EHRA
HIMSS ELECTRONIC HEALTH RECORD ASSOCIATION

33 West Monroe Street, Suite 1700
Chicago, IL 60603

@EHRAssociation | ehra.org

September 17, 2021

EHRA Submission to QHIN Technical Framework (QTF) Feedback Form

Feedback Regarding QHIN Exchange Scenarios for Query

Page 8 states that "Each QHIN has either a Record Locator Service (RLS) OR Enterprise Master Patient Index (eMPI) OR the ability to query all of its Participants for a patient lookup within the timeout limitation as specified in the QHIN Service Level Requirements Policy". The service level requirements policy referenced is not yet available. We want to underscore the importance that, regardless of method chosen by the QHIN, not only the timeout limitations are acceptable and consistent to support the end user workflows impacted, but also overall performance, quality, and completeness of responses are consistent to ensure end-user experience across QHINs is acceptable.

We note the absence of patient matching performance thresholds necessary to provide consistent minimum matching performance across QHINs. We strongly urge the RCE to collaborate with QHINs and their participants to establish basic performance expectations for patient matching, to drive consistent quality and completeness of matches across QHINs and their participants. This could include designation of an expanded minimum set of demographic data elements (including available unique identifiers and/or formatting standards) that must be exchanged to facilitate patient matching across organizations and across the network of QHINs.

The QTF contains the following excerpt: "IHE does not define a document beyond 'a collection of bytes, including proprietary and textual formats.' Therefore an XCA document may be any form of information including C-CDA 2.1, FHIR® resources, PDF, or other formats. For purposes of Document Query and Retrieve, C-CDA 2.1 is the expected format for all patient information. If a Responding Source is unable to return a C-CDA 2.1 document, the data is converted to the C-CDA 2.1 format by a Responding QHIN, Participant, or Subparticipant prior to transmission to the Initiating QHIN. "

Further, QTF-039 requires "If a Document Retrieve response is not in C-CDA 2.1 format, QHINs MUST convert the response to C-CDA 2.1 format except where consistent with QTF-043 and QTF-040".

We are opposed to any requirement that the QHIN convert any document to any other format, whether HL7 CDA C-CDA R2.1 in accordance with the standards/versions referenced in ONC's certification criteria, or any other current or future standard, e.g., an HL7 FHIR Document. Requiring a QHIN to perform such conversions creates major concerns as outlined below:

i. Privacy and Security: The QHIN should not be expected to access message payloads. Such access unnecessarily expands the number of touchpoints where patient data is exposed and at risk. The source of the information should be expected to produce information in any required manner.
ii. Incompatibility: Older or different data formats may not have sufficient or appropriate data to properly create an HL7 CDA C-CDA 2.1 document, thus requiring not only format changes but also content mapping. Next generation documents based on FHIR that are likely to emerge as this framework rolls out would have to be converted "back to" C-CDA 2.1 format, dampening standards advancement.
iii. Loss of information: A loss conversion to C-CDA 2.1 might inadvertently withhold original/relevant data from the information requester.
iv. Change of information: Certain documents such as Referral Notes and Discharge Summaries are considered legal attestations to the facts contained therein. For these documents in particular, it is important they contain only what the author intended to be conveyed and retain their full original format and content. Any change by any intermediate is not appropriate and should not be required.
v. Non-brokered exchange: As FHIR-based access and exchange in the future may contain documents as well and the FHIR-based exchange may not be brokered by the QHIN, documents would not be managed consistently.

Rather than recommend the QHIN be responsible for normalizing document formats to C-CDA 2.1, we instead recommend ONC require sources to generate new documents in accordance with the then-current format as required in ONC's CEHRT program, regardless of whether the source is CEHRT or not. Similarly, receivers should be required to enable viewing of any document obtained using that standard as well as standards used in prior standards (e.g., CCR, CCD, C-CDA R1.1) or generally used formats (e.g., .pdf). Any conversions to other formats should be left with either the source to maintain fidelity to the original document or the receiver in context of the intended purpose. This should not preclude a QHIN from providing this capability to their participants to aid in any desired conversion as indicated by the source to maintain the necessary fidelity to the original source.

