

# QUALITY DATA IMPLEMENTATION (QDI) USER GROUP MEETING | MINUTES

Meeting date | 10/18/2023 3:00 PM ET | Meeting location|Webinar <https://global.gotomeeting.com/join/980942653>

Time	Item	Presenter	Discussion/Options/Decisions
3:00 – 3:03 pm	Agenda	ICF	<ol style="list-style-type: none"> <li>1. Announcements and survey link</li> <li>2. QI-Core related discussions                             <ol style="list-style-type: none"> <li>a. Using QI-Core Observation versus specific profiles:                                     <ol style="list-style-type: none"> <li>i. NutritionIntake</li> <li>ii. ObservationPregnancyStatus</li> </ol> </li> </ol> </li> <li>3. Removal of MustSupport flags</li> <li>4. General Discussion and Questions</li> </ol>
3:03 – 3:04 pm	Announcements	ICF	<ul style="list-style-type: none"> <li>• MAT and Bonnie User Group – October 19</li> <li>• Cooking with Clinical Quality Language (CQL) Webinar – November 30</li> <li>• Cypress Tech Talks – November 14</li> <li>• QDI User Group – November 15</li> <li>• Resource shared: <a href="https://ecqi.healthit.gov/calendar">https://ecqi.healthit.gov/calendar</a></li> </ul>
3:04 – 3:20	Using QI-Core Observation versus specific profiles	ICF	<p>This topic addresses data requirements to define all enteral intake for a newborn infant in the hospital – e.g., exclusive breast milk feeding for hospital newborns <a href="#">PC-05 / CMS9v11</a>. QDM allows use of “Substance, administered” and data reported in QRDA use the Medication Administration template. That approach will not work for FHIR-based measures as MedicationAdministered is intended for medications. The measure’s focus is exclusively on enteral intake of all substances, requiring that intake is exclusively breast milk and nothing else. The CQI workgroup followed the development and publication of the FHIR R5 resource, NutritionIntake, with expectation that it might represent a way to identify and retrieve all substances the infant receives. As QI-Core is based on FHIR R4 it could not build directly on the FHIR R5 resource.</p> <ul style="list-style-type: none"> <li>• QI-Core 6.0 ballot modeled a <a href="#">NutritionIntake</a> profile as an extension based on the <a href="#">FHIR R5 NutritionIntake</a> resource</li> <li>• Definition of the FHIR R5 resource:                             <ul style="list-style-type: none"> <li>○ A record of food or fluid that is being consumed by a patient. A NutritionIntake may indicate that the patient may be consuming the food or fluid now or has consumed the food or fluid in the past. The source of this information can be the patient, significant other (such as a family member or spouse), or a clinician. A common scenario where this information is captured is during the history taking process during a patient visit or stay or through an app that tracks food or fluids consumed. The consumption information may come from sources such as the patient’s memory, from a nutrition label, or from a clinician documenting observed intake.</li> </ul> </li> </ul>



Time	Item	Presenter	Discussion/Options/Decisions
3:04 – 3:20	Using QI-Core Observation versus specific profiles (cont.)	ICF	<p>Defining enteral intake – exclusive breast milk feeding for hospital newborns</p> <ul style="list-style-type: none"> <li>• Information from Orders and Observations (OO) Workgroup nutrition SMEs: <ol style="list-style-type: none"> <li>1. Intended interoperability for NutritionIntake addresses workflow between a nutrition software product and the EHR; not EHR-to-EHR</li> <li>2. The NutritionIntake FHIR R5 resource has cardinality of 1..1 for <i>both</i> .consumedItem.type (edible substance), and .consumedItem.NutritionProduct (detail about the substance), i.e., both are required elements</li> </ol> </li> <li>• The measure use case requests all documented intake (i.e., what was taken in and assure undesired substances were not taken in) <ol style="list-style-type: none"> <li>1. Enteral intake = breast milk</li> <li>2. Enteral intake ≠ anything else</li> </ol> </li> </ul> <p>Further discussions with the Orders and Observations nutrition experts and the CQI Workgroup led to a decision not to move forward with the QI-Core extension NutritionIntake profile and to recommend use of QI-Core SimpleObservation (STU 6.0) to express a measure to retrieve all enteral intake. While SimpleObservation is a QI-Core STU6 profile, the QI-Core STU 4.1. and 5.0 Observation profiles can be used the same way.</p> <ul style="list-style-type: none"> <li>• A potential example using this Observation profile could look like the following (note that terminology needs to be reviewed for appropriateness): <ul style="list-style-type: none"> <li>○ Observation.code = 870690008 Oral intake (observable entity) (Direct Reference Code) <ul style="list-style-type: none"> <li>▪ with Observation.component.value bound to value set containing: <ul style="list-style-type: none"> <li>• 226789007 Breast milk (substance)</li> <li>• 226790003 Expressed breast milk (substance)</li> </ul> </li> <li>○ AND NOT: Observation.code = 870690008 Oral intake (observable entity) (Direct Reference Code) <ul style="list-style-type: none"> <li>▪ with Observation.component.value bound to value set containing: <ul style="list-style-type: none"> <li>• 789382003 Infant formula intake composition (observable entity)</li> <li>• 444281000124102 Glucose water infant formula (product)</li> <li>• 443151000124100 Sterilized water infant formula (product)</li> </ul> </li> </ul> </li> </ul> </li> </ul> <p>Discussion questions for implementers:</p> <ul style="list-style-type: none"> <li>• Where does the data exist in a documented record?</li> <li>• Is an Intake and Output record accessible to retrieve needed data?</li> <li>• How might the measure access ALL intake for the infant throughout the hospitalization?</li> <li>• Discussion – no implementers joined to call to assist with answers to these questions. However, previous discussions in the HL7 CQI Workgroup indicate that nurses record the required data as part of the clinical record Intake and Output documentation and that such documentation completes every nursing shift. Thus, there are at least two (for 12-hour shifts) and potentially more intake records in a 24-hour period.</li> </ul> </li></ul>

