

# Quality Data Model (QDM) User Group (UG) Meeting |Minutes

Meeting date | 03/21/2018 2:30 PM ET | Meeting location|Webinar link:  
<https://esacinc2.webex.com/esacinc2/j.php?MTID=me8d6277dca528e02526f28ca60f9397b>

Time	Item	Presenter	Discussion/Options/Decisions
5 Minutes	Announcements	Chana West (ESAC)	<p><b>Cooking with CQL Webinar was held on Thursday, March 29<sup>th</sup> at 4pm ET.</b> These sessions are generally held on the third Thursday monthly. Upcoming events can be found by going to the <a href="#">eCQI Resource Center events page</a>.</p> <ul style="list-style-type: none"> <li>Please submit CQL-related questions and/or measure examples to <a href="mailto:cqlesac@esacinc.com">cqlesac@esacinc.com</a></li> </ul>
20 Minutes	Adverse Event and Allergy/Intolerance Modeling	Floyd Eisenberg (ESAC)	<p>During the HL7 Clinical Quality Improvement (CQI) Workgroup call, Adverse Event (AE) and Allergy/Intolerance were reviewed in relation to QDM to QI Core mapping. The discussion amongst that group resulted in considerations for the QDM User Group on modeling Adverse Events and Allergy Intolerance within the QDM.</p> <p><b><u>AE Overview:</u></b></p> <p>AE time references:</p> <ul style="list-style-type: none"> <li>QDM = Relevant Period</li> <li>HL7 FHIR = AdverseEvent.date (date that it occurred)</li> </ul> <p>As discussed on CQI WG call, an AE can occur over a period of time. ESAC asked the group to consider whether it is appropriate to include date/asserted date of when the AE occurred or consider leaving the modeling as is, but adding guidance. Guidance would suggest that Relevant Period indicates that an adverse event (AE) may occur over time or may be instantaneous. Implementers would be instructed to refer the beginning of the Relevant Period to when the AE was known to start, and in most cases the end of the Relevant Period will be the same time as the beginning.</p> <p><b><u>AE Discussion:</u></b></p> <p>Question posed to the QDM UG: Do you generally see AEs in the electronic health record (EHR)? Or is this recorded in separate software?</p> <ul style="list-style-type: none"> <li>Howard Bregman (Epic) – Noted this is generally recorded as text somewhere, but not</li> </ul>

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20 Minutes, Cont.	Adverse Event and Allergy/Intolerance Modeling, Cont.	Floyd Eisenberg (ESAC), Cont.	<p>entered in a way that can then be reported on later.</p> <ul style="list-style-type: none"> <li>• Pamela Mahan-Rudolph (Memorial Hermann) – We have a separate system where AEs or unexpected events are recorded. Whether data is discreet or not varies by client.</li> </ul> <p>The QDM UG participants had no feedback when asked about measure testing specific to AEs and whether there were timing concerns.</p> <p><b><u>AE Mapping Resolution/Next Steps:</u></b></p> <p>The QDM UG attendees supported inclusion of implementation guidance in the AE modeling, suggesting that the beginning and end are generally the same time unless explicitly specified as different times in the record.</p> <p>The ESAC team will take this to the Governance group for review/consideration and if no concerns are identified, present the recommended changes to the MAT Change Control Board for inclusion in the next iteration of the QDM (v5.4)</p> <p><b><u>Allergy/Intolerance:</u></b></p> <p>Allergy/Intolerance (Item #1)</p> <ul style="list-style-type: none"> <li>• QDM: Timing = Prevalence Period</li> <li>• FHIR: <ul style="list-style-type: none"> <li>○ Start = AllergyIntolerance.onset(x)—may be over a period of time</li> <li>○ End = AllergyIntolerance-resolutionAge—patients may not recall exact age</li> </ul> </li> </ul> <p>To ensure that QDM timing attributes align to FHIR attributes, the ESAC Team asked for comment on the following potential modeling options:</p> <ol style="list-style-type: none"> <li>1. Map QDM Allergy/Intolerance Prevalence Period start to the beginning of FHIR AllergyIntolerance.onset (x) period</li> <li>2. Map QDM Allergy/Intolerance Prevalence Period end to FHIR AllergyIntolerance-resolutionAge and suggest that implementers map the resolutionAge to a year—the implementer would then need to represent the age with the date that the patient achieved that age. If there is no end age, then it must still be active.</li> </ol> <p>Howard Bregman (Epic) – This is fine, but do not see much utility in these attributes.</p> <p>Joe Kunisch (Memorial Hermann) – Does not see an issue with the recommendation.</p>

