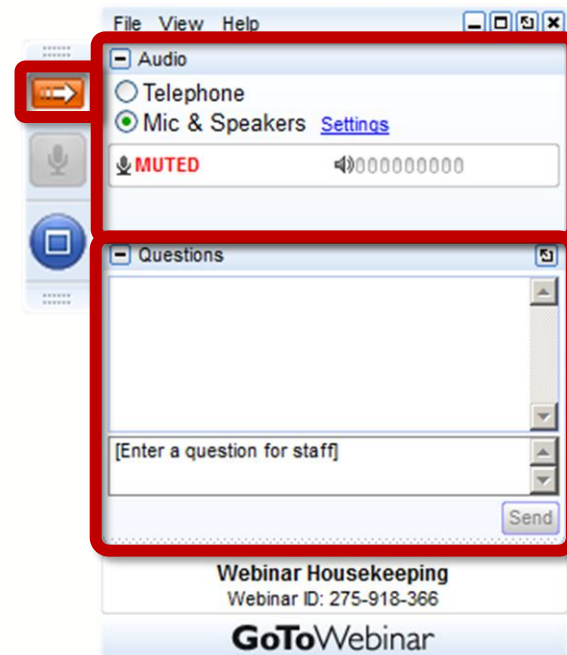# eHealth Exchange™

All Participant Call

How Do I Participate?

Your Participation

Open and close your control panel

Join audio:
- Choose "Mic & Speakers" to use VoIP
- Choose "Telephone" and dial using the information provided

Submit questions and comments via the Questions panel

Note: Today's presentation is being recorded and will be provided within 48 hrs

Problems or Questions? Contact Dawn Van Dyke

dvandyke@ehealthexchange.org or 703.864.4062

eHealth Exchange

Today's Topics

1. Carequality Draft Policy Updates	Eric Heflin
2. FHIR R4 Directory Rollout	Mike Yackanich
3. QHIN Update	Mike Yackanich
4. Q&A	Everyone

eHealth Exchange™
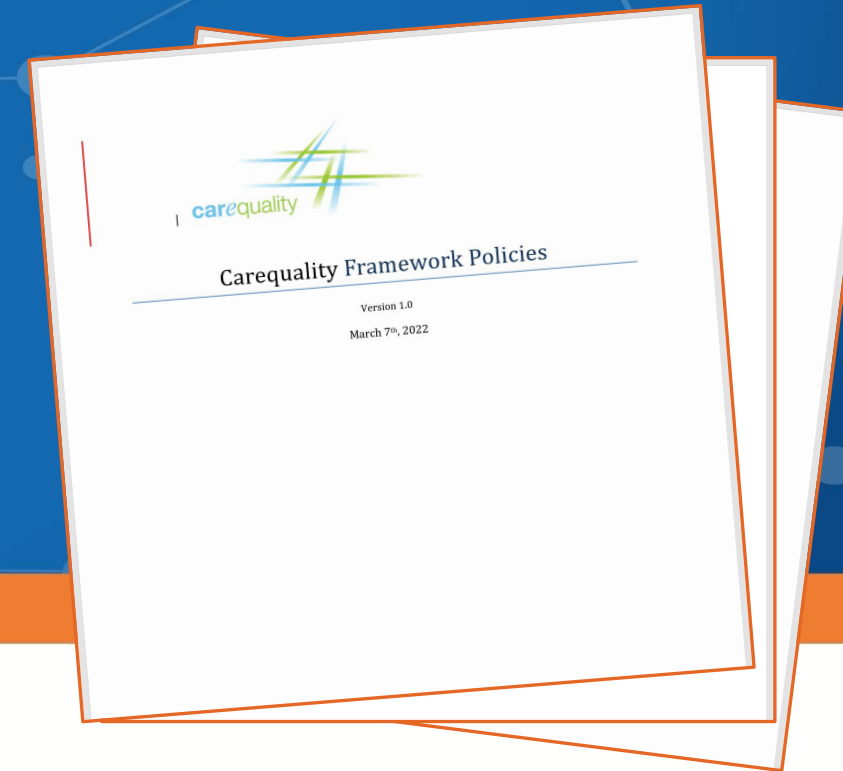
Preview of new Carequality DRAFT Framework Policy Updates

*Eric Heflin, Consultant*

Welcome!

Why This May Be Important To Your Organization

Agenda

- Carequality Policy Framework
- On Behalf Of (OBO)
- Care Coordination Mechanics
- Care Coordination Payer Considerations
- Carequality Patient Request Identity Verification
- Patient Requests: Mandatory Patient Matching Rules
- Audit Logging & New Identifier Values
- Audit Log Service Levels
- Your Feedback / Q&A

eHealth Exchange™

New Proposed Carequality Policy Framework

- Filename: **Carequality Framework Policies v2.0 DRAFT - CLEAN - 20230313 - Implementer Community Distro.docx**

- Current version: Carequality Framework Policies

- Sent to Carequality Implementors March 14th

- Not yet published on the Carequality web site

- The eHealth Exchange Technical Work Group publicly analyzed the draft on March 30th (all are welcome!)

