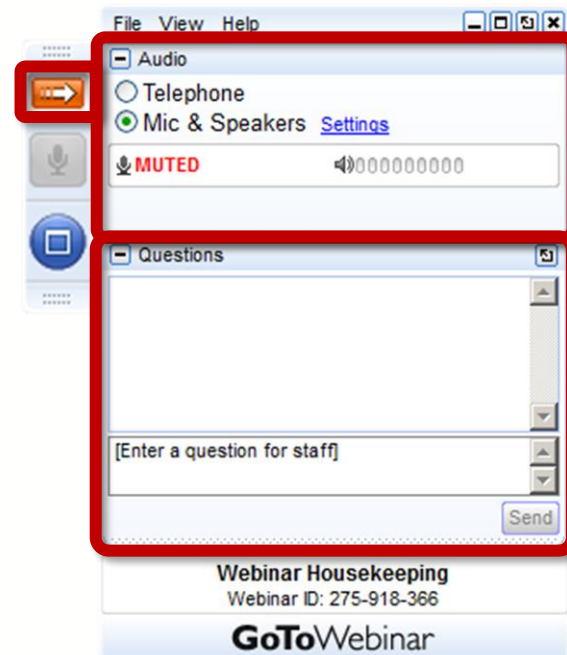


March 16th, 2023

eHealth ExchangeTM

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

Today's Topics

1. HIMSS Update	Kathryn Bingman
2. Contacts	Mark Rogers
3. QHIN Update	Kathryn Bingman, Mike Yackanich
4. FHIR Directory	Michael McCune
5. FHIR Pilot Update	Abhi Pandey, Hussein Ezzeldin
6. Q&A	Everyone



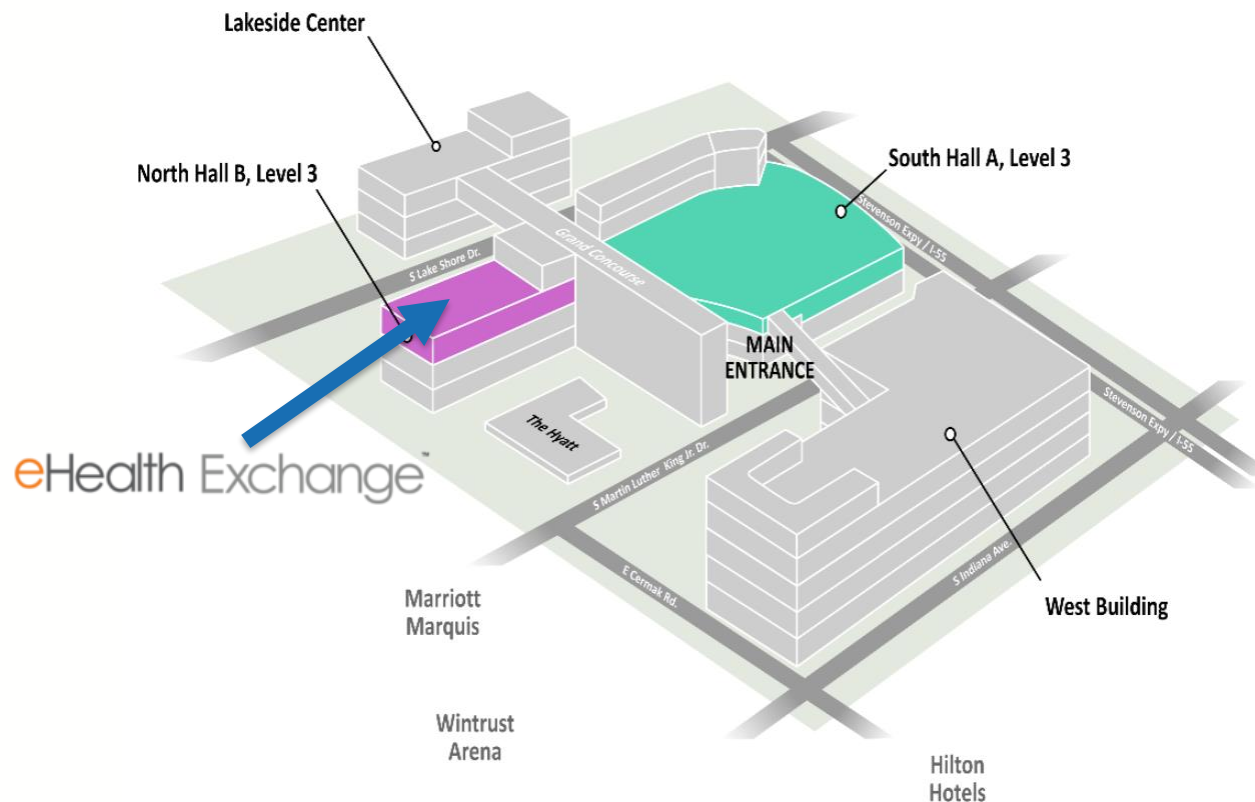
HIMSS 2023

Mon, Apr 17 – Fri, Apr 21

eHealth ExchangeTM

Join Us At HIMSS23 in Chicago

Visit us at Booth 7927 in
(North Building, Hall B)

