

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

Meeting date | 12/20/2017 2:30 PM ET | Meeting location|Webinar link:  
<https://esacinc2.webex.com/esacinc2/j.php?MTID=mb962393406b2f4cf8f09d16d996ee5ec>

Time	Item	Presenter	Discussion/Options/Decisions
5 Minutes	Announcements	Rob Samples (ESAC)	<ul style="list-style-type: none"> <li>- Upcoming Cooking with CQL Webinar on Thursday, January 18<sup>th</sup> at 4pm ET, register for the webinar (<i>link provided with agenda</i>)                             <ul style="list-style-type: none"> <li>o Please submit CQL-related questions and/or measure examples to <a href="mailto:cql-esac@esacinc.com">cql-esac@esacinc.com</a></li> </ul> </li> <li>- The following education sessions were recorded and will be posted on the eCQI Resource Center.                             <ul style="list-style-type: none"> <li>o Side-by-Side Comparison of an eCQM for Eligible Hospitals and Critical Access Hospitals (CAHs) Using CQL – <a href="#">Monday December 18, 2017 at 1:00 PM ET</a></li> <li>o Side-by-Side Comparison of an eCQM for Eligible Professionals and Eligible Clinicians Using CQL – <a href="#">Tuesday December 19, 2017 at 1:00 PM ET</a></li> </ul> </li> </ul>
30 Minutes	Recap - Communication Datatypes	Floyd Eisenberg (ESAC)	<p><b>Overview</b>                      ESAC recapped the discussion about QDM Communication datatypes from the last meeting. Two instances using communication include:</p> <p><b>Two Distinct Use Cases in Current Measures (Generic Descriptions):</b></p> <ul style="list-style-type: none"> <li>▪ <b>Patient Communication of Information to the Provider</b> <ul style="list-style-type: none"> <li>- ["Communication: From Patient To Provider": "<i>Patient Reason for Declining Medication</i>"] Com with "<i>Specific Diagnosis</i>" Enc such that Com.authorDatetime during Enc.relevantPeriod</li> </ul> </li> <li>▪ <b>Provider Communication with another Provider (i.e., Referral Management – Referral and Fulfillment)</b> <ul style="list-style-type: none"> <li>- ["Communication: From Provider To Provider": "<i>Request for Specific Referral</i>"] Com with "<i>Encounter Type</i>" Enc such that Com.authorDatetime after start of Enc.relevantPeriod</li> </ul> </li> </ul>

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30 Minutes	Recap - Communication Datatypes-Cont.	Floyd Eisenberg (ESAC)-Cont.	<ul style="list-style-type: none"> <li>- ["Communication: From Provider To Provider": " <i>Specific Referral Report (fulfillment)</i>"] Com with " <i>Encounter Type</i>" Enc such that Com.authorDatetime after start of Enc.relevantPeriod</li> </ul> <p>The goal of creating eQMs using HQMF is to expect the EHR to interpret the logic and retrieve information from existing data in the EHR. The use cases provided require some human intervention to find the information needed to calculate the measure. In consideration of what is available in EHRs, HL7 FHIR resources base maturity determinations on the frequency with which information is available in EHRs today and the extent to which testing show successful sharing of such data.</p> <p>QDM 5.3 Mapping to HL7 FHIR QI-Core</p> <ul style="list-style-type: none"> <li>• FHIR Definition for Communication: A request for information to be sent to a receiver.</li> <li>• Metadata includes communication sent, sender, etc.</li> </ul> <p>However, use of communication as a resource assumes that the EHR will capture evidence of the communication whether it occurred by electronic request, verbal request or postal mail request. The UG previously discussed the feasibility of using communication versus other options.</p> <p>The ESAC Team presented the following possible alternatives on the last call:  <b>Consider the Following Alternatives with the Current Examples:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Patient Communication of Information to the Provider (in this example, the patient communicated a reason to avoid taking a specific medication)</b> <ul style="list-style-type: none"> <li>- ["Medication, Not Active: "<i>Medication</i>"] MedNotActive with " <i>Specific Encounter Type</i> " Enc such that MedNotActive.authorDatetime during Enc.relevantPeriod and (MedNotActive.negationRationale in "Medical Reason" or MedNotActive.negationRationale in "Patient Reason" or MedNotActive.negationRationale in "System Reason"</li> </ul> </li> </ul>