- eHealth Exchange provided comments on April 6th

- We understand from Carequality that no associated technical document will be published

- This presentation is a summary of key considerations and eHealth Exchange feedback to Carequality

carequality

Carequality Framework Policies

Version 1.0

March 7th, 2022

Image credits: Carequality.org, licensed from iStockPhoto
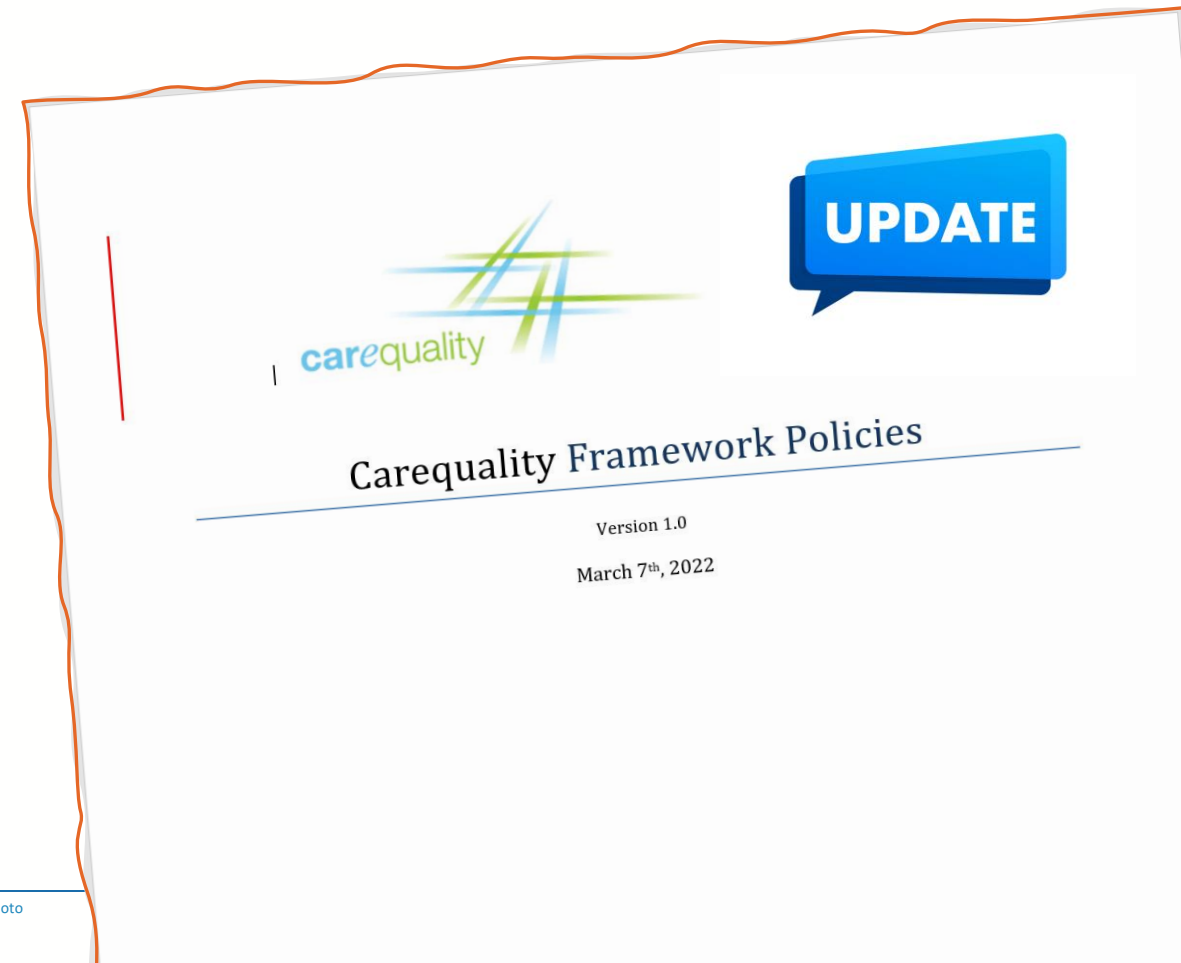
On Behalf Of

New Carequality Concept of "On Behalf Of" ([Section 3.2.1.3](#))

- The Carequality Framework Policies DRAFT document introduces a concept of "On Behalf Of" (OBO)
- Purpose is to allow smartphone (or other initiator-only) applications to query, without being required to **directly** respond. Reasoning some applications do not have a Clinical Data Repository (CDR) and cannot respond
- Those **applications can now be "linked"** to another Carequality application that can respond **on behalf of** the initiator only application
- The OBO application **must be listed** as a responder in the Carequality directory
- **Initiating messages must reference** the responding application in their message by the OID

Image credit: Licensed from iStockPhoto

eHealth Exchange™

On Behalf Of Feedback from eHealth Exchange to Carequality

- Carequality should clarify how the directory will "point" between the initiating application directory entry and the associated OBO entry
- Carequality should clarify if intermediaries are required to enforce OBO rules such as rejecting a request from an initiator that doesn't respond and doesn't point to an OBO organization
- Carequality should clarify if this logic applies only to the ultimate initiator, or intermediaries
- More technical details are needed to make this implementable such as Xpaths, valuesets, code systems, placement and source of the value, etc.
- The Initiator Only and the linked Responder Organizations should be required to have a contractual relationships
- More feedback later in this presentation under the audit logs topic

eHealth Exchange™

Care Coordination

Mechanics

New Carequality Concept of Non-Treatment "CareCoordination" PoU (Section 3.1)

