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

Meeting date | 01/15/2020 2:30 PM ET | Meeting location|Webinar link: ttps://esacinc2.webex.com/esacinc2/j.php?MTID=mb664f23602ec7fedf8287ada56865428

Time	ltem	Presenter	Discussion/Options/Decisions
5 Minutes	Announcements	Jen Seeman (ESAC)	<ul> <li>Cooking with CQL Webinar was held on January 16<sup>th</sup> at 4:00 PM ET. These sessions are generally held on the third Thursday monthly. Upcoming events can be found by going to the <u>eCQI Resource Center events page</u>.         <ul> <li>Please submit CQL-related questions to <u>cql-esac@esacinc.com</u>.</li> </ul> </li> <li>CMS hosted a webinar on the Health Level Seven International (HL7) FHIR® standard to highlight the next generation exchange framework being adopted by the healthcare community to advance interoperability. The FHIR for Implementers Webinar was held on Wednesday, January 22<sup>nd</sup> at 12:00pm Eastern Time.</li> <li>Next QDM User Group Meeting will be February 19, 2020</li> </ul>
10 Minutes	Known Issues Recap	Floyd Eisenberg (ESAC)	Overview and Update:         Two new QDM Known Issues posted November 2019:         • QDM Medication Active Timing - QDM 5.4 and 5.5         • https://github.com/esacinc/CQL-Formatting-and-Usage-Wiki/wiki/eCQM-Known- Issues#qdm-medication-active-timing-qdm-54-and-55.         • QDM Laboratory Test Performed Timing - QDM 5.4 and 5.5         • https://github.com/esacinc/CQL-Formatting-and-Usage-Wiki/wiki/eCQM-Known- Issues#qdm-laboratory-test-performed-timing-and-Usage-Wiki/wiki/eCQM-Known- Issues#qdm-laboratory-test-performed-timing-qdm-54-and-55         With regard to QDM datatype Laboratory tests, Performed, QDM 5.5 allows for relevant Datetime
			<ul> <li>(point in time) and relevant Period. Results (e.g., laboratory, EKG, etc.) are generally documented as a single point in time.</li> <li><u>Discussion:</u> Paul Denning (MITRE) noted that without getting into the value set to know which codes represent tests for which specimens are captured at a single point in time (using relevant dateTime) versus those tests for which specimens are captured over a period of time (e.g., 24 hour urine collection for</li> </ul>





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			creatinine clearance that might use relevant Period) it is difficult to be sure of how EHRs might capture specimen time (physiologic time). ESAC suggested an example of a complicating factor might be a glucose tolerance test (GTT) procedure which occurs over a period of time. However, for a GTT, each individual lab value has its own point in time as well as a LOINC code, example:
			<ul> <li>1-hour post 75 g oral glucose LOINC code = 6748.8</li> <li>3.5 hours post 75 g oral glucose LOINC code = 10967.8</li> <li>5 hours post 75 g oral glucose LOINC code = 6758-7</li> <li>Etc.</li> </ul>
			There are two ways to look at this issue: A test with multiple results or individual LOINC codes might be referenced using an individual relevant Datetime for each LOINC code, or the entire 5-hour GTT might be reference with a relevant Period.
			<b>Conclusion:</b> Knowledge about general EHR workflow is important to determine how to manage value sets with respect to timing assignment in eCQM expressions. It is important to remember discussion at previous QDM User Group meetings in which EHR vendors indicated they capture and store only two times for most observations (e.g., laboratory tests), i.e., the time the specimen is obtained (physiologic time) and resulted time (when the result is issued by the laboratory or department providing the result). If that information is true, relevant Datetime might be appropriate regardless of the actual specimen period (where applicable) specific to the laboratory test collection time.
5 Minutes	Updated QDM Charter	Floyd Eisenberg (ESAC)	Overview: The Charter was modified to replace the MAT Change Control Board (MCCB) with eCQM Governance Group and the following revision was approved by the eCQM Governance Group. ESAC provided an overview of the new workflow that replaces the MCCB final approval of QDM changes and timing to final approval by the Governance Group. The change simplifies the process.