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30 Minutes	Recap - Communication Datatypes- Cont.	Floyd Eisenberg (ESAC)- Cont.	<ul style="list-style-type: none"> <li>▪ <b>Provider Communication with another Provider (i.e., Referral Management – Referral and Fulfillment) (in this example, the provider requested a consult with another type of provider and the other provider completed the consult and responded with a consult report containing specified, structured information)</b> <ul style="list-style-type: none"> <li>– Define “Referral”: [“Intervention, Order: ”<i>Referral to Specialist (reason)</i>”] Referral</li> <li>– Define “Consult Report” [“Assessment, Performed: Consultation (<i>reason</i>)”] <i>ConsultReport</i></li> <li>– Define “Fulfills with Consult Report” “<i>Consult Report</i>” Consult where exists (“Referral” R where R.id in Consult.relatedTo)</li> </ul> </li> </ul> <p>ESAC asked the User Group if members had given further consideration to the issue of how to successfully use the QDM Communication datatypes.</p> <p><b>Discussion:</b> Howard Bregman (Epic) – If the communication is an email, the measure might detect whether an email was sent during a certain time period. However, usually a measure specifies that the message conveyed some specific information which would be difficult to operationalize. A number of different communications could happen by email (e.g., email to a group, email from one person to another person). In the case of a referral, patients are commonly referred to a clinic or department without specifying a person. Such a referral is usually managed using an order. There is a record of the referral order; however, the order might not include the necessary specificity (i.e., structured reason codes and specific characteristics of the recipient of the message). For example, a patient is referred to headache clinic. They see a provider there, but there is no direct connection between the referral and the provider. A loop would need to be drawn between the requesting provider and the kind of provider or organization intended to receive the request for the measure to</p>

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30 Minutes Cont.	Recap - Communication Datatypes-Cont.	Floyd Eisenberg (ESAC)-Cont.	<p>work.</p> <p>Jamie Lehner (PCPI) – Offered the following example<sup>1</sup>: The purpose of CMS142 is to communicate results from studies performed in CMS167 (findings from a macular (retinal) examination) from one provider to another provider who is managing the patient’s ongoing care. Measure CMS 142 requires that the eye care provider communicates either presence or absence of macular edema (swelling of the central portion of the retina). The measure logic does not specify the type of provider (i.e., eye care professional, or other ophthalmology practice) expected to perform the examination and report the results).</p> <p>ESAC asked if there had been any feedback from implementers about how they identify information to process the measure. PCPI indicated there has been no feedback about issues identified in implementing the measure and that there is no way to find such information. For the purpose of the measure, they are not prescriptive about how the measure is implemented; rather, implementers are allowed to use whatever works in their practice and incorporate and map as they see fit to decrease effort.</p> <p>Joe Kunisch (Memorial Hermann) indicated the measure can be reported as an eCQM, a claims-based measure or a registry-based measure.</p> <p><b><u>Resolutions/Next Steps:</u></b></p> <p>The ESAC asked PCPI and others on the call to investigate further by identifying groups or vendors which have reported on this measure to determine how it was done, if such information is available.</p>

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<sup>1</sup> Note: details about measures CMS 142 and CMS 167 were added to the minutes for context. Details were determined from version 6.0 available on the eCQI Resource Center; the details were not provided during the call.

Time	Item	Presenter	Discussion/Options/Decisions
30 Minutes	Diagnostic Study – Differentiation	Floyd Eisenberg (ESAC)	<p><b>Overview:</b>  QDM Definition for Diagnostic Study:  Diagnostic Study represents any kind of medical test performed as a specific test or series of steps to aid in diagnosing or detecting disease.  The QDM defines diagnostic studies as those that are not performed in organizations that perform testing on samples of human blood, tissue or other substance from the body.  Diagnostic studies may make use of digital images and textual reports.</p> <p>The ESAC Team suggested the following wording is awkward, “those that are not performed in organizations that perform testing on samples of human blood.” The intent is to avoid including tests based on specimens of human blood (rather than all studies performed by organizations that test human blood specimens). The ESAC Team proposed the language be revised in future versions to remove organization and indicate diagnostic studies do not include tests on human blood or tissue.</p> <p><b>Discussion:</b>  The UG agreed the proposed wording is clearer.</p> <p><b>Resolutions/Next Steps:</b>  Update the language in a future version of QDM, when a new version update is required.</p>
30 Minutes	Negation Rationale Considerations	Floyd Eisenberg (ESAC)	<p><b>Considerations based on QDM 5.3 to QI Core (FHIR) Mapping</b>  The HL7 Clinical Quality Information Workgroup has approved a January ballot item for QI Core. QI (Quality Improvement) Core is an implementation guide intended to harmonize standards for clinical decision support and electronic clinical quality measurement based on HL7 FHIR resources.</p> <ul style="list-style-type: none"> <li>ESAC encouraged interested QDM User Group members to sign up to review the ballot before the December 21, 2017 deadline for registering to comment on the January ballot.</li> <li>In the process of mapping QDM to QI Core and FHIR, the ESAC team identified some challenges in determining QDM’s negation rationale attribute</li> </ul> <p>Negation rationale can be mapped to FHIR directly or through QI Core FHIR extensions. However, one FHIR resource, Diagnostic Report, does not allow a negation reason.  FHIR definitions:</p> <p>DiagnosticReport as: a combination of request information, atomic results, images, interpretation, and formatted reports.</p>