- The updated Carequality Framework Policies DRAFT adds a completely new Purpose of Use value for "Care Coordination"
- This value is intended for those organizations performing non-treatment care coordination under HIPAA Health Care Operations (Section 3.1)
- Seems targeted at Payers
- Requires reciprocity (Section 3.2.2)
  - Carequality orgs querying under this PoU must respond to CareCoordination queries unless disallowed by law
  - ALL Carequality orgs querying for Treatment PoU must respond to CareCoordination queries unless disallowed by law

Image credit: Licensed from iStockPhoto

eHealth Exchange™

New Care Coordination Purpose of Use (Contd.)

- Section 3.0 also adds the value "CARECOORDINATION" to the table

- This value is not under a NHIN/eHealth Exchange value

- **Carequality Feedback:** The new "CARECOORDINATION" value is not an NHIN value. Can this table be updated to reflect such?

Carequality Permitted Purpose	**NHIN PurposeOfUse code**
Treatment	TREATMENT
Payment	PAYMENT
Health Care Operations	OPERATIONS
Public Health Activities	PUBLICHEALTH
Patient Request	REQUEST
Coverage Determination	COVERAGE
Care Coordination	CARECOORDINATION
Other Authorization-Based Disclosures	The Implementer or CC may use any NHIN PurposeOfUse code that is NOT otherwise listed in this table and is not prohibited in the

eHealth Exchange

New Directory Entry Value

- Section 3.2.1 adds a new value that can be placed in the directory.

- Entry: Organization.extensions:InitiatorOnly

- Value: "On Behalf Of (Initiator Only)

- **Carequality Feedback:** How will this directory entry be linked to the associated On Behalf Of directory entry?

Organization.extension:InitiatorOnly field, as one of the following values, as appropriate based on that organization's exception:

- Provider Organization (Initiator Only)
- EMS Provider (Initiator Only)
- On Behalf Of (Initiator Only)
- Other Authorized (Initiator Only)

eHealth Exchange™

Care Coordination

Payer Considerations

New Carequality "CareCoordination" Declining Requests, Fees ([Section 4.2](#))

- Responders can decline to respond to CareCoordination requests if the Initiator does not respond to queries and/or if a response fee has not been established
- Response fees can only be charged if allowed by law, and only to CareCoordination Initiators that cannot respond with standardized clinical data formats
- If the Initiator is querying On Behalf Of a payer, then the response fee arrangement applies to the payer
- See the Carequality document for more details

Image credit: Licensed from iStockPhoto
eHealth Exchange™

New Carequality "CareCoordination" Payer Data Obligations, Fees

- CareCoordination Payer Responders may respond via FHIR or C-CDA regardless of the method used by Initiators (Section 4.2)
- Payer Responders meet their reciprocity obligations provided they respond with full and complete data, which is expected to vary (Section 4.2)
- Payer Initiators seeking fee exemptions must respond with current USCDI plus other data (Section 4.2)
- "Small" Payers can be except from fees for 6 months (Section 4.2)

Image credit: Licensed from iStockPhoto

eHealth Exchange™

CareCoordination Purpose of Use Feedback

- HIPAA "minimal necessary" concerns should be directly addressed by Carequality

- This new PoU needs to be carefully integrated into the existing Carequality specifications, policies, and framework. It's difficult for the eHealth Exchange to anticipate how this PoU interacts with other Carequality work flows.

- It is non-standard for a message querying using SOAP to not know if the response will be via SOAP v FHIR

- PDF files should not be allowed for data exchange as that format is not interoperable at the discrete data level. PDFs should only be allowed by Carequality if the equivalent data is not available in a structured interoperable format like C-CDA

- Some eHealth Exchange Carequality Connections expressed that the definition of Care Coordination under Treatment is broad enough to cover Operational uses hence no new CARECOORDINATION PoU code is needed

- Additional directory information could be added to facilitate determining the status of payers in terms of providing, or not providing medical data, which could in turn automate the responder's ability to accept/reject a request on that basis

eHealth Exchange™

Carequality Patient Request Identity Verification

New Carequality Concept of Patient Request Identity Verification

- The Carequality Framework Policies DRAFT document introduces a concept of patient-initiated requests that supply validated demographics

- A Carequality certified third party, called a Credentialing Service Provider (CSP) would identity proof the patient and linked demographics (Section 3.6)

- Certain demographics not generally available such as for historical names or addresses (Section 3.6.1)

- Initiators can only use validated demographics (Section 3.6.1)

- Demographics are supplied in a "technical token" (Section 3.6.1)

- Carequality Feedback: We have asked that the token be defined precisely (format, values, location)

eHealth Exchange™

3.6.1. Demographic Matching within Patient Request

Until a standard to separate verified from non-verified demographics exists, Initiators must only use verified demographics for Patient Request queries. Implementers and CCs playing the role of Initiator for the Patient Request permitted purpose, may only assert demographics that have been verified by their CSP. After a successful identity validation event, CSPs must supply the Initiator with a technical token containing the verified demographics as described in the Technical Trust Policy. These demographics, once verified, will be immutable. Any change (such as a change of address) will require verification by their CSP. Any historical demographic that has been verified by the CSP at any point in the past can be used, even if that demographic has been changed or is otherwise outdated, so long as a non-expired matching token is asserted along with it. It is recommended, but not required, that Consumer Applications/PHRs/Other prompts their patients to periodically verify that their demographics are up to date.

