

# Health IT Standards Committee

A Public Advisory Body on Health Information Technology to the National Coordinator for Health IT



## NwHIN Power Team

- Recommendations re Query for Patient Record

September 10, 2014

# HIT Policy Committee Functional Charge: Query for Patient Record



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- Enable query functions within context of HITECH EHR certification authority\* and building on market developments in **directed and query exchange**

\*i.e., without requiring separate authority to regulate HISPs, HIE organizations, or other third-party actors

# HIT Policy Committee Recommendation on Query for Patient Record



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- Search for patient information: Certified EHR systems should have the ability to electronically query external EHR systems for patient medical records
- Respond to searches for patient information: Certified EHR systems should have the ability to electronically respond to electronic queries for patient medical records from external EHR systems

# Clarifications from Discussion with Micky Tripathi, May 9, 2014 (1 of 2)



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- To have any impact in the market, must have query capability in Stage 3 – objective is to enable query exchange, not to dictate “how” the exchange works
- EHR system should be able to delegate query capability to third party (e.g., HIE service provider)
- “Query” need not be synchronous – synchronous query should be treated as desiderata (“wish list”) – Stage 3 requirement should be set of functional requirements, not a specific set of transactions in a specific order
  - No presumptions regarding orchestration

# Clarifications from Discussion with Micky Tripathi, May 9, 2014 (2 of 2)



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- Search/respond for patient clinical information
- Leverage existing standards such as Direct and IHE XCA where possible
- Responsibilities for providing identifying information (patient matching) vs. clinical information (record) could be assigned to different organizations
- Standards for content is open question
  - Don't want to restrict to Consolidated CDA (e.g., want to allow for FHIR response), but also recognize need to certify capability to return some minimal standardized content



- Data Access Framework (DAF) S&I Framework project
  - Currently in process
  - Focus is too broad for 2017 timeframe – our focus needs to consider only the “remote system query for data” use case
  - Inadequate vendor support for emerging recommendations
  - Complex – requires support for both SOAP-based and REST-based query responses
- IHE Cross Community Access (XCA) Profile
  - Document-oriented profile that uses document metadata
  - Complex implementation, and limited to documents (which have not been well received by providers, due to workflow constraints and sometimes-cumbersome process of extracting structured data)
  - Network dependent – incompatible variations among implementations

# Query Options Considered for 2017 Edition (2 of 2)



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- Direct
  - Asynchronous, no guarantee of a response
  - Responses limited to document attachments and text
- HL7 Fast Healthcare Interoperability Resources (FHIR)
  - High promise as standard capable of supporting both query for documents and query for discrete data elements
  - Not yet a finalized standard
  - Need to develop FHIR profiles
  - Unlikely to be fully ready for national adoption as standard by 2017 Edition, though possibly some subset could be “fast tracked”



- Use of Consolidated Clinical Document Architecture (C-CDA) for query
  - C-CDA specification needs further content encoding and constraint standardization for interoperability
  - Transitions-of-care documents can become large and cumbersome – need for template for concise, 1-2 page snapshot summary of current patient state
  - Need more widespread support for other, simpler kinds of human-readable documents besides C-CDA (e.g., discharge summary)
  - Issues relating to inconsistent implementations for wrapping of C-CDA documents as Direct attachments





- Major challenges and unknown impacts
  - Trust issues across networks; certificate discovery
  - No standard for patient identity discovery and validation
  - No standard for record-locator services
  - Unknown impacts of JASON Task Force and ONC Roadmap initiative



The need for certification criteria for 2017 Edition is not well aligned with long-range desire to move to HL7 FHIR as the standard for querying for documents and discrete data items.

Assuming that query “must be” included in the 2017 Edition, we are recommending a “least regret” approach to avoid compelling vendors to expend excessive time and effort on certification of a temporary approach.

# Recommendations for EHR Technology Certification (1 of 4)



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1. Recommend limiting scope of use cases for 2017 Edition to:
  - Query a named external health care organization (HCO) for a document containing a specific patient's data
  - Respond to query with requested document, list of documents, or non-availability of document
  - Allow both synchronous and asynchronous queries

# Recommendations for EHR Technology Certification (2 of 4)



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2. For EHR Certification 2017 Edition, recommend including functional requirements as certification criteria, and allow vendors to provide documentation attesting to how their technology provides these functions
  - Focus primary efforts on “low regret” activities that are well aligned with **moving the industry in the direction of broad use of RESTful, FHIR-based services, including services to support query for both documents and discrete data elements**
  - Simple query of a known external entity for a document containing an identified patient’s information could be achievable, for example, using existing EHR certification standards, emerging standards, or membership in a query network



Certified EHR technology will have attested to having an automated capability that enables participation in the following query conversation, in either a requester or an external responder role.

- (Requester) Generate and address to a trusted and known, external end point a query requesting a document containing clinical data for an identified patient
  - (External Responder) In response to a received query, return a list of available documents that contain the requested information
  - (External Responder) If the provider holds no information for the identified patient, return a response indicating that the requested data are unavailable.
- (Requester) From the list provided, select the identifier for the desired document.
  - (External Responder) Return a structured, encoded document containing the requested clinical information.

# Recommendations for EHR Technology Certification (3 of 4)



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3. As high priority, “low regret” activity for the near term, recommend fast-tracking of improvements to Consolidated CDA Implementation Guide, as recommended by the Implementation Working Group and approved by the HITSC on August 20, 2014
  - Specific improvements are needed to facilitate query for, and selective retrieval of, a range of clinically useful C-CDA documents, including but not limited to implementation specifications to support “on demand” retrieval of a simple current summary (problems, allergies/intolerances, current medications, recent labs, etc.), and specifications for a complete longitudinal summary, in addition to the current encounter-by-encounter documents

# Recommendations for EHR Technology Certification (4 of 4)



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4. Recommend strong support of efforts to accelerate development of FHIR-based services and FHIR profiles, consistent with recommendations of the JASON Task Force