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3:04 – 3:20	Using QI-Core Observation versus specific profiles (cont.)	ICF	<ul style="list-style-type: none"> <li>• Implementation discussion: <ul style="list-style-type: none"> <li>▪ PC05's QDM version currently records enteral intake as "Substance, Administered". Reporting occurs in QRDA using the Medication Administration template. Does the QDM version of the measure need to change to use Observation instead of "Substance, Administered"? <ul style="list-style-type: none"> <li>• Response: Implementers have already aligned their data capture and retrieval to the current measure's design; therefore, a change could introduce potential burden. However, it is not necessarily clear how sites currently find all feeding events and retrieve the information to report measure results. ICF asked if implementers currently retrieve information from the intake and output record. No one on the call presented any implementation-specific information whether specific to the information source or how implementers assured that they retrieved all infant feeding events.</li> <li>• Since QI-Core, US Core, and FHIR have no Substance Administration resource consistent with QDM's "Substance, Administered", Observation remains the best approach for FHIR-based measures.</li> </ul> </li> </ul> </li> </ul> <p>This topic addresses a question in the QI-Core STU 6.0 ballot suggesting enhancement of the <u>US Core Observation Pregnancy Status</u>, or a QI-Core profile built on that US Core profile to capture additional <u>pregnancy-related information</u>.</p> <ul style="list-style-type: none"> <li>• The US Core Observation Pregnancy profile "sets minimum expectations for the Observation resource to record, search, and fetch the "state or condition of being pregnant" [US Core Data for Interoperability (USCDI) v3]. The specific observation indicates only whether a patient is pregnant, possibly pregnancy, not pregnant, or if status is unknown. <ul style="list-style-type: none"> <li>○ The Observation LOINC 82810-3 Pregnancy Status – includes responses: <ul style="list-style-type: none"> <li>▪ <a href="http://snomed.info/sct">102874004</a> - <a href="http://snomed.info/sct">http://snomed.info/sct</a> - Possible pregnancy (finding)</li> <li>▪ <a href="http://snomed.info/sct">146799005</a> - <a href="http://snomed.info/sct">http://snomed.info/sct</a> - Possible pregnancy (situation)</li> <li>▪ <a href="http://snomed.info/sct">60001007</a> - <a href="http://snomed.info/sct">http://snomed.info/sct</a> - Not pregnant (finding)</li> <li>▪ <a href="http://snomed.info/sct">77386006</a> - <a href="http://snomed.info/sct">http://snomed.info/sct</a> - Pregnancy (finding)</li> <li>▪ <a href="http://terminology.hl7.org/CodeSystem/v3-NullFlavor">UNK</a> - <a href="http://terminology.hl7.org/CodeSystem/v3-NullFlavor">http://terminology.hl7.org/CodeSystem/v3-NullFlavor</a> - Unknown</li> </ul> </li> <li>○ Measure developers requested options for retrieving additional clinical data required with reference to pregnancy: <ul style="list-style-type: none"> <li>▪ estimated delivery date</li> <li>▪ gestational age</li> <li>▪ gravidity</li> <li>▪ parity</li> </ul> </li> </ul> </li> </ul>