Carequality Patient Request Initiator Demographic Requirements

Demographic Superset

Queries for Patient Request MUST include these CSP verified demographics	First Name, Last Name, Date of Birth, Address, City, State, ZIP
Queries for Patient Request MAY include these CSP verified demographics	Middle Name, Middle Initial, Suffix, Email Address, Mobile Phone Number, SSN, SSN last 4 digits, ZIP+4, Sex, and Other Verifiable Identifiers

Patient Requests: Mandatory Patient Matching Rules

New Data Entries & New Rules

Carequality Patient Request: New Mandatory Patient Matching Rules (Section 3.6.1)

- Responders can **only match** based on the "approved set of demographics"

- Responders **cannot request additional demographics** other than those listed in the Carequality documentation under the "Must" section

- If responders get a "100%" match, they **must respond** to the query unless they have an "unambiguous non-match" such as for "twins"

- Responders are encouraged to validate the demographics section of the message with the demographics in the token to confirm they agree

- Carequality Feedback: Carequality should require all known demographics, including historical, and flag those that are validated to maximize match quality. Please define "100%" match. The term "Sex" should be defined ("Administrative Gender", "Biological Gender at Birth", "Patient's Preferred Gender", etc.)

Image credit: Licensed from iStockPhoto

eHealth Exchange™

Mandatory Responses

3.6. Patient Request – Identity Verification and Demographics

An Implementer or CC who plays the role of Query Initiator for Treatment purposes in any Use Case must also play the role of Query Responder for the Patient Request purpose utilizing demographic search via the technical and policy requirements described in Carequality's Query-Based Document Exchange Use Case AND/OR the FHIR Use Case no later than XX/XX/2023.

New Audit Log and Message Rejection Logic

- A new "7.0 Transaction Logs" section has been added
- "A request ==without the minimum data== necessary to create an audit log ==MAY be rejected==, so long as that rejection is applied uniformly in compliance with non-discrimination" <emphasis mine>

- **Carequality Feedback:** Clarify distinction between "Treatment" and "Health Care Operations" have identical Minimal Data Sets collapse into a single row?

7.0 Transaction Logs

A request without the minimum data necessary to create an audit log MAY be rejected, so long as that rejection is applied uniformly in compliance with non-discrimination. Carequality has defined minimum requirements for the data set needed to create an audit log:

Minimum Data Set	
Treatment	Date/time, Local Patient ID, Request Audit ID, patient last name, DOB, Document title, requesting ORG, requesting system OID, On behalf of organization OID
Health Care Operations	Date/time, Local Patient ID, Request Audit ID, patient last name, DOB, Document title, requesting ORG, requesting system OID, On behalf of organization OID
Care Coordination	Date/time, Local Patient ID, Request Audit ID, patient last name, DOB, Document title, requesting ORG, requesting system OID, On behalf of organization OID, NAIC code

eHealth Exchange

New Audit Log Values

- Local Patient ID
- Request Audit ID
- Patient Last Name
- DOB
- Document Title
- Requesting ORG
- Requesting System OID
- On Behalf Of Organization OID
- NAIC Code

7.0   Transaction Logs

A request without the minimum data necessary to create an audit log MAY be rejected, so long as that rejection is applied uniformly in compliance with non-discrimination. Carequality has defined minimum requirements for the data set needed to create an audit log:

Minimum Data Set	
Treatment	Date/time, Local Patient ID, Request Audit ID, patient last name, DOB, Document title, requesting ORG, requesting system OID, On behalf of organization OID
Health Care Operations	Date/time, Local Patient ID, Request Audit ID, patient last name, DOB, Document title, requesting ORG, requesting system OID, On behalf of organization OID
Care Coordination	Date/time, Local Patient ID, Request Audit ID, patient last name, DOB, Document title, requesting ORG, requesting system OID, On behalf of organization OID, NAIC code

eHealth Exchange

Transition Logs Draft Feedback from eHealth Exchange

- Carequality should publish implementation-level information for each of these new values including:
  - Expected source of the values (a directory, or a message, or something else)
  - Syntax
  - Semantics
  - Value sets
  - Code systems
  - Processing model
  - Test cases
  - Xpaths
  - Etc.
- This section references "Local Patient ID", "patient last name", "DOB", and "Document title"
- We understand that these audit log requirements are for ALL message types including push, PD/QD/RD
- Some of these values may not be available in some messages. Example: Document Title is not normally known in a PD message request or response

eHealth Exchange™

Transition Logs Draft Feedback (Cont.)

