Quality Data Model (QDM) User Group Meeting |Minutes

Meeting date | *02/21/2018 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)	• **Cooking with CQL Webinar was held on Thursday, February 22st at 4pm ET**. ○ Please submit CQL-related questions and/or measure examples to cqlesac@esacinc.com • **CMS invites Stakeholders to Review and Provide Feedback on draft eCQMs for 2019 Reporting using the CQL standard** ○ The draft measures (HTML, XML, and JSON formats) will be available 2/28 - 3/20 on the CQM Issue Tracker along with direct links to the measures.
30 Minutes	Potential Change to QDM: Context attribute for Medication, Order *(Jira Ticket QDM-101)*	Floyd Eisenberg (ESAC)	**Overview** Jira Ticket QDM-101 indicates that QDM fails to provide a mechanism to specify the setting in which a medication order is intended to be dispensed. The use case raised refers to medication orders during a hospital inpatient encounter in which a medication order can be written with express intention for submission of e-prescription for the patient to pick up and self administer after discharge. Feedback from members of the QDM User Group confirms that at least two high-market share vendors allow for such indication. The group decided last time to follow up with use cases and to determine if there is a corresponding HL7 resource (FHIR). ESAC reviewed the concept with the HL7 Pharmacy Workgroup at the recent HL7 Working Group meeting in New Orleans (January 2018). The appropriate FHIR resource mapping is MedicationResource.category which has the options of Inpatient, Outpatient, and Community. ESAC identified a new Use Case from draft measure specifications and obtained permission from the measure steward to use them as exemplars: The measure intent is to determine the percentage of patient aged 18 years and older with a diagnosis of heart failure with a current or prior left ventricular ejection fracture (LVEF) < 40% who were prescribed:

Time	Item	Presenter	Discussion/Options/Decisions
15 Minutes, Cont.	Potential Change to QDM: Context attribute for Medication, Order *(Jira Ticket QDM-101),* *Cont.*	Floyd Eisenberg (ESAC) , Cont.	CMS 135: ACE Inhibitor or ARB therapy CMS 144: Beta Blocker therapy within a 12 month period when seen in the outpatient setting or at each hospital discharge. Issue: As originally constructed, patients who have multiple inpatient hospital discharges within a year may pass the measure even when a heart failure medication was prescribed at only one of the hospital discharges. Compliance is required at each hospital discharge. Under consideration – change the measure to have two populations: Population 1: Outpatient Population 2: Inpatient **Exemplar (presented on slides for the UG):** **CMS 135 (ACEI/ARB)** **Numerator 1** exists “ACE Inhibitor or ARB Ordered Outpatient” or exists “Currently Taking ACE Inhibitor or ARB Outpatient” **Numerator 2** exists “ACE Inhibitor or ARB Ordered Inpatient” or exists “Currently Taking ACE Inhibitor or ARB Inpatient” **CQL Definition Expressions for the Numerators:** 1. ACE Inhibitor or ARB Ordered Outpatient ["Medication, Order": "ACE Inhibitor or ARB"] ACEInhibitorOrARBOrdered with "Heart Failure Outpatient Encounter with Moderate or Severe LVSD" ModerateOrSevereLVSDHFOutpatientEncounter such that ACEInhibitorOrARBOrdered.authorDatetime during ModerateOrSevereLVSDHFOutpatientEncounter.relevantPeriod

Time	Item	Presenter	Discussion/Options/Decisions
15 Minutes, Cont.	Potential Change to QDM: Context attribute for Medication, Order *(Jira Ticket QDM-101),* *Cont.*	Floyd Eisenberg (ESAC) , Cont.	2. ACE Inhibitor or ARB Ordered Inpatient ["Medication, Order": "ACE Inhibitor or ARB"] ACEInhibitorOrARBOrdered with "Heart Failure Inpatient Encounter with Moderate or Severe LVSD" ModerateOrSevereLVSDHFInpatientEncounter such that ACEInhibitorOrARBOrdered.authorDatetime during ModerateOrSevereLVSDHFInpatientEncounter.relevantPeriod 3. Currently taking ACE inhibitor or ARB Outpatient [“Medication, Active”: “ACE Inhibitor or ARB”] ActiveAceInhibitorOrARB With “Heart Failure Outpatient Encounter with Moderate or Severe LVSD” ModerateorSevereLVSDHFOutpatientEncounter such that ActiveAceInhibitororARB.relevantPeriod overlaps after ModerateorSevereLVSDHFOutpatientEncounter.relevantPeriod 4. Currently taking ACE inhibitor or ARB Inpatient [“Medication, Active”: “ACE Inhibitor or ARB”] ActiveAceInhibitorOrARB With “Heart Failure Outpatient Encounter with Moderate or Severe LVSD” ModerateorSevereLVSDHFInpatientEncounter such that ActiveAceInhibitororARB.relevantPeriod overlaps after ModerateorSevereLVSDHFInpatientEncounter.relevantPeriod ESAC clarified that the purpose of the discussion is to use the measures as exemplars and that suggestions for modifying the measures are out of scope for the QDM User Group. The challenge with the existing logic expression is that ACE Inhibitor or ARB Ordered Inpatient ▪ Does not differentiate if the medication order was written for the patient to take the medication as an inpatient or an outpatient.
15 Minutes,	Potential Change to QDM: Context	Floyd Eisenberg	○ Orders while the patient is in the hospital but intended for prescription electronically to be picked up as an outpatient

