADDED *PRIORITY* ATTRIBUTE (ENCOUNTER, PROCEDURE)

• Added *priority* attribute to
  • Encounter, Order
  • Encounter, Performed
  • Procedure, Order
  • Procedure, Performed

• Allows reference to an elective or urgent
  • Encounter or procedure
  • Order for an encounter or procedure
RESOURCES

• Review the webinar titled “QDM Version 5.5 Overview” for an in-depth summary of the QDM v5.5.
• Current and past versions of the QDM are located on the eCQI Resource Center QDM page
• Past versions of production QDM Specifications can be found on the eCQI Resource Center QDM-Previous Versions tab
• QDM User Group meeting information is on the eCQI Resource Center QDM-Connect tab
• For questions or comments on the QDM, please contact the ESAC QDM team
• To submit an issues ticket, please visit the ONC Project Tracking System (Jira) QDM project