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			Stage 1: Discover QDM Issue
			1.1: QDM User, ESAC, HHS identifies question or issue 1.2 QDM Standards Contractor Management team triages QDM issue, prepares for QDM User Group meeting including evaluation of consistency with HL7 modeling (if indicated)
			Stage 2: Convene QDM User Group
			2.1: QDM User Group discusses QDM issue, recommends course of action 2.2 QDM Standards Contractor Management Team summarizes recommendations for eCQM Working Group and GTLs 2.3 QDM Standards Contractor Management Team communicates with issue submitter, posts issue status for public tracking
			Stage 3: Determine need and feasibility of QDM update
			3.1: As needed, incorporation and development of QDM errata, updates or Known Issues discussed with eCQM Governance Group for approval
			Discussion and Conclusion: The QDM User Group participants had no comments or questions about this change. The new QDM Charter is already active.
40 Minutes	QDM to QI-Core mapping <i>lessons</i> <i>learned</i>	Floyd Eisenberg (ESAC)	Overview:         QDM Device, Applied         QDM should model Device, Applied the same as Procedure, Performed for all devices:         Implantable (in FHIR this is specifically called out by US Core)         Non-implantable         – devices used on a patient by clinicians         – patient-use devices (e.g., wheelchair, cane, etc.)





Time	ltem	Procontor					
		Presenter	Discussion/Options/Decisions				
			QDM does not differentiate among these kinds of devices				
			Therefore, the act of <i>applying</i> a device in QDM should always use Procedure, Performed				
			To indicate the result of using a device with QDM depends on the use case, or the device.				
			<ul> <li>Procedure, Performed <i>result</i>, OR</li> <li>Assessment, Performed (basically an observation about how the device was used)</li> </ul>				
			<ul> <li>Examples:</li> <li>Anti-thrombotic pneumatic device - Procedure, Performed</li> </ul>				
			<ul> <li>CPAP* (patient use)</li> <li>CPAP* (patient use)</li> <li>Assessment, Performed</li> </ul>				
			– usage hours – component				
			– mask seal – component				
			– events per hour - component				
			– mask on/off - component				
			– total score - component				
			QDM Device, Applied – Equivalent use in QI-Core (FHIR)				
			QDM QI-Core				
			Procedure, Performed Procedure with Procedure.usedCode				
			(to indicate the device used by the				
			procedure to insert/use the device)				
			Assessment, Performed Observation.partOf				
			(to indicate <i>findings</i> ) (to indicate the procedure during which				
			the observation occurred)				
			Future consideration for QDM: Remove Device, Applied				
			Discussion:				
			Lisa Anderson (NCQA) asked about how to address a use case to ask about a patient's use of a				
			cane or wheelchair in QI-Core (FHIR), specifically why DeviceUseStatement would not be more				
			appropriate rather than Observation. ESAC explained that the Orders and Observation Workgroup that owns DeviceUseStatement recommended against its use since it has a maturity level of "0"				
			and it has not been sufficiently tested, nor is there clearly established workflow to capture and				
			share data in structured form. Observation (in QI-Core) or Assessment, Performed (in QDM) should				
			be used since information about patient use of devices such as a cane or wheelchair are captured				
			as findings (observations) if they are captured at all.				