Time	Item	Presenter	Discussion/Options/Decisions
Cont.	attribute for Medication, Order *(Jira Ticket QDM-101),* *Cont.*	(ESAC) , Cont.	○ Medications ordered for administration within the hospital stay. <u>Medication, Active</u> ▪ Addresses inpatient medication <u>Medication, Discharge (another alternative for inpatient settings)</u> ▪ Addresses medications to be taken at discharge (regardless of the need for an order) **<u>ESAC asked for discussion about</u>** expanding QDM to indicate an attribute for Medication, Order to allow expression of the ordering provider's intention for the medication to be taken in the inpatient or outpatient setting: Consider QDM Attribute for Medication, Order: • (*context*) • Outpatient • Inpatient **<u>Discussion</u>** Claudia Hall (Mathematica) – The term inpatient is more clinically associated with the medications given while an inpatient. If trying to look at medications at discharge, the more relatable QDM datatype is Medication, Discharge. Howard Bregman (Epic) – Agrees with Claudia; however the problem is an inpatient med would be counted in the numerator of the eCQMs which are really looking for outpatient medications. Joe Kunisch (Memorial Hermann) – Noted there is a feasibility issue in that the patient can be within multiple EHRs and hospital systems within the 12 month period. For this reason, it might be difficult to generate the numerator and denominator for this population in organizations that do not have good interoperability or a single enterprise system. Yvette Apura (PCPI) – Assume if the medication order occurred in the inpatient, and is intended for use in outpatient, then they assume med order should fall in inpatient criteria because the med order resides in the inpatient record.
15 Minutes, Cont.	Potential Change to QDM: Context attribute for Medication, Order	Floyd Eisenberg	Howard Bregman (Epic) – offered an example: A patient with chest pain/presumed MI is given an aspirin in the ED. This is an inpatient order written and administered in the hospital. A measure looking at risk factors on aspirin with the intention of capturing those on home aspirin would include

Time	Item	Presenter	Discussion/Options/Decisions
	(Jira Ticket QDM-101), *Cont.*	(ESAC) , Cont.	the patient given a single dose of aspirin in the ED in the numerator. There is currently no good way to exclude that dose of aspirin in the ED and exclude them from the numerator. Martha Radford (NYU) – Noted as measures are developed for the first draft of the spec it is helpful to be inclusive and sacrifice sensitivity for specificity. This might mean allowing a few inpatient prescriptions to show in the numerator and as the measure matures, the numerator can be further refined. Stan Rankins (Telligen) – Noted allowing inpatient orders for shared [enterprise] systems will be a difficulty. ESAC noted this was the original focus of the ticket submitted which led to this discussion to add an attribute to indicate intention for outpatient or inpatient use. Joe Kunisch (Memorial Hermann) - Suggested it might be best to eliminate the encounter types. For example, say I only want outpatient or ambulatory encounters (rather than filter out medications). Stan Rankins agreed but noted this particular measure does not look at encounters for medication orders. ESAC referenced comments from Jamie Lehner (PCPI) on the last QDM UG call that many measures tie the Medication, order to the timing of the encounter and this way avoid looking at inpatient orders. ESAC reviewed the next steps and possible options for resolution. The UG should consider whether additional discussion or additional use cases are needed. The possible resolutions include: 1. Suggest to measure developers: consider this issue in measure design because QDM will not have ability to indicate inpatient or outpatient use. 2. Create a QDM indication of intended inpatient or outpatient use by adding an attribute to QDM allowing measure developer to be more specific. Joe Kunisch (Memorial Hermann) – Generally supports adding the attribute, but suggested ambulatory may be a different type of encounter and cannot be lumped with outpatient. Joe noted the MedicationResource.category includes *inpatient*, *outpatient*, and *community*, and that