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20 Minutes, Cont.	Adverse Event and Allergy/Intolerance Modeling, Cont.	Floyd Eisenberg (ESAC), Cont.	<p>Stan Rankins (Telligen) – Noted age can overlap years, so if we say we map to year is it beginning or end of age? The ESAC Team suggested using the year that age was achieved.</p> <p><u>Allergy/Intolerance (Item #2)</u></p> <p>FHIR also has an asserted date, however in our QDM modeling we currently have an author time. Author time is not necessarily, but could be, the asserted date.</p> <ul style="list-style-type: none"> <li>• QDM: Timing = Author dateTime</li> <li>• FHIR: Asserted date “The date on which the existence [sic] of the AllergyIntolerance was first asserted or acknowledged.”</li> </ul> <p>It is unclear whether this maps clearly to Author dateTime. FHIR does not clearly define what is meant by asserted date—e.g., acknowledged by whom, etc. The QDM UG was asked to consider whether to:</p> <ol style="list-style-type: none"> <li>1. Maintain Author dateTime, or</li> <li>2. Change to asserted date (and if so, how defined) or</li> <li>3. Map Author dateTime to asserted since there is no Author dateTime in the FHIR representation of allergy?</li> </ol> <p>ESAC recommended leaving QDM Allergy/Intolerance Author dateTime mapped to FHIR provenance Author dateTime and not to asserted date. Implementers would then need to determine whether they map the onset time to the asserted date or to something else.</p> <p>The UG had no concerns about this approach.</p> <p><b><u>Allergy/Intolerance Mapping Resolution/Next Steps:</u></b></p> <p>Item #1- The ESAC team will take the below to the Governance group for review/consideration and if no concerns are identified, present the recommended changes to the MAT Change Control Board for inclusion in the next iteration of the QDM (v5.4):</p> <ol style="list-style-type: none"> <li>1. Map QDM Allergy/Intolerance Prevalence Period start to the beginning of FHIR AllergyIntolerance.onset (x) period</li> <li>2. Map QDM Allergy/Intolerance Prevalence Period end to FHIR AllergyIntolerance-resolutionAge and suggest that implementers map the resolutionAge to a year—the implementer would then need to represent the age with the date that the patient achieved</li> </ol>