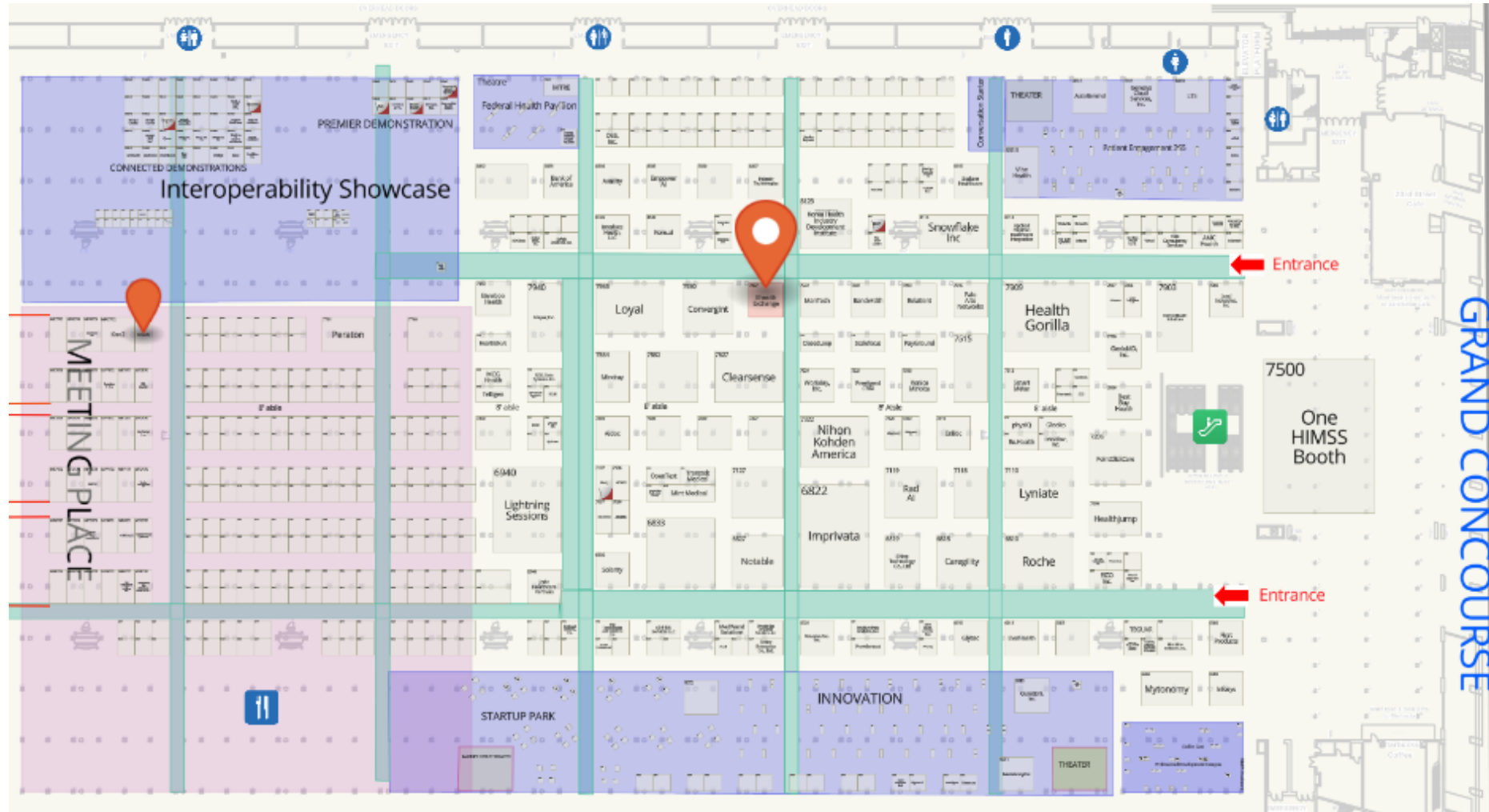


HIMSS Discount

Our members receive the HIMSS member rate to attend. Here's how to register:

1. Visit HIMSS23 general registration and sign in: <https://www.himss.org/global-conference/registration-info-pricing>.
2. Once you're signed in, start your registration. Be sure to select the Collaborator tab on the left-hand side when prompted.
3. Select your preferred HIMSS23 pass and enter "eHealth Exchange" as the "Referring Collaborator Organization" to receive the HIMSS member rate on registration.