Time	Item	Presenter	Discussion/Options/Decisions
15 Minutes, Cont.	Potential Change to QDM: Context attribute for Medication, Order *(Jira Ticket QDM-101),* *Cont.*	Floyd Eisenberg (ESAC) , Cont.	MedicationResource.category. Lisa Anderson (TJC) – Suggested Medication, Discharge datatype be used in the case of ordering medication on inpatient side for the patient to take home to make this clear. Suggested the group should clearly indicate what the difference is between Medication, Discharge and Medication, Order with a context to make it clear to measure developers. ESAC suggested the EH measures are generally episode-based, on the Encounter and identify at discharge there is a discharge med list. The attribute may me most useful in defining the population in patient-based measures. Martha Radford (NYU) – When looking at outpatient encounters or outpatients that have encounters and wanting to assess something to do with physician decision making like writing a prescription, the encounter must be a physician decision making encounter (as opposed to imaging, labs, etc.). The encounter can contain an E/M code. ESAC suggested in most cases the denominator value sets identify acceptable visits using CPT E/M codes that indicate outpatient visit and, therefore, the measure design often excludes outpatient encounters such as imaging procedures. Claudia Hall (Mathematica) – Asked whether context refers to where the order was written or where they expect it to be taken? ESAC noted MedicationRequest.context means where it was written and MedicationRequest.category means for where it is intended to be filled and used. Lisa Anderson (TJC) - Suggested that it is preferable to align with FHIR and use the same term. Jana Malinowksi (Cerner) – Confirmed Cerner has the ability to indicate a Medication, Order should be filled by outpatient pharmacy (so that the correct pharmacy receives the information). **Resolution/Next Steps** The UG did not voice opposition to adding category as an attribute and some users suggested it might be helpful. ESAC will take the issue to the Governance Group for further discussion and discuss the issue again in the March QDM UG meeting before moving forward with a change to QDM at this time. Based on today's discussion, if there is a new attribute, it should be called *category* and allow the measure developer to indicate the location at which the medication order is to be filled (most likely using the same terms as the HL7 FHIR representation – *inaptient, outpatient, community*).

Time	Item	Presenter	Discussion/Options/Decisions
15 Minutes	Potential options for identifying Principal Diagnosis using HL7 FHIR Resources	Floyd Eisenberg (ESAC)	**Overview** Encounter, Performed has an attribute, "Principal Diagnosis". ESAC asked the group to consider the most appropriate mapping of Principal Diagnosis in HL7 QI Core using existing FHIR resources. ESAC reviewed the concern with the HL7 Patient Administration and Patient Care and Financial Management Workgroups all of which recommended using the Encounter.diagnosis.role and Encounter.diagnosis.rank combined to address *principal* diagnosis. "Principal" is a specific concern for the US domain and therefore cannot be directly included in HL7 FHIR (except as an extension in QI Core). ESAC asked the QDM UG if the use of Encounter.diagnosis.role and Encounter.diagnosis.rank would be sufficient: ▪ Encounter.diagnosis.role o Admission diagnosis o Discharge diagnosis o Chief complaint o Comorbidity diagnosis o Pre-op diagnosis o Post-op diagnosis o Billing diagnosis ▪ Encounter.diagnosis.rank o Ranking of the diagnosis (for each role type) - positive integer ESAC suggested that Encounter.diagnosis.role (billing diagnosis) and Encounter.diagnosis.rank (1) might be an appropriate recommendation for mapping QDM *principal diagnosis* attribute to QI Core. **Discussion** Jana Malinowksi (Cerner) - Cerner currently uses a ranking/priority of 1 to identify Principal Diagnosis.