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20 Minutes, Cont.	Adverse Event and Allergy/Intolerance Modeling, Cont.	Floyd Eisenberg (ESAC), Cont.	that age. If there is no end age, then it must still be active. Item #2—no changes
2 Minutes	Allergy/Intolerance Value Sets (Jira Ticket <a href="#">QDM-188</a> )	Floyd Eisenberg (ESAC)	The QDM UG previously discussed how to indicate medication class, considering using MED-RT™ (which is replacing NDF-RT™ and will possibly be available as early as March) or using the SNOMED hierarchy. This issue was discussed in the Governance Group and ESAC is still awaiting final determination. ESAC will update the UG once the Governance Group makes a decision.
15 Minutes	Assessment Modeling	Floyd Eisenberg (ESAC)	<p><b>Overview:</b></p> <p>During the HL7 Clinical Quality Improvement (CQI) Workgroup call, Assessment was reviewed in relation to QDM to QI Core mapping. A question arose regarding the fact that QDM does not currently have a category for Assessment, Order. Any QDM datatype that ends with “Recommended” is a request for something to happen.</p> <p>FHIR has ProcedureRequest.intent metadata element with the following intent codes:</p> <ul style="list-style-type: none"> <li>• <i>Proposal</i>—a suggestion made by someone/something that doesn't have an intention to ensure it occurs and without providing an authorization to act</li> <li>• <i>Plan</i>—an intension to ensure something occurs without providing an authorization for others to act</li> <li>• <i>Request</i>— a request/demand and authorization for action</li> </ul> <p>Our approach in QDM has been to use <i>proposal</i> for clinical decision support (CDS) with justification that a proposal as defined is a suggestion to a system user, but does not have an intention to ensure it happens. If a clinician is making a recommendation to the patient, this might fit best with <i>plan</i>. Order is intended to ensure it happens. Examples:</p> <p>Assessment, Recommended maps to plan Assessment, Order would map to order [if Assessment, Order were present as a QDM datatype] Procedure, Recommended maps to plan Procedure, Order maps to order</p>

Time	Item	Presenter	Discussion/Options/Decisions
15 Minutes, Cont.	Assessment Modeling, Cont.	Floyd Eisenberg (ESAC), Cont.	<p>One question on the HL7 CQI Workgroup call was whether Assessment, Recommended should persist in QDM since no one has yet used it in a measure. One potential use case could be a care plan that recommends a follow-up functional status assessment in six months. This may include a recommendation to the provider that they contact the patient to get this assessment performed. In a measure, the developer may want to assure that the recommendation is included in the plan. ESAC asked for the UG's feedback on the utility of maintaining Assessment, Recommended.</p> <p><b><u>Discussion:</u></b></p> <p>Marilyn Parenzan (TJC) – Suggested it makes sense to leave it in as we are moving towards patient reported outcome measures and this might be used more in the future.</p> <p>Howard Bregman (Epic) – Suggested that defining a recommended assessment from an electronic record is difficult.</p> <p>Joe Kunisch (Memorial Hermann) – Suggested recommendation is not impossible, but would need some design behind it before it would be useful.</p> <p>ESAC also pointed out that the QDM also does not have an Assessment, Order datatype which is inconsistent with modeling of other QDM categories. The group suggested assessment can conceivably be ordered. There was general support for adding Assessment, Order; however, additional analyses should be performed to consider all of the recommended datatypes and whether this is an appropriate datatype wherever used.</p> <p>Pamela Mahan-Rudolph (Memorial Hermann) – Agreed that this needs to be considered further. Suggested this might be an issue of semantics: assessment versus evaluation. ESAC agreed assessment is a very broad term. It includes evaluation tools, individual observation, components of an assessment tool, full evaluation measurement tool, etc. Maybe this is part of the issue, some you can order and not others.</p> <p>Howard Bregman (Epic) – Suggested assessment is the best word to use.</p> <p><b><u>Resolution/Next Steps:</u></b></p> <ul style="list-style-type: none"> <li>• Add Assessment, Order as a QDM datatype.</li> <li>• The ESAC Team will create a JIRA ticket regarding how to manage all QDM Recommendation datatypes to start the discussion.</li> </ul>