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			With respect to what the terminology allows, Rob McClure (MD Partners) noted there is no independent LOINC code for assistive devices in use. LOINC does have some observable entities that reference use of such devices, but those elements are part of larger patient evaluation or assessment tools. While in some cases, use of one codes from within a larger assessment tool might be acceptable, this use case might require creating a separate LOINC code for the desired information without capture of the full assessment tool. The attendees generally agreed that this piece of information is important for patient care and should be addressed with an additional LOINC code. Lisa Anderson (NCQA) noted this logic was added for the 2020 reporting year. ESAC suggested this discussion be taken offline to address.
			After the User Group meeting, ESAC reviewed LOINC to provide some general guidance:
			The current mechanism for capturing information of such "frailty device" usage is via free text, if a practitioner deems it significant enough, or as a response to an existing dataset or survey used for detailed patient assessment or to document patient status on facility transfer:
			<ul> <li>Survey.CMS Version 2.64 as one observation among many – LOINC code 89411-2 - Does the patient use a wheelchair/scooter [CMS Assessment].</li> <li>Survey.MDS Version 2.54 as one observation among many - LOINC code 54758-8 - Wheelchair (manual or elective) normally used in last 7 days [MDSv3]</li> </ul>
			Or, as part of a patient reported outcome survey measurement:
			LOINC code PROMIS 91974-6 When I was in pain I used something for support (can, crutches, wheelchair) to move from place to place in past 7 days [Survey.PROMIS PAINBE29_PED]
			Each of these items represent a specific observation that is part of an existing evaluation tool. Such tools or even individual observable entities such as these are managed in QDM by Assessment, Performed (with the individual component questions manage as components of Assessment, Performed, or as individual stand-alone questions if such are available in LOINC).
			<ul> <li>QDM Device, Order; Device, Recommended</li> <li>DeviceRequest describes a request (order, recommendation) for use of a device by a patient (e.g., wheelchair, hearing aid, insulin pump, CPAP, masks)</li> </ul>





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			<ul> <li>QDM Device, Order maps to DeviceRequest.intent = order</li> <li>QDM Device, Recommended maps to DeviceRequest.intent = plan</li> <li>ServiceRequest should be used for implantable devices and other devices used for a patient by clinicians (i.e., any non-patient use device)</li> <li>QDM Device, Order maps to ServiceRequest.intent = order</li> <li>QDM Device, Recommended maps to ServiceRequest.intent = plan</li> </ul> Future consideration for QDM: No change (QI-Core is more expressive, but QDM concepts for Device, Order and Device, Recommended are sufficient for current use).
			<ul> <li>QDM Encounter, Performed negation rationale         <ul> <li>There is no clear use case for an eCQM to request a reason for failure to perform an encounter.</li> <li>QI-Core / FHIR has no concept of an encounter not performed (i.e., it didn't happen, but no way to document it didn't happen for a specific reason)</li> </ul> </li> <li>Future considerations for QDM:         <ul> <li>Current AU cycle: refrain from expressing eCQMs with QDM Encounter, Performed negation rationale</li> <li>Retire the Encounter, Performed negation rationale attribute in future versions</li> </ul> </li> </ul>
			<ul> <li>QDM Procedure, Performed priority</li> <li>QI-Core and FHIR base Procedure resources have no priority element to indicate that a procedure is elective, Vs non-elective. Therefore, a solution using QI-Core is: <ul> <li>Use Procedure.basedOn ServiceRequest (with priority – routine) – note that the available values for ServiceRequest.priority do not include the term <i>elective</i>. Therefore, the best approach is to assume that priority = routine is sufficient, OR</li> <li>Consider use of Encounter.priority – <i>elective</i> is an option in the Encounter.priority value set in QI-Core and the Encounter.procedure extension can indicate that the procedure occurred within the encounter.</li> </ul> </li> <li>However, QDM does not have a way to reference a relationship between a Procedure, Performed and a Procedure, Order comparable to QI-Core's Procedure.basedOn.</li> </ul>
			<b>Future consideration for QDM:</b> In subsequent QDM versions, remove Procedure <i>priority</i> and add Procedure <i>relatedTo</i> to address a Procedure, Order with priority = elective.