Time	Item	Presenter	Discussion/Options/Decisions
15 Minutes, Cont.	Potential options for identifying Principal Diagnosis using HL7 FHIR Resources, Cont.	Floyd Eisenberg (ESAC), Cont.	Joe Kunisch (Memorial Hermann) – Suggested the Coding Department determines Principle Diagnosis based on documentation. This drives the DRG. He offered to contact the Coding Department for input. Suggested it might be useful to pull a dataset to determine if the billing diagnosis would work for this intent. ESAC noted another option is discharge diagnosis, but this might not always be the same as billing. Should discharge be considered or just billing for mapping Principal Diagnosis to FHIR? Claudia Hall (Mathematica) – Has seen discrepancies between these two (i.e., discharge diagnosis and billing diagnosis). She prefers using billing as this is usually the rank of "1". Rob McClure (NLM Contractor) – Noted "Principal" is a US construct, which is the reason HL7 will not adopt a Principal Diagnosis. What other billing diagnosis would exist other than the one driving the use of the word "Principal"? ESAC questioned whether comorbidities would be a billing diagnosis but not have the rank of "1". Rob suggested there be an extension to support a new Principal characterization in FHIR to make an ordered list of billing diagnoses. Yvette Apura (PCPI) – Noted Principal Diagnosis, which is the reason of the admission, and Discharge Diagnosis are not necessarily the same. **Resolution/Next Steps** ESAC will present and discuss the issues identified on the HL7 Workgroup call to help resolve those areas difficult to map, including this issue. ESAC will come back to the UG with any decisions which impact QDM.
5 Minutes	Update on Allergy/ Intolerance Drug Class Value Sets *(Jira Ticket QDM-188)*	Floyd Eisenberg (ESAC)	The group previously discussed how to indicate medication class. The group discussed 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 awaiting final determination. ESAC will update the UG once the Governance Group makes a decision.

Time	Item	Presenter	Discussion/Options/Decisions
10 Minutes	HL7 QI Core – QDM mapping Update	Floyd Eisenberg (ESAC)	QI Core Ballot is in the process of reconciliation of ballot comments. The ballot includes a mapping from FHIR QI Core to QDM and a reverse map from QDM to FHIR. 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 (Friday 1-3pm ET). Dial in: 770-657-9270 Passcode: 217663 https://join.freeconferencecall.com/hl7cqi ESAC will bring back any mapping results which impact QDM to the QDM UG. 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: http://www.hl7.org/myhl7/managelistservs.cfm?ref=nav
5 Minutes	Next Meeting	Chana West (ESAC)	**Agenda items for next QDM user group meeting** – Contact us at gdm@esacinc.com – Or start a discussion: gdm-user-group-list@esacinc.com **Next user group meeting** – Regularly Scheduled Meeting – March 21, 2018 from 2:30 to 4:30 PM ET.

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
	Ben Hamlin	NCQA
X	Beth Bostrom	PCPI
	Brian Blaufeux	Northern Westchester Hospital
	Bryn Rhodes	ESAC
X	Chana West	ESAC
	Chandra Bartleman	Telligen
	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
X	Jacob Machinia	Promise Healthcare
X	Jamie Lehner	PCPI
X	Jana Malinowski	Cerner
	Jean Fajen	Telligen
X	Jeff Jennings	Cerner
X	Jenny Brush	ESAC
	Jenna Williams-Bader	NCQA
	John Carroll	The Joint Commission
	John Lujan	Kaiser Permanente
	Jessica Smails	Caradigm
X	Joseph Kunisch	Memorial Hermann
	Jorge Belmonte	PCPI
	Julia Skapik	ONC
	Julie Koscuiszka	Nyack Hospital
X	Juliet Rubini	Mathematica
	Justin Schirle	Epic
	Jay Frails	Meditech
	Khadija Mohammed	ESAC
	Kendra Hanley	HSAG
	Kimberly Smuk	HSAG
	KP Sethi	Lantana

	Name	Organization
	Latasha Archer	NCQA
	Laura Pearlman	Midwest Ctr 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
X	Martha Radford	NYU Medical Center
X	Matt Hardman	Cerner
	Melissa Van Fleet	Alliance Health Oklahoma
	Michelle Dardis	The Joint Commission
X	Michelle Hinterberg	MediSolv
X	Mike Shoemaker	Telligen
X	Mindy Staum	Therapy by Mindy
X	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	NCQA
X	Rob McClure	NLM Contractor
	Rob Samples	ESAC
	Rose Almonte	MITRE
	Rukma Joshi	ESAC
	Rute Martins	MITRE
	Ruth Gatiba	Battelle
	Ryan Clark	Xcenda
X	Ryan Sullivan	NYU
	Samuel Benton	NCQA
	Sethuraman Ramanan	Cognizant
X	Stan Rankins	Telligen
	Susan Wisnieski	Meditech
	Sweta Ladwa	ESAC
	Syed Zeeshan	eDaptive Systems
	Tammy Kuschel	McKesson
X	Tina Blair	Kaiser Permanente
	Tom Dunn	Telligen
	Vaspaan Patel	NCQA
	Wendy Wise	Lantana
X	Yan Heras	ESAC
X	Yanyan Hu	The Joint Commission
X	Yvette Apura	PCPI
	Zahid Butt	MediSolv