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30 Minutes	Negation Rationale Considerations-Cont.	Floyd Eisenberg (ESAC)-Cont.	<p>Observation: measurements and simple assertions.</p> <p>In the QDM to QI Core mapping, many QDM <i>performed</i> datatypes fit best as Observations (Laboratory, Physical Exam, Assessment, Care Experience, etc.). Imaging studies but best with FHIR DiagnosticReport. However, QDM diagnostic studies include 'non-imaging' tests (e.g., EKGs, etc.). Therefore, the QDM to QI Core mapping defines two groups of Diagnostic Study:</p> <ul style="list-style-type: none"> <li>▪ Diagnostic Study, Performed – imaging studies <ul style="list-style-type: none"> <li>– Use FHIR QI Core <i>DiagnosticReport</i></li> </ul> </li> <li>▪ Diagnostic Study, Performed – non-imaging studies <ul style="list-style-type: none"> <li>– Use FHIR QI Core <i>Observation</i></li> </ul> </li> </ul> <p><b>QI Core (FHIR) Metadata &amp; Negation Rationale Consideration</b></p> <p>The FHIR Observation resource allows dataAbsentReason (negation rationale). FHIR DiagnosticReport does not allow negation. The rationale is that the report would not exist if it were negated.</p> <p>The line of reasoning raises the question about whether any QDM datatype with the context of <i>Performed</i> should include negation rationale, or if negation rationale should be limited to the QDM datatype contexts of <i>Order</i>, or <i>Recommended</i>.</p> <p>ESAC asked the QDM User Group for thoughts about negating something that was performed.</p> <p><b>Discussion:</b></p> <p>Lisa Anderson (TJC) – Suggested Assessment, Performed, allows negation rationale because the measure is looking for something to have been done. Negation rationale allows clinicians to indicate why something is not done.</p> <p>ESAC noted that many implementers determine reasons for avoiding an action during the ordering process and map those reasons to the QDM <i>Performed</i> datatype elements. Thus, while the logic may not specify the <i>Order</i> or <i>Recommended</i> context implementers implicitly configure their systems that way. The question is whether use of QDM should be more explicit, indicating the assessment is not ordered or recommended for a reason (as opposed to not performed)?</p> <p>Rob McClure (NLM Contractor) – Suggested since implementers have to report these quality measures they are addressing this in the workflow. In order to convince measure developers to endorse this solution, the team would need to prove that implementers are doing this and this is the right way to do it. Suggested best to leave as is.</p>