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15 Minutes	Category attribute for Medication, Order (Jira Ticket <a href="#">QDM-101</a> )	Floyd Eisenberg (ESAC)	<p>During the February QDM UG call, there was discussion about potentially changing the QDM to accommodate a <i>category</i> attribute for Medication, Order. This attribute would allow developers to specify where a medication is intended to be filled and used (e.g., administer in the hospital or prescription for home use). This aligns with the HL7 FHIR resource metadata item MedicationResource.category which includes the following options:</p> <ul style="list-style-type: none"> <li>• Inpatient (hospital)</li> <li>• Outpatient (e.g., outpatient facilities like ER, ambulatory surgery)</li> <li>• Community (ambulatory)</li> </ul> <p>There was some support on the last call to add this attribute to the QDM, so the topic was brought back to confirm if there was additional discussion. No additional concerns were identified, therefore the attribute will move forward as a recommendation for inclusion.</p> <p><b><u>Resolution/Next Steps:</u></b></p> <p>The ESAC team will take this to the Governance group for review/consideration and if no concerns are identified, present the recommended changes to the MAT Change Control Board for inclusion in the next iteration of the QDM (v5.4)</p>
5 Minutes	Potential options for identifying Principal Diagnosis using HL7 FHIR Resources	Floyd Eisenberg (ESAC)	<p><b><u>Overview:</u></b></p> <p>As a recap from the February QDM UG discussion, Principal Diagnosis is difficult to map to an HL7 international standard because Principal is a US term used for billing. The group previously discussed mapping it to FHIR metadata element Encounter.diagnosis.role, constrained to “billing diagnosis” with a FHIR metadata Encounter.diagnosis.rank of 1 (i.e., the first billing diagnosis).</p> <p>Feedback received indicated that discharge diagnosis might not be the same, so it is best to keep it constrained to billing diagnosis with a rank of 1. Additionally, this is the definition for use with quality artifacts, this should be part of US Core to ensure all implementers represent principal diagnosis the same way.</p> <p><b><u>Discussion:</u></b></p> <p>Joe Kunisch (Memorial Hermann) - Clarified that a billing diagnosis is not what is coded, but the principal diagnosis is always #1. Do you want to leave the word <i>billing</i> out of it because from a coding standpoint, they are not looking at this as the billing diagnosis? The principal diagnosis is not always the same as discharge diagnosis.</p>

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5 Minutes, Cont.	Potential options for identifying Principal Diagnosis using HL7 FHIR Resources, Cont.	Floyd Eisenberg (ESAC), Cont.	<p>The ESAC Team suggested addressing that in some cases implementers do not have a concept of billing diagnosis, and instead use principal diagnosis, but it most likely maps directly to FHIR value set term billing.</p> <p><b><u>Resolution/Next Steps:</u></b></p> <p>No additional feedback on using billing diagnosis with rank of 1 for principal diagnosis.</p>
10 Minutes	HL7 QI Core – QDM mapping update	Floyd Eisenberg (ESAC)	<p>As a reminder, the QI Core Ballot is in the process of reconciliation of comments. The ballot includes a mapping from FHIR QI Core to QDM and a reverse map from QDM to FHIR.</p> <p>The CQI Workgroup will be reviewing sections of the QDM to FHIR mapping on the HL7 Clinical Quality Information (CQI) Workgroup calls over the next few months (Fridays 1-3pm ET). This was split into nine segments, with segment two scheduled for 3/23 and weekly thereafter until finished.</p> <p>To join the weekly calls, use the access information provided:</p> <p>Dial in: 770-657-9270 Passcode: 217663</p> <p><a href="https://join.freeconferencecall.com/hl7cqj">https://join.freeconferencecall.com/hl7cqj</a></p> <p>ESAC will continue to bring any mapping results that impact the QDM for UG discussion.</p> <p>QDM UG members are welcome to join the HL7 CQI Workgroup list serve and participate. To sign up for the HL7 CQI list serve use this link: <a href="http://www.hl7.org/myhl7/managelistservs.cfm?ref=nav">http://www.hl7.org/myhl7/managelistservs.cfm?ref=nav</a></p>
5 Minutes	Next Meeting	Chana West (ESAC)	<p><b>Agenda items for next QDM user group meeting</b></p> <ul style="list-style-type: none"> <li>– Contact us at <a href="mailto:qdm@esacinc.com">qdm@esacinc.com</a></li> <li>– Or start a discussion: <a href="mailto:qdm-user-group-list@esacinc.com">qdm-user-group-list@esacinc.com</a></li> </ul> <p><b>Next user group meeting</b></p> <ul style="list-style-type: none"> <li>– Regularly Scheduled Meeting – April 18, 2018 from 2:30 to 4:30 PM ET.</li> </ul>