- Without implementation-quality technical specifications for these values, the eHealth Exchange is unable to estimate the effort or time-frame required to implement these changes

- It is highly likely that adding support for these new values will require developmental costs on the part of the eHealth Exchange Carequality Connections so that those Participants' technology platforms can parse, make audit log entries, and properly determine the new business rules regarding adherence to the new audit log Minimal Data Set

eHealth Exchange™

Service Levels for Audit Log Requests

New Audit Log Service Levels

- New requirement that can be read as a "right" of a responder, and an "obligation" of the initiator

- Designed to allow responder to receive relevant audit logs within a certain timeframe as a function of the scope of the request

- **Carequality Feedback:** The table is unclear and does not seem to differentiate between the patient scope and the service levels

Initiators MUST be able to produce an audit log within the required response time of a request as described in the chart below, unless doing so would violate Applicable Law.

Required Response Times				
		Within 1 Day	Within 1 Month	> 1 Month
Scope Across Patients	Single Patient	3 Business Days	3 Business Days	60 Business Days
	> 100 Patients	3 Business Days	10 Business Days	60 Business Days
	> 1,000 Patients	3 Business Days	10 Business Days	60 Business Days

eHealth Exchange™

Companion Document

Companion Document

- Carequality Patient Request Identify Verification Policy

- References a "token" for CSP verified demographics

- Carequality Feedback: The exact structure and location of this token should be specified including: position in the XML message, format (JSON v XML), CDATA vs native, etc.

- The token should identify validated v non-validated data

Carequality Patient Request Identity Verification Policy

Overview
When processing data requests initiated by a patient (Patient Request), it is imperative that patient's information is disclosed only to the patient to whom that information belongs. This is typically accomplishe having the Patient authenticate directly with the data source, but in cases where such an authentication workflow is either undesirable or infeasible, additional mechanisms are needed.

This document details an exchange pattern within a federated trust framework (Carequality) in which a QI Initiator facilitating a Patient Request query must partner with a Full Service (IAL2 + AAL2) Credentialing S Provider (CSP) or Component Service (CS) (ex. IAL2 via a Registration Authority) to identity proof the patie IAL2 prior to sending requests to the data sources (Carequality Implementers and CCs). The CSP or CS mu provide a signed, technical token (IAL2 Claims Token) containing the patient's demographics to the Patie Request Initiator, as part of the IAL2 identity verification service. By policy, the Patient Request Initiator provide this token to the Query Responder within the Patient Discovery (XCPD) transaction.

Trusted Credential Service Providers and Component Services
Carequality Implementers or their CCs that initiate queries for Patient Request must use one or more o approved a set of trusted Full Service (IAL2 + AAL2) Credentialing Service Provider (CSP) or Component (CS) (ex. IAL2 via a Registration Authority) that has been vetted and approved by a certifying body sele

General Comments

General Comments from eHealth Exchange to Carequality

- To avoid unintended consequences, the proposed Carequality Framework Policies revisions **require additional details** before proposed policy revisions are published

- The new audit logging Minimal Data Set (MDS) requirements seem to **reduce patient privacy** by placing demographics into the audit logs of Carequality Implementor and Connection gateways

- Carequality should provide **implementation quality specifications** so the proposed requirements can be implemented in an interoperable manner

- These updates may cause eHealth Exchange Carequality Connected organizations to have to **re-contract with their Subparticipants** which is an onerous process

- We recommend Carequality **iterate and improve** on this document over the next 3 to 9 months before considering publication

- The **effective date** should be a function of Carequality Implementers' ability to develop and deploy the requisite version upgrades of their gateway software and internal policies, procedures, and legal agreements

eHealth Exchange™

Q&A

How might I obtain additional information?