Time	Item	Presenter	Discussion/Options/Decisions
3:20 – 3:36 pm	Using QI-Core Observation versus specific profiles (cont.)	ICF	<p>Options discussed:</p> <ol style="list-style-type: none"> <li>1. Expand <u>US Core Observation Pregnancy Status</u> with a QI-Core specific profile <ol style="list-style-type: none"> <li>a. The additional profile may potentially add burden for data capture and retrieval</li> <li>b. A QI-Core specific profile is Inconsistent with US Core/USCDI-driven interoperability</li> </ol> </li> <li>2. Use QI-Core <u>SimpleObservation</u> (STU 6.0); <u>Observation</u> (STU 4.1.1, 5.0) <p>Observation.code =</p> <ul style="list-style-type: none"> <li>"Date and time of obstetric delivery" ("LOINC Code (93857-1)")</li> <li>"Delivery date Estimated" ("LOINC Code (11778-8)")</li> <li>"[#] Births.preterm" ("LOINC Code (11637-6)")</li> <li>"[#] Births.term" ("LOINC Code (11639-2)")</li> <li>"[#] Parity" ("LOINC Code (11977-6)")</li> <li>"[#] Pregnancies" ("LOINC Code (11996-6)")</li> </ul> <ol style="list-style-type: none"> <li>a. This approach is consistent use of Observation profiles and it is consistent with US Core/USCDI-driven interoperability</li> </ol> </li> </ol> <p>Discussion:</p> <ul style="list-style-type: none"> <li>▪ Measure developers asked how a panel of observations about a pregnancy might be collected, e.g., a set of findings reported on an American College of Obstetrics and Gynecology (ACOG) form. <ul style="list-style-type: none"> <li>○ ICF response: While each finding can be retrieved using the Observation profile, measure retrieval can also use the approach of the US Core Observation Screening Assessment profile. The approach uses the Observation.code to indicate each individual finding and an Observation.code to represent the full panel adding Observation.hasMember to reference each of the included findings in the LOINC panel. For example: <ul style="list-style-type: none"> <li>▪ Antepartum record panel (AntepartumObservation.code)</li> <li>▪ AntepartumObservation.hasMember.DeliveryDateEstimatedObservation.code = LOINC11778-8</li> <li>▪ AntepartumObservation.hasMember.#BirthsPretermObservation.code = LOINC 11637-6</li> <li>▪ AntepartumObservation.hasMember.#BirthsTermObservation.code = LOINC 11639-2</li> <li>▪ AntepartumObservation.hasMember.#ParityObservation.code = LOINC 11977-6</li> <li>▪ AntepartumObservation.hasMember.#PregnanciesObservation.code = LOINC 11996-6</li> </ul> </li> <li>○ This same approach would not solve the panel approach with QDM “Assessment, Performed” since that QDM datatype does not have a <i>hasMember</i> attribute. Once could use the <i>component</i> attribute in QDM to address a panel and its members but that is not entirely consistent with the FHIR approach.</li> </ul> </li> </ul>

Time	Item	Presenter	Discussion/Options/Decisions
3:36 – 3:51 pm	MustSupport elements – Proposal to remove QI-Core MS flags	ICF	<p>Background (HL7 Jira tracker <a href="#">FHIR-42889</a>)</p> <ul style="list-style-type: none"> <li>QI-Core approach in previous versions of QI-Core (through 5.0) <ul style="list-style-type: none"> <li>Measure developers should <i>only</i> use elements listed as Must Support (containing an MS flag)</li> <li>Reason – such element with MS flags have been shown to be potentially retrievable and <i>tested</i> with existing eCQMs</li> </ul> </li> <li>New QI-Core 6.0 approach: <ul style="list-style-type: none"> <li>Allow measures (eCQMs) to drive QI-Core content used on any given measure or measure set.</li> <li>Measure developers should address feasibility when developing and testing measures</li> <li><i>Any</i> element available in the QI-Core profile can be used in measure authoring</li> <li>the Key Element Table is guidance to what has shown some feasibility previously</li> </ul> </li> </ul> <p>Given the new QI-Core 6.0 approach, the Must Support flag may be unnecessary and it adds complexity for implementers:</p> <ul style="list-style-type: none"> <li>The MS flag suggests to implementers that all MS elements must be supported to process and report on eCQMs</li> <li>Some implementers limit activity to a specific domain (e.g., ambulatory care, inpatient care) and some MS element are irrelevant to such settings</li> <li>EHRs and other software do not have certification requirements to support all of QI-Core and no such program is anticipated</li> <li>A program or domain-specific measure set content implementation guide (IG) aligning with QI-Core requires inclusion of all QI-Core MS elements even if none of the referenced measures use those elements and analytic engines will need to retrieve such elements not used in measure analysis adding implementer burden</li> </ul> <p>Proposed plan:</p> <ul style="list-style-type: none"> <li>Remove all QI-Core specific flags in QI-Core for all profiles except for those elements containing US Core MS flags.</li> <li>Replace QI-Core MS flags with indication at the beginning of the definition such as "(QI-Core)" and a QI-Core specific extension on the element similar to the way US Core adds such indication for (USCDI) and a custom extension (<a href="http://hl7.org/fhir/us/core/STU6.1/StructureDefinition-uscdi-requirement.html">http://hl7.org/fhir/us/core/STU6.1/StructureDefinition-uscdi-requirement.html</a>).</li> </ul>