## Invitees/Attendees:

	Name	Organization
X	Abrar Salam	The Joint Commission
	Alex Lui	Epic
X	Angela Flanagan	Lantana
X	Aniek Valentine	Cerner
X	Ann Philips	NCQA
	Anna Bentler	The Joint Commission
X	Anne Coultas	McKesson
X	Anne Smith	NCQA
	Balu Balasubramanyam	MITRE
X	Barb Riggins	Liberty Hospital
	Ben Hamlin	NCQA
X	Beth Bostrom	AMA
	Brian Blaufeux	Northern Westchester Hospital
	Bryn Rhodes	ESAC
X	Chana West	ESAC
	Chris Moesel	MITRE
	Cindy Lamb	Telligen
X	Claudia Hall	Mathematica
	Cynthia Barton	Lantana
	Dalana Ostile	Providence Health Systems
	Dave Wade	Apprio
	Debbie Hall	University of Maryland
	Deidre Sacra	McKesson
	Doug Goldstein	Epic
X	Floyd Eisenberg	ESAC
	Ganesh Shanmugam	Glenwood Systems
X	Howard Bregman	Epic
	Jamie Lehner	PCPI
X	Jana Malinowski	Cerner
	Jean Fajen	Telligen
X	Jenny Brush	ESAC
	Jenna Williams-Bader	NCQA
	John Carroll	The Joint Commission
	John Lujan	Kaiser Permanente
	Jessica Smails	Caradigm
X	Jessica Malenfant	Harvard Pilgrim
X	Joseph Kunisch	Memorial Hermann
	Jorge Belmonte	PCPI
	Julie Koscuizska	Nyack Hospital
X	Juliet Rubini	Mathematica
	Justin Schirle	Epic
X	Jay Frails	Meditech
	Khadija Mohammed	ESAC
	Kendra Hanley	HSAG
X	Kimberly Smuk	HSAG
	KP Sethi	Lantana

	Name	Organization
	Latasha Archer	NCQA
	Laura Pearlman	Midwest Center for Women's HC
	Laurie Wissell	Allscripts
X	Lisa Anderson	The Joint Commission
X	Lizzie Charboneau	MITRE
X	Lynn Perrine	Lantana
	Marc Hadley	MITRE
	Marc Overhage	Cerner
X	Margaret Dobson	Zepf Center
X	Marilyn Parenzan	The Joint Commission
	Martha Radford	NYU
	Melissa Van Fleet	Alliance Health Oklahoma
	Michelle Dardis	The Joint Commission
X	Michelle Hinterberg	MediSolv
	Mike Shoemaker	Telligen
X	Mukesh Allu	Epic
	Neelam Zafar	The Joint Commission
X	Pamela Mahan-Rudolph	Memorial Hermann
	Patty McKay	FMQAI
	Paul Denning	MITRE
	Rachel Buchanan	Oregon Urology
	Rayna Scott	PCPI
X	Rob McClure	NLM Contractor
X	Rob Samples	ESAC
	Rose Almonte	MITRE
	Rukma Joshi	ESAC
	Rute Martins	MITRE
	Ruth Gatiba	Battelle
	Ryan Clark	Xcenda
	Ryan Sullivan	NYU
	Samuel Benton	NCQA
	Seth Ramanan	Cognizant
X	Stan Rankins	Telligen
	Susan Wisniewski	Meditech
	Sweta Ladwa	ESAC
	Syed Zeeshan	eDaptive Systems
	Tammy Kuschel	McKesson
	Tom Dunn	Telligen
	Vaspaan Patel	NCQA
	Wendy Wise	Lantana
X	Yan Heras	ESAC
X	Yanyan Hu	The Joint Commission
X	Yiscah Bracha	RTI
	Yvette Apura	PCPI
	Zahid Butt	MediSolv
X	Zach May	ESAC