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30 Minutes	Negation Rationale Considerations-Cont.	Floyd Eisenberg (ESAC)-Cont.	<p>Joe Kunisch (Memorial Hermann) – Suggested from a quality measurement perspective, the concern is why the study was not done which is what is being sent in the QRDA (e.g., contraindication). Suggested best to leave this the way it is.</p> <p>Further discussion suggested that negation rationale may occur at several steps in the workflow. For example, a medication may have negation rationale at the time or ordering (i.e., reason not ordered), but also at the dispensing or the administration step in the workflow. Therefore, the QDM may need to require interpretation at the implementation site based on workflow.</p> <p><b><u>Resolution/Next Steps:</u></b></p> <p>This issue requires more investigation. The UG agreed to maintain current status. However, QDM Diagnostic Study, Performed negation rationale cannot be mapped to FHIR 3.0 DiagnosticReport as FHIR is currently configured. Also recommend a comment on the FHIR January ballot about the inconsistency in modeling negation across FHIR resources.</p>
30 Minutes	Recap – Allergy/Intolerance Terminology	Floyd Eisenberg (ESAC)	<p><b><u>Overview:</u></b></p> <p><b><u>Recap of the November QDM User Group discussion about terminology recommendations for Allergy/Intolerance.</u></b></p> <ul style="list-style-type: none"> <li>• QDM 5.3 Annotated combines Allergy and Intolerance into a single QDM Datatype</li> <li>• Current (2018) measures use RxNorm as follows: <ul style="list-style-type: none"> <li>○ Medication ingredient value sets for allergy.</li> <li>○ Medication orderable value sets for intolerance</li> </ul> </li> <li>• Result – two lines of code using Allergy/Intolerance datatype to handle allergy and intolerance</li> </ul> <p>CMS 145 Example:</p> <p>["Allergy/Intolerance": "Beta Blocker Therapy"] MedIntolerance  with "Coronary Artery Disease Encounter" Enc  such that MedIntolerance.prevalencePeriod overlaps Enc. relevantPeriod</p> <p>["Allergy/Intolerance": "Beta Blocker Therapy Ingredient"] MedAllergy  with "Coronary Artery Disease Encounter" Enc  such that MedAllergy.prevalencePeriod overlaps Enc. relevantPeriod</p> <p><b><u>Resolution/Next Steps:</u></b></p> <p>The QDM datatype Allergy/Intolerance does not differentiate allergy from intolerance unless the measure developer includes the QDM attribute <i>type</i> to specify the reaction intended to meet criteria. Based on discussions with NLM, ESAC suggested to use the Ingredient RXNorm value set</p>



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30 Minutes	Recap – Allergy/Intolerance Terminology-Cont.	Floyd Eisenberg (ESAC)-Cont.	<p>for both allergy and intolerance and to differentiate the two, use the “type” attribute. Rob McClure (NLM Contractor) confirmed this is the appropriate approach.</p> <p>Lisa Anderson (TJC) noted the ONC 2017 Standards Advisory (available at: <a href="https://www.healthit.gov/newsroom/final-2017-interoperability-standards-advisory">https://www.healthit.gov/newsroom/final-2017-interoperability-standards-advisory</a>) recommends SNOMED for indicating allergy by medication class. Therefore, she asked if measure developers should start adding SNOMED codes to their medication ingredient value sets. Existing measures have used SNOMED to indicate allergies, but only as SNOMED (disorder) concepts using the QDM datatype, <i>Diagnosis</i>.</p> <p><b>Overview:</b> Rob McClure (NLM Contractor) – Suggested that the ISA supports this approach, but noted there are challenges.</p> <ul style="list-style-type: none"> <li>• The SNOMED (product) hierarchy would be most appropriate to address drug classes that could be used as an allergen.</li> <li>• If implementers are capturing the data in the allergy list (which is used for decision support to check for allergies with new orders), then we could recommend to the Governance call that we add the SNOMED (product) codes to the ingredient value set and it would use the QDM Allergy/Intolerance datatype.</li> <li>• If implementers are capturing the data on the Problem / diagnosis list, then we should recommend use of the SNOMED (disorder) code(s) along with the QDM diagnosis datatype and review this issue with the Governance call as well.</li> <li>• Either decision requires information from implementers to confirm the measure goes to one place to find either the SNOMED (product) or RXNorm ingredient concept.</li> <li>• The ISA recommendation to use SNOMED as a way of representing drug class is under-specified. It should specifically recommend the use of the product hierarchy.</li> </ul> <p><b>Resolution/Next Steps:</b></p> <ul style="list-style-type: none"> <li>• Review the issue on a Governance call</li> <li>• Lisa Anderson (TJC) will query those Jira commenters who raised the issues to determine how implementers are using SNOMED in their systems. Recommendations of the most appropriate approach will depend on the results of that investigation.</li> <li>• If the Governance group specifies a recommendation, it should be added to the CMS Measures Management Blueprint.</li> </ul>