Join Us At HIMSS23 in Chicago!



Visit us at Booth
7927
(North Building, Hall B)

Join Us At HIMSS23 in Chicago

Visit us at Booth 7927 in
(North Building, Hall B)



Don't Forget Your Swag!

PARTICIPANT EXCLUSIVE

Clear Stadium Tote Bag

Perfect for concert and sporting events all summer long, the eHealth Exchange tote bags are only for network participants.

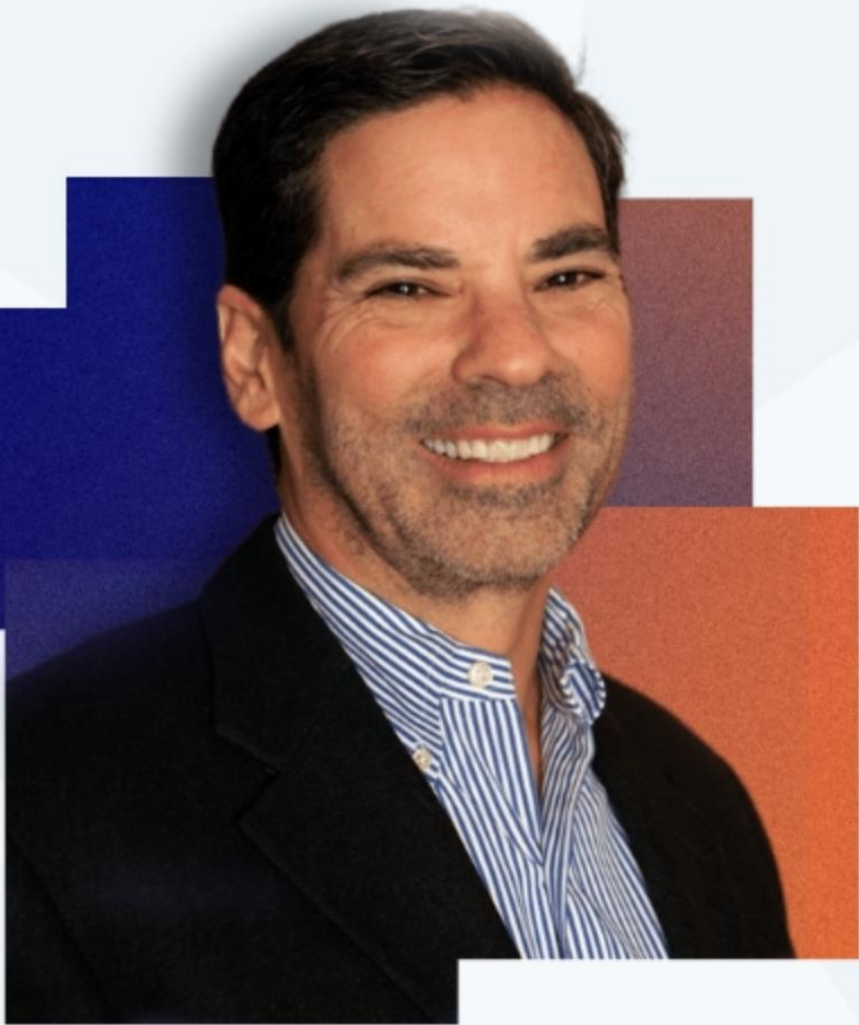


ALL ATTENDEES

Safety Lights

We're giving away safety lights to everyone who comes by our booth. Wear them when walking or riding your bike at night, or even put one on your dog's collar for better visibility and safety.





The Road to TEFCA – Perspectives from QHIN Candidates

WEDNESDAY, APRIL 19 AT 1:00 PM - 2:15 PM CT

West Building, Level 4 | W471 A

Join us for an update on Qualified Health Information Networks (QHINs) under the Trusted Exchange Framework and Common Agreement (TEFCA). Hear directly from organizations officially approved for onboarding as QHINs, including Health Gorilla, CommonWell Health Alliance, eHealth Exchange, and Epic.



Contacts

Changing and New Contacts