Should the QTF include QHIN Message Delivery? If you believe QHIN Message Delivery should be included, how should it be technically specified?

The RCE requests that responses consider the following three options:

1. ***Option 1: Require "QHIN Message Delivery" modality in QTF using the Integrating the Health Care Enterprise (IHE) Cross-Community Document Reliable Interchange (XCDR) profile with a future transition to FHIR; or***
2. ***Option 2: Defer "QHIN Message Delivery" from QTF until a FHIR based solution is readily available; or***
3. ***Option 3: Include "QHIN Message Delivery" using XCDR as optional in QTF until a FHIR based solution is readily available.***

The EHRA recognizes the need for message delivery to be a capability that the trusted exchange framework and QTF supports. We note the value demonstrated by recent efforts by Carequality, eHealthExchange, APHL, and CommonWell to enable message delivery for COVID case reporting. However, we do not support the introduction of XCDR for this purpose between QHINs for the following reasons:

- XCDR is not widely adopted. Although XCDR would only be required QHIN to QHIN, we would expect requirements would be likely to trickle down to participants.
- XCDR is not fit to purpose. A message delivery capability needs to be able to support addressing messages to specific users, not only organizations/home communities.
- Other and newer alternatives are available or on the horizon.

We therefore do not support options to require or optionally support XCDR.

However, we do offer an alternative to waiting for FHIR. FHIR has the promise, but not yet the maturity, to address message delivery through a variety of mechanisms: RESTful writes, messaging paradigm, and subscription/notification models. Rather than waiting for these models to mature and be deployed, we suggest to encourage and enable QHINs to follow the Carequality model used for case reporting: use Direct or XDR with applicable payloads for the use case at hand. With record locator services and endpoint directories, a variety of notification and other push messaging use cases can be scaled under a common trust framework. We note that under this approach QHINs would not be required to broker the messages. Generally we recommend that brokering actual payload transactions should not be a requirement across all use cases. While reasonable and appropriate for document queries, this is not necessary for message delivery as already demonstrated in other settings where the legal framework and trust framework are the critical element to scale. We realize that un-brokered messaging complicates certain interoperability measures, but those measures should not drive how to best communicate data. Function, utility, efficiency should drive the level for brokering that QHINs support.

As FHIR matures for the relevant use cases, it can expand, improve upon, or replace message delivery use cases. In the meantime a proven, widely adopted message delivery approach can be consistently deployed within, across, and outside of QHINs.

What elements should be included in a TEFCA FHIR Roadmap to provide predictability and a clear direction for QHIN-to-QHIN exchange regarding the implementation of FHIR for QHIN Query, QHIN Message Delivery, and for enabling FHIR data to be used by Health IT systems?

We suggest aligning the TEF QTF FHIR Roadmap with similar efforts under development by the FHIR at Scale Task Force (FAST), Carequality, CommonWell, and eHealth Exchange. They focus on establishing the fundamentals of a FHIR based trust, authorization, authentication, and registration foundation using FHIR US Core queries. Subsequent use cases would be expanded based on industry priorities, such as those developed by the Da Vinci Project, the Argonaut Project, the Gravity Project, and other HL7 FHIR Accelerators. This approach does not currently require brokered FHIR transactions (although the need for them may emerge over time as the technology matures and use cases demonstrate benefiting from brokered exchange). Neither the QTF nor the CA should have blanket brokering requirements across use cases and technologies. Instead, if a specific use case or technology adopted by QHINs and Participants requires the use of brokered transactions, the QTF should reflect that need specific to that use case. For example, Carequality does not require brokered FHIR transactions. Similarly, CommonWell is initially focusing on unbrokered FHIR based queries within the CommonWell trust framework for patient matching, record location services and endpoint discovery.

Finally, while the RCE and ONC should continue to participate in advancing the development and maturation of new standards, we recommend relying on the existing framework for developing industry-wide, consensus-based standards to do so, instead of attempting to use TEFCA Participants as an accelerator for standards development and adoption. Following existing initiatives would prevent diluting those existing efforts, as the same resources would be required to progress any RCE-led initiatives.