Time	Item	Presenter	Discussion/Options/Decisions
3:36 – 3:51 pm	MustSupport elements – Proposal to remove QI-Core MS flags (cont.)	ICF	<p>Example:</p> <ul style="list-style-type: none"> <li>US Core 6.10 Procedure Profile <ul style="list-style-type: none"> <li>There are only four MustSupport elements in Key Elements table: status, code, subject, and perform.</li> <li>Some of the other elements are needed for USCDI, but not all profiles use it so there are no MustSupport flags.</li> </ul> </li> <li>QI Core 6.0 Procedure Profile <ul style="list-style-type: none"> <li>Has many more MustSupport flags; those driven by US Core and reasonCode, and reasonReference, recorded time</li> </ul> </li> <li>ICF showed a prototype of QI-Core that removes all Must Support flags except those inherited directly from US Core. The list of elements does not change – it is the same and the cardinality of each has not changed. The <i>Description</i> column includes reference to (QI-Core) indicating the reason for inclusion in the Key Element Table.</li> <li>The second prototype compared the new QI-Core profile for Procedure indicating that both reasonCode and reasonReference indicate (QI-Core) in their descriptions. However, a content Implementation Guide (IG) referencing only specific set of measures includes only reasonCode as a measure in the set uses reasonCode; reasonReference is absent since no measure in the set uses it.</li> </ul> <p>Discussion</p> <ul style="list-style-type: none"> <li>Purpose of the change is to not overload MustSupports.</li> <li>Intention for the measure set profiles is that anything used in the measure would have a MustSupport</li> </ul> <p>The group did not express any concerns nor raise any questions about the approach.</p>
3:51 – 3:59 pm	General Discussion and Questions	ICF	<p>Peter Muir identified a LOINC panel that might help measure developers evaluating the PC-05 measure - (LOINC Code: 80441-9) - Breast milk and/or formula intake panel</p> <ul style="list-style-type: none"> <li>Can be used to do an Observation using this panel and identify this as an option as a LOINC code for what was taken in.</li> <li>Has a panel for breast milk and/or formula, but within that there is another panel just for breastmilk. Would have to look at panel and create it as separate definitions and have it without formula.</li> <li>Have to decide if this works; content includes volume adequacy, estimated volume, attempts, feeding. The measure developer needs to assure there is no other feeding.</li> </ul> <p>Measure developers indicated they will review the panel, indicating there is content that would be inconsistent with measure intent but some potentially useful content.</p> <p>No QDI follow up required.</p>

Time	Item	Presenter	Discussion/Options/Decisions
3:59 – 4:04 pm	Conclusion	ICF	<ul style="list-style-type: none"> <li>▪ Agenda items for updated QDI user group meeting <ul style="list-style-type: none"> <li>▪ Contact us at <a href="mailto:gdm@icf.com">gdm@icf.com</a></li> </ul> </li> <li>▪ Next user group meeting - stay tuned for updated date! <ul style="list-style-type: none"> <li>▪ November 15, 2023 3:00pm – 4:30pm ET</li> </ul> </li> </ul>

## Attendees:

Name	Organization
Alannah Marsh	Mathematica
Angela Flanagan	Lantana
Carrie K.	Unknown
David Czulada	MITRE
Dorothy Lee	NCQA
Floyd Eisenberg	ICF
Greta Kessler	Premier Inc.
Jean Fajen	Telligen
Joanna Ramsaier	ICF
Juliet Rubini	ICF
Karen McLaughlin	Medisolv
Karl	MITRE
Kimberly Smuk	Mathematica
Marilyn Parenzan	TJC
Marla Throckmorton	Lantana
Melissa Breth	TJC
Melody Hall-Ramirez	DHCFP
Paul Denning	MITRE
Peter Muir	ICF
Raquel Belarmino	TJC
Rosemarie Anglin	RWJ Barnabas Health
Sheila Aguilar	TJC
Sulayman Aziz	Unknown
Yan Heras	ICF



Name	Organization
Yanyan Hu	TJC
Yvette Apura	ASCO