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Internation         Presenter         Discussion/options/decisions           QDM Participant recorder         • QDM added recorder to allow all QDM datatypes to referrer individual or organization that performed an activity). How Resource: Coverage, does not include a performer or recorrepresents the insurance applicable to a patient at any give case to suggest a need for a Participation recorder in QDM           Future consideration for QDM: In subsequent QDM versions, recommend that measure developers not use this attribute for Par           10         QDM Terminology           Minutes         Floyd           Eisenberg         (ESAC)           QDM-243         Floyd           Eisenberg         (ESAC)           • Https://www.cms.gov/Medicare/Quality-Initiatives-Patient-A Instruments/MMS/Downloads/Blueprint.pdf           ESAC reminded the QDW User Group that terminology recommendations or originated in the previous Health Information Technology Standard vocabulary Task Force which no longer meets. The latest version some of the terminology recommendations. This current effort to noriginated with a request from a measure developer who suggeste Intervention, Performed should have the same terminology recommendations QDM datatypes as shown in the table below:	ever, the comparable FHIR rder. FHIR's <i>Coverage</i> en time. There is no existing use move Participation <i>recorder</i> and ticipation in the AU 2020 cycle. ure Considerations for QDM" as a m (MMS) Blueprint es. See QDM Jira ticket: <u>QDM-ons in the CMS MMS Blueprint</u> . Assessment- indations for QDM datatypes ds Committee subgroup: of the MMS Blueprint updated eview recommendations ed that QDM datatype mendations as the QDM datatype





General Clinical Concept	QDM Datatypes	QDM Attribute	Clinical Vocabulary	Transition Vocabulary
Intervention	Intervention, Order Intervention, Performed Intervention, Recommended	Code	SNOMED CT (disorders, findings)	CPT, HCPCS, ICD-9-CM Procedures, ICD-10-PCS
Intervention	Intervention, Order Intervention, Performed Intervention, Recommended	Reason	SNOMED CT (disorders, findings)	N/A
Intervention	Intervention, Order Intervention, Performed Intervention, Recommended	Negation rationale	SNOMED CT (disorders, findings)	N/A
Intervention	Intervention, Performed	Result	SNOMED CT (disorders, findings)	N/A
Procedure	Procedure, Order Procedure, Performed Procedure, Recommended	Code	SNOMED CT (procedures, regime/therap y)	CPT, HCPCS, ICD-9-CM Procedures, ICD-10-PCS
Procedure	Procedure, Order Procedure, Performed Procedure, Recommended	Reason	SNOMED CT (disorders, findings)	N/A





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			General Clinical Concept	QDM Datatypes	QDM Attribute	Clinical Vocabulary	Transition Vocabulary
			Procedure	Procedure, Order Procedure, Performed Procedure, Recommended	Negation rationale	SNOMED CT (disorders, findings)	N/A
			Procedure	Procedure, Performed	Result	SNOMED CT (disorders, findings)	N/A
			and "regime/therapy". Discussion: Rob McClure (MD Pa Performed would still such as education are Blueprint should not r Resolution/Next Ste ESAC requested that other areas for which User Group will review recommendations to review may be prudent to review	rtners) agreed with the r need to include SNOME e recorded as findings (e estrict measure develop	recommendatio ED disorders an e.g., education ers from using embers review rint recommence id, after that rev Since the MM signments now	n but suggested the completed). All ag the appropriate te the QDM-243 Jira lations should be u view and discussio S Blueprint update and submit recom	nat Intervention, ome interventions reed that the MM rminology. ticket and sugge updated. The QD n, with forward a soccur annually





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5 Minutes	QI Core Publication Status	Floyd Eisenberg (ESAC)	Current Publication Content Site: <u>http://build.fhir.org/ig/HL7/fhir-qi-core/</u> QI Core will be reviewed in the CQI WG and then moved to publication.
5 Minutes	General Discussion	Floyd Eisenberg (ESAC)	Attendees had no further questions or discussion topics.
5 Minutes	Next Meeting	Jen Seeman (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         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 QDM@esacinc.com so you may be added to the distribution list.         Next user group meeting       –         February 19, 2020 from 2:30 to 4:30 PM ET.