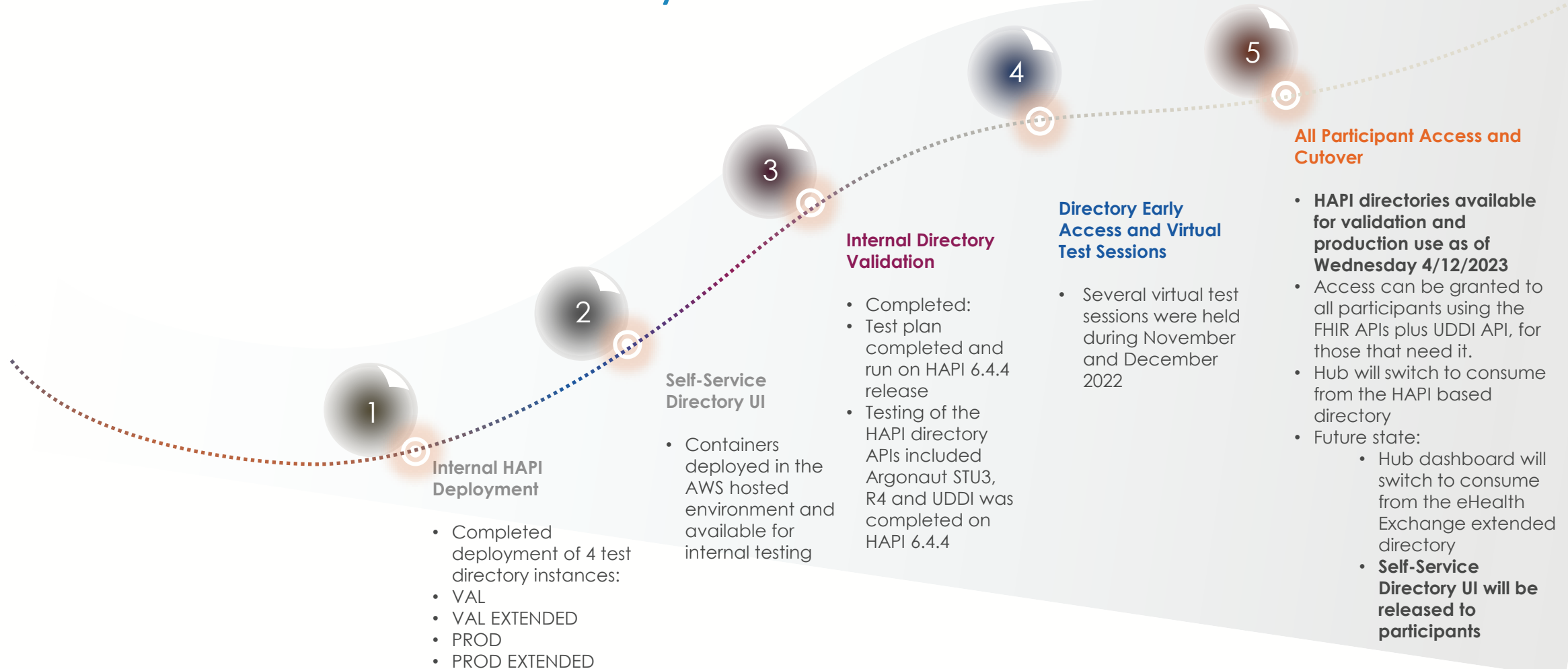| How	When	Where
1. Visit eHealth Exchange Web Site	Any time	https://ehealthexchange.org/what-we-do/tefca-and-ehealth-exchange
2. Monthly Participant Web Meetings	Typically, the 3rd Thursday of Each Month at 1 pm ET	https://ehealthexchange.org/events
3. Monthly TEFCA Policy Compliance Meetings	Dates coming soon!	https://ehealthexchange.org/events
4. Monthly TEFCA Technical Compliance Meetings	Dates coming soon!	https://ehealthexchange.org/events
5. Email	Any time if you have a specific question	administrator@ehealthexchange.org

eHealth Exchange™

FHIR R4 Directory Rollout

eHealth Exchange™

51

Transition to FHIR R4 Directory – Milestones

1

Internal HAPI Deployment

- Completed deployment of 4 test directory instances:
- VAL
- VAL EXTENDED
- PROD
- PROD EXTENDED

2

Self-Service Directory UI

- Containers deployed in the AWS hosted environment and available for internal testing

3

Internal Directory Validation

- Completed:
- Test plan completed and run on HAPI 6.4.4 release
- Testing of the HAPI directory APIs included Argonaut STU3, R4 and UDDI was completed on HAPI 6.4.4

4

Directory Early Access and Virtual Test Sessions

- Several virtual test sessions were held during November and December 2022

5

All Participant Access and Cutover

- **HAPI directories available for validation and production use as of Wednesday 4/12/2023**
- Access can be granted to all participants using the FHIR APIs plus UDDI API, for those that need it.
- Hub will switch to consume from the HAPI based directory
- Future state:
  - Hub dashboard will switch to consume from the eHealth Exchange extended directory
- **Self-Service Directory UI will be released to participants**

eHealth Exchange

New HAPI directories are available as of Wednesday 4/12/2023!

- Email techsupport@sequoiaproject.org to get access to the new HAPI directories:
  - For existing FHIR API users, ask to have your API key migrated to the HAPI directories. You can continue to access the legacy directories, as needed.
  - For organizations that have not accessed the directory FHR API in the past, ask for a new FHIR API key to access the HAPI directories.
- See the "Directory Endpoint Options" slides for more information on HAPI directory API options.
- Provide feedback on the new HAPI directories:
  - Email techsupport@ehealthexchange.org for technical issues or concerns
  - For urgent attention, copy administrator@ehealthexchange.org

eHealth Exchange™

New HAPI Directory – FHIR Implementation Guides (IGs)

- The Base FHIR R4 IG and eHealth Exchange FHIR R4 IG are at the bottom of the technical specifications page under the Directory Implementation Guides section. Navigate to:

  https://ehealthexchange.org/testing-program/technical-specifications

- There is no IG documentation for the STU3 API for the new FHIR directories which documents FHIR capabilities such as search parameters, read operations, etc. The STU3 API under the new FHIR directories generally conforms to the HL7 FHIR R4 capabilities listed below, as it's an API into a FHIR R4 directory.

