RCE Public Stakeholder Feedback Session:
QHIN Technical Framework (QTF)
12/11/2019
Approach to this Session

• Our primary aim in this session is to gather feedback to help inform the next draft of the QTF
• We will provide some background, but will try to spend the bulk of the time hearing from you
• There will be an opportunity to provide voluntary feedback via ThinkTank
• To access ThinkTank:
  – https://engage.thinktank.net/sessionJoin/-LvLSM_J1rCvH2mXIVDQ
  – Password: RCEQTF
ThinkTank Support

- The QTF ThinkTank session will be available until midnight Monday December 16th
- Please email Shane Hamstra at shamstra@rti.org with any questions
- Enter input by selecting the item, entering text and pressing the arrow on the far right:
Introductions

Mariann Yeager  
CEO, The Sequoia Project

Dave Cassel  
Executive Director, Carequality

David Pyke  
Senior Consultant at Ready Computing

Chris Muir  
Director of the Standards Division at ONC
QTF Background

• The QTF outlines the specifications and other technical requirements necessary for QHINs to accomplish exchange under the paradigms laid out in the MRTCs
• The Common Agreement will require compliance with the QTF
• The RCE is responsible for working with ONC to develop the QTF
• ONC published an initial QTF draft in April, along with TEF Draft 2. This initial draft was intentionally incomplete, and we are working to flesh out a proposed QTF draft 2.
• The QTF will primarily address QHIN-to-QHIN transactions, and where possible we propose to be silent on how the necessary functional outcomes are achieved within a QHIN. Nonetheless, there are likely to be some requirements that must be enforced at the Participant and Participant Member level.
QHIN Query – Background

• The MRTCs require QHINs to support an exchange paradigm called “QHIN Query”, in which information is requested from other QHINs in either a targeted or general broadcast fashion
  – Note that a broadcast query is not fundamentally different from a targeted query; it is simply a query for which all other QHINs are targets
• The MRTCs do NOT specify any particular standard or technical approach; this is left to the QTF
• QTF Draft 1 envisioned QHIN Query being accomplished by SOAP-based IHE profiles, as a straw proposal
• We propose to build further on this straw proposal for QTF Draft 2, fleshing out the Draft 1 requirements with heavy reliance on existing Carequality specifications
• We have a number of questions for your feedback, however, which could influence this proposal
QHIN Message Delivery – Background

• The MRTCs require QHINs to support an exchange paradigm called “QHIN Message Delivery”, in which information is delivered (or “pushed”) by one QHIN to another, either for the receiving QHIN’s own use or for it to forward on to a designated recipient system or user among its Participants/Participant Members

• As with QHIN Query, the MRTCs do not specify any particular standard or technical approach, and instead leave this to the QTF

• Potential use cases for QHIN Message Delivery include (but are not limited to):
  – Messaging between provider organizations when Direct addresses aren’t known
  – Submission of public health reporting data
  – Submission of information from provider organizations to payers
  – Notifying relevant parties of events, care plan updates, or recommended clinical actions
Support for FHIR

- We anticipate that QHIN Query via FHIR will be supported in a future version of the QTF, but not the initial version. The standard itself is still undergoing rapid development and is in early stages of widespread deployment for most use cases. There also is work to be done on how FHIR-based queries should best be deployed, architecturally, within a QHIN context. We anticipate addressing FHIR-based QHIN Query in the second production version of the QTF.
  - *Input related to addressing FHIR in second production version of the QTF*
  - *Input related to support FHIR for document queries in version one.*
Patient Matching and Record Location

• QHINs are required by the MRTCs to provide record location for all those who participate under them, as a functional outcome, but are not required in the most recent published MRTCs draft to accomplish this functional outcome through a centralized MPI/RLS.
  • Input related to centralized QHIN MPI/RLS
• Address formatting consistency has been shown to improve patient matching rates.
  – Input related to USPS standard for patient matching
Message Delivery Specifications

• The QTF Draft 1 proposed the IHE XCDR profile for QHIN Message Delivery. XCDR creates a push capability for XCA environments with a limited implementation base (effectively Provide and Register Document Set for XCA). Another potential IHE profile for Message Delivery is XDR, which has a reduced capability set but is much more supported in software.
  – Input related to XCDR and XDR delivery.
  – Input related to FHIR-based QHIN message delivery
  – Input related to subscription messages
Potential Variance from Carequality Specs

• We plan to reference the most recent IHE specs (2019) rather than the 2010 version referenced by Carequality.
  – *Input related to IHE specs*

• We plan to reference the IHE XUA profile for SAML specs, rather than the NHIN Authorization Framework specs referenced by Carequality.
  – *Input related to IHE XUA profile for SAML*
PurposeOfUse and Provenance

• The Exchange Purpose for a query is communicated – under the currently proposed specifications – as a PurposeofUse (PoU) value in the SAML token. We intend to use a limited subset of the HL7 PoU code set as valid entries in this field. (Note, we would ensure that any PoU code was specifically mapped to only one Exchange Purpose.)
  
  — Input related to PoU

• CDA, XDS, and FHIR models have all defined ways to carry information on Provenance with the data being transferred. Provenance information can exist at varying levels of detail, and with varying levels of ongoing preservation for historical values
  
  — Input on Provenance
Patient Matching, and ID Caching

- QTF expect to set and measure minimum match rates
  - *Input related to minimum patient match rates*
- QTF expects to require that the foreign ID be cached so that future information requests can skip the patient lookup step.
  - *Input related to ID caching*
- QTF consider a further requirement that if IDs are cached, query initiators need to gracefully fall back on redoing patient matching in the event an error related to the cached ID (e.g. if it has been merged away)
  - *Input related to fall back patient matching*
Security and Directory

- Currently the security requirements specific TLS1.2 (or better), however, TLS 1.3 is released and has additional security and, with some options, faster resolution.
  - Input related to TLS1.3

- Our initial proposal for healthcare directory services will be to use a new operational instance of The Sequoia Project’s FHIR-based directory service, currently used by Carequality. Our plan is to have the directory be organization-focused, rather than have entries for individuals (patients, clinicians, or users).
  - Input related to organization-focused directory
Thank You!