Time	Item	Presenter	Discussion/Options/Decisions
5 Minutes	Next Meeting	Rob Samples (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:gdm@esacinc.com">gdm@esacinc.com</a></li> <li>- Or start a discussion: <a href="mailto:gdm-user-group-list@esacinc.com">gdm-user-group-list@esacinc.com</a></li> </ul> <p><i><u>If you attend the QDM User Group meetings but do not receive communications or have access to the QDM User Group List, please send an email to <a href="mailto:QDM@esacinc.com">QDM@esacinc.com</a> so you may be added to the distribution list.</u></i></p> <p><b>Next user group meeting</b></p> <ul style="list-style-type: none"> <li>- Regularly Scheduled Meeting – January 17, 2018 from 2:30 to 4:30 PM ET.</li> </ul>

**Action Items:**

Assignee	Topic	Action Item Details
None	N/A	N/A
None	N/A	N/A
None	N/A	N/A

## Invitees/Attendees:

	<b>Name</b>	<b>Organization</b>
X	Abrar Salam	The Joint Commission
	Alex Lui	Epic
X	Angela Flanagan	Lantana
	Anna Bentler	The Joint Commission
	Anne Cooney	N/A
X	Anne Coultas	McKesson
	Anne Smith	NCQA
	Balu Balasubramanyam	MITRE
	Ben Hamlin	NCQA
X	Beth Bostrom	N/A
	Brian Blaufeux	Northern Westchester Hospital
	Bryn Rhodes	ESAC
	Chana West	ESAC
	Chandra Bartleman	Telligen
	Chris Moesel	MITRE
	Cindy Lamb	Telligen
	Cynthia Barton	Lantana
	Dalana Ostile	Providence Health Systems
	Dave Wade	Apprio
	Debbie Hall	University of Maryland
	Deidre Sacra	N/A
	Doug Goldstein	Epic
X	Floyd Eisenberg	ESAC
	Ganesh	N/A
X	Howard Bregman	Epic
X	Jamie Lehner	PCPI
	Jean Fajen	Telligen
	Jenny Brush	ESAC
X	Jenna Williams-Bader	NCQA
	John Carroll	The Joint Commission
	John Lujan	Kaiser Permanente
	Jessica Smails	Caradigm
	Joseph Kunisch	Memorial Hermann
	Jorge Belmonte	PCPI
	Julia Skapik	ONC
	Julie Koscuizska	Nyack Hospital
X	Juliet Rubini	Mathematica
	Justin Schirle	Epic
	Jay Frails	Meditech
	Khadija Mohammed	ESAC
	Kendra Hanley	HSAG
	Kimberly Smuk	HSAG
	KP Sethi	Lantana
	Latasha Archer	NCQA
	Laura Pearlman	Midwest Center for Women's Healthcare

	<b>Name</b>	<b>Organization</b>
	Laurie Wissell	Allscripts
	Lindsey Clapper	N/A
X	Lisa Anderson	The Joint Commission
	Lizzie Charboneau	MITRE
X	Lynn Perrine	Lantana
	Marc Hadley	MITRE
	Margaret Dobson	Zepf Center
X	Marilyn Parenzan	The Joint Commission
X	Melissa Tindal	N/A
	Melissa Van Fleet	Alliance Health Oklahoma
	Michelle Dardis	The Joint Commission
	Michelle Hinterberg	MediSolv
	Mike Shoemaker	Telligen
	Mukesh Allu	Epic
	Neelam Zafar	The Joint Commission
X	Pamela Mahan-Rudolph	Memorial Hermann
	Patty McKay	FMQAI
X	Paul Denning	MITRE
	Rachel Buchanan	Oregon Urology
	Rayna Scott	PCPI
X	Rebecca Baer	N/A
X	Rob McClure	NLM Contractor
	Rob Samples	ESAC
	Rose Almonte	MITRE
	Rukma Joshi	ESAC
	Rute Martins	MITRE
	Ruth Gatiba	Battelle
	Ryan Clark	Xcenda
	Samuel Benton	NCQA
	Sethuraman Ramanan	Cognizant
	Stan Rankins	Telligen
	Susan Wisnieski	Meditech
	Sweta Ladwa	ESAC
	Syed Zeeshan	eDaptive Systems
	Tammy Kuschel	McKesson
	Tom Dunn	Telligen
	Toi Anderson	N/A
	Vaspaan Patel	NCQA
	Wendy Wise	Lantana
	Yan Heras	ESAC
	Yanyan Hu	The Joint Commission
	Yvette Apura	PCPI
	Zahid Butt	MediSolv
	Zach May	ESAC