  – RESTful API: https://hl7.org/fhir/http.html
  – FHIR Read: https://hl7.org/fhir/http.html#read
  – Generalized search capabilities (see "parameters for all resources" and "search result parameters" under the Summary Table): https://www.hl7.org/fhir/search.html
  – Search parameters for an FHIR Organization resource: https://hl7.org/fhir/organization.html#search

eHealth Exchange

New HAPI Directory APIs – 3 API Choices

FHIR Client API

- Access the directory with a FHIR client using a FHIR API key provided by Sequoia technical support – email techsupport@sequoiaproject.org for a FHIR API key

  – Provides access to both **Argonaut STU3 FHIR** (same as the current directory offering) and **FHIR R4** APIs

  – Typically provides read-only access – no update or create operations

UDDI API (SOAP API) continued support

- The new FHIR HAPI based directory will support a traditional **UDDI/SOAP** interface
- Newer data elements introduced with STU3/R4 will not be available under the UDDI/SOAP interface
- **No access** to sub-participant entries
- Access will require SSL/TLS certificate-based security only, as in the past

New HAPI Directories and Hub endpoints

FHIR Client API and Hub endpoints

- Unlike the current directories, using the FHIR APIs, there are no longer separate directories for direct endpoints and Hub endpoints.

- To obtain Hub endpoints using the FHIR APIs, use the FHIR operation $hub-aware. For example:

  – For all FHIR R4 entries with Hub endpoints:
  https://directory.prd.ehealthexchange.org/fhir/Organization/**$hub-aware**

  – For a single FHIR R4 entry with Hub endpoints:
  https://directory.prd.ehealthexchange.org/fhir/Organization/2.16.840.1.113883/**$hub-aware**

UDDI API (SOAP API) and Hub endpoints

- The base URI remains the same for direct and Hub endpoints but the path changes. For example:

  – Direct endpoints with the UDDI API:

    - https://directory.prd.ehealthexchange.org/uddi

  – Hub endpoints with the UDDI API:

    - https://directory.prd.ehealthexchange.org/uddi-hubaware

eHealth Exchange

Directory Endpoint Options

VALIDATION DIRECTORY

FHIR R4 API

- Direct endpoints:
  https://directory.val.ehealthexchange.org/fhir/Organization?_apiKey=<INSERT_API_KEY>&_format=json
- Hub endpoints:
  https://directory.val.ehealthexchange.org/fhir/Organization/$hub-
  aware?_apiKey=<INSERT_API_KEY>&_format=json

Argonaut STU3 API

- Direct endpoints:
  https://directory.val.ehealthexchange.org/fhir-pre-stu3/Organization?_apiKey=<INSERT_API_KEY>&_format=xml
- Hub endpoints: https://directory.val.ehealthexchange.org/fhir-pre-stu3/Organization/$hub-
  aware?_apiKey=<INSERT_API_KEY>&_format=xml

UDDI API

- Direct endpoints: https://directory.val.ehealthexchange.org/uddi
- Hub endpoints: https://directory.val.ehealthexchange.org/uddi-hubaware

eHealth Exchange™

Directory Endpoint Options

PRODUCTION DIRECTORY

FHIR R4 API
- Direct endpoints:
  https://directory.prd.ehealthexchange.org/fhir/Organization?_apiKey=<INSERT_API_KEY>&_format=json
- Hub endpoints:
  https://directory.prd.ehealthexchange.org/fhir/Organization/$hub-aware?_apiKey=<INSERT_API_KEY>&_format=json

Argonaut STU3 API
- Direct endpoints:
  https://directory.prd.ehealthexchange.org/fhir-pre-stu3/Organization?_apiKey=<INSERT_API_KEY>&_format=xml
- Hub endpoints:
  https://directory.prd.ehealthexchange.org/fhir-pre-stu3/Organization/$hub-aware?_apiKey=<INSERT_API_KEY>&_format=xml

UDDI API
- Direct endpoints: https://directory.prd.ehealthexchange.org/uddi
- Hub endpoints: https://directory.prd.ehealthexchange.org/uddi-hubaware

eHealth Exchange

Change in functionality – inactivated entries are now logically deleted

With the legacy directories, when a directory entry is inactivated and should no longer be consumed, we set the "active" element to false.

With the new HAPI directories, the following is done instead:

- The "active" element set to false now indicates that a directory entry is pending eHealth Exchange approval. An "active=false" entry should **not** be consumed by directory clients as it has not been approved.

- When a directory entry is removed from the HAPI directories, it will be logically deleted using HTTP DELETE and can no longer be found using a directory search for Organization entries. Logically deleted entries can be discovered by querying for AuditEvent entries, with an optional date range:

  - An example FHIR R4 search query is:
    https://directory.val.ehealthexchange.org/fhir/AuditEvent?_format=xml&_sort=-date&date=gt2023-03-01T00:00:00

  - The XPath to find the HCID of the logically deleted entry is /AuditEvent/entity/what/identifier/value/@value

  - For now, the directory will only contain AuditEvent entries for logical deletions. In the future, the directory will add AuditEvent entries for re-activations of a deleted entry. To facilitate queries to AuditEvent in the future, the directory will provide a helper operation/call so that only deleted entries will be listed and re-activations will not be included in the list of deleted entries.

eHealth Exchange

Directory Query Recommendations

- Query with an "active=true" parameter
  - Directory entries with "active=false" are unapproved and not ready to query
  - Unlike the legacy directories, if you don't specify a value for "active", then the default is not "active=true". Entries will be returned with active set to true and false if the active parameter is not specified.