## Invitees/Attendees:

	Organization
Abrar Salam	The Joint Commission
Alex Borenstein	Greenway Health
Alex Lui	Epic
Andy Kubilius	The Joint Commission
Angela Flanagan	Lantana
Ann-Marie Dunn	Unknown
Ann Philips	NCQA
Anna Bentler	The Joint Commission
X Anne Coultas	McKesson
Anne Smith	NCQA
Amira Elhagmusa	Battelle
Balu Balasubramanyam	MITRE
Ben Hamlin	NCQA
Benjamin Bussey	Unknown
Beth Bostrom	AMA
Brian Blaufeux	Northern Westchester
Brian Blaufeux	Hospital
Brook Villarreal	Unknown
Bryn Rhodes	ESAC
Carolyn Anderson	Primary care practice
X Chana West	ESAC
Chris Moesel	MITRE
Cindy Lamb	Telligen
Claudia Hall	Mathematica
Corrie Dowell	BSW Health
Dalana Ostile	Providence Health Systems
Dawn Lane	Covenant Health
Dave Mishler	Unknown
X David Clayman	Allscripts
Debbie Hall	University of Maryland
Deidre Sacra	McKesson
Doug Goldstein	Epic
X Floyd Eisenberg	ESAC
Gary Rezik	QIP
Ganesh Shanmugam	Glenwood Systems
Howard Bregman	Epic
Huy	Unknown
Isbelia Briceno	Cerner
James Bradley	MITRE
Jamie Lehner	PCPI
Jana Malinowski	Cerner
X Jen Seeman	ESAC
Jenna Williams-Bader	NCQA
Jill Shuemaker	VCU Health
John Carroll	The Joint Commission
John Lujan	Kaiser Permanente
Jessica Smails	Caradigm
	Memorial Hermann

	Name	Organization
	L Dejesus	Informedika
Х		NCQA
	Lizzie Charboneau	MITRE
	Lynn Perrine	Lantana
	Marc Hadley	MITRE
Х	Marc Hallez	The Joint Commission
	Marc Overhage	Cerner
	Margaret Dobson	Zepf Center
	Matt Hardman	Unknown
Х	Marilyn Parenzan	The Joint Commission
	Martha Radford	NYU
	Melissa Van Fleet	Alliance Health Oklahoma
Х	Mia Nievera	The Joint Commission
	Michael Mainridge	Unknown
	Michelle Dardis	Mathematica
	Michelle Hinterberg	MediSolv
	Mike Shoemaker	Telligen
	Mukesh Allu	Epic
	Nathan R	Unknown
	Neelam Zafar	The Joint Commission
	Norm Sirois	Unknown
	Pamela Mahan-Rudolph	Memorial Hermann
Х		MITRE
Х	Peter Muir	ESAC
	Rachel Buchanan	Oregon Urology
	Rayna Scott	PCPI
	R Swaineng	Swaineng Associates
	Rebeccah Baer	NCQA
Х	Rob McClure	MD Partners
	Rob Samples	ESAC
	Robin Holder	Unknown
	Rose Almonte	MITRE
	Ruth Gatiba	Battelle
	Ryan Clark	NCQA
	Ryan Guifoyle	Unknown
	Samuel Benton	NCQA
	Sarah Sims	My Patient Insight
	Sethuraman Ramanan	Cognizant
	Shanna Hartman	CMS
	Stan Rankins	Telligen
	Susan Wisnieski	Meditech
	Syed Zeeshan	eDaptive Systems
	Tammy Kuschel	McKesson
	Thomas Hudson	Unknown
	Tom Dunn	Telligen
Х	Traci Psihas	ESAC
	Vaspaan Patel	NCQA





	Name	Organization
	Johanna Ward	Mathematica
	Jorge Belmonte	PCPI
	Julie Koscuiszka	Nyack Hospital
Х	Juliet Rubini	Mathematica
	Justin Schirle	Epic
	Jay Frails	Meditech
	Katie Magoulick	CMS
	Kathy Carson	SemanticBits
	Kimberly Smuk	HSAG
	KP Sethi	Lantana
	Latasha Archer	NCQA
	Laura Pearlman	Midwest Center for Women's
		Healthcare
	Laurie Wissell	Allscripts

	Name	Organization
	Ward Holland	Unknown
	Wendy Wise	Lantana
	Yan Heras	ESAC
Х	Yanyan Hu	The Joint Commission
	Yiscah Bracha	RTI
	Yvette Apura	PCPI
	Zahid Butt	MediSolv
	Zeeshan Pasha	Unknown