- Query for Participant entries if you don't want to retrieve Subparticipant entries
  - Query parameter/value for Participant entries:
    type=https://sequoiaproject.org/fhir/sphd/CodeSystem/OrganizationType%7CParticipant
    - Note: %7C is an URL encoded pipe character ("|")
  - In the future, the directory will have Subparticipant entries which represent provider locations such as a hospital or clinic. Subparticipant entries are not expected to have endpoints in the short-term.

- Directory paging
  - HAPI has a paging feature which adheres to the paging behavior specified by FHIR R4 – see http://hl7.org/fhir/R4/search.html#count
  - The directory is currently set to a default page size of 500, so by default, 500 records will be returned for a single response. You can return less records in a response by setting the _count parameter to a value lower than 500.
 - The maximum page size is 1000, so you cannot increase the page size beyond 1000 using the _count parameter.

eHealth Exchange

Rollout of New HAPI Directories and Retirement of Legacy Directories

Rollout of the new HAPI directories to all participants:

- The HAPI directories are available to all participants as of 4/12/2023

- Legacy directories will be the data source for HAPI directories until the legacy directories are retired. Updates/additions will be made to the legacy directories and the legacy directories will be used to refresh the data in the HAPI directories

Legacy directory retirement

- The legacy directories will be retired and will no longer be accessible once the HAPI directories can be utilized by participants. The eHealth Exchange is aware of several participants which need to migrate to the HAPI directories, but please inform administrator@ehealthexchange.org that you need to migrate if not sure.

- Once the retirement occurs, the eHealth Exchange will <u>attempt</u> to forward requests for the legacy directories to the new HAPI directories. This is more feasible for the UDDI API than the FHIR API. Forwarding is currently under investigation and may not be feasible due to the complexity of the forwarding configuration.
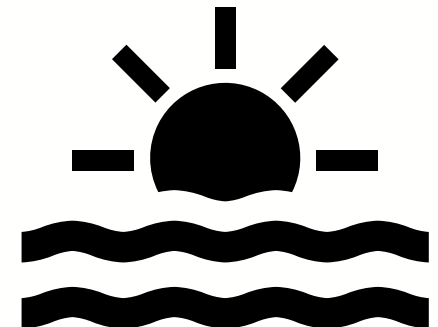
eHealth Exchange

FHIR R4 Directory Questions & Answers

eHealth Exchange™

QHIN Update

eHealth Exchange™

Technical Readiness for TEFCA

	Completed
	In Progress
	Planned

We are here

1. Review QTF Requirements		3. Contracting		5. Build

Jan 22   Aug 22   Nov 22   TBD

2. Hub Gap Analysis		4. Planning & Initiation		6. Conformance Testing	7. Refine/ Retest	8. Pre-Prod Testing	9. Go Live

Jun 22   Sep 22   Mar 23   Apr 23

Phase	Accomplishments
1. Thru 4.	QTF review and gap analysis completed. Vendor contracting completed. Project planning and initiation.
5.	Customizations in progress (required to mitigate gaps and flow-down requirements that participants might not be able to accommodate).
6.	**4/11: Kick-off call with RCE Testing team** 3/24: Created eHx QHIN Organization entry in RCE-TEST directory 3/23: Successful QHIN Initiating Gateway test [eHx Hub ITP -> eHx QHIN -> Sequoia Subscription ITP (in RCE mode)] 3/21: Deployed PKI certificates provisioned for RCE-TEST (non prod) 3/7: Received approval to request PKI certificates for RCE-TEST (non prod). 3/1: Received API Key to access RCE Directory.

eHealth Exchange

Please Engage!

We'd love to hear from you.

eHealth Exchange™

Technical Work Group

Thursdays 4-5pm Eastern: email administrator@ehealthexchange.org for an invite

Typical Topics:

1. Technical Specification Creation
   a) Push notifications
   b) Populating directory with hospital locations
   c) Broadcast query
   d) FHIR Directory
   e) Consumer access
   f) Carequality harmonization
   g) Controlled Unclassified Information (CUI) Marking
2. Testing
3. Hub Updates
4. Capacity planning [Final Thursday each month]

How might I obtain additional information?

How	When	Where
Visit **eHealth Exchange** Website	Any time	https://ehealthexchange.org
Monthly Participant Web Meetings	3rd Thursday of Each Month at 1 pm ET	https://ehealthexchange.org/events
Weekly Technical Workgroup	Thursdays 4-5 ET	https://ehealthexchange.org/events
Email	Any time if you have a specific question	administrator@ehealthexchange.org

eHealth Exchange

How might I obtain assistance?

How	Who	Where
Certificates	Direct Trust Support	support@directtrust.zohodesk.com
Hub and Hub Dashboard Assistance	Hub Service Desk	servicedesk@hub.ehealthexchange.org
Directory Assistance, setup, changes	Tech Support	techsupport@ehealthexchange.org
Testing Questions	Testing Team	testing@ehealthexchange.org
Questions about DURSA/OPP's	Administrator	administrator@ehealthexchange.org

eHealth Exchange

Follow @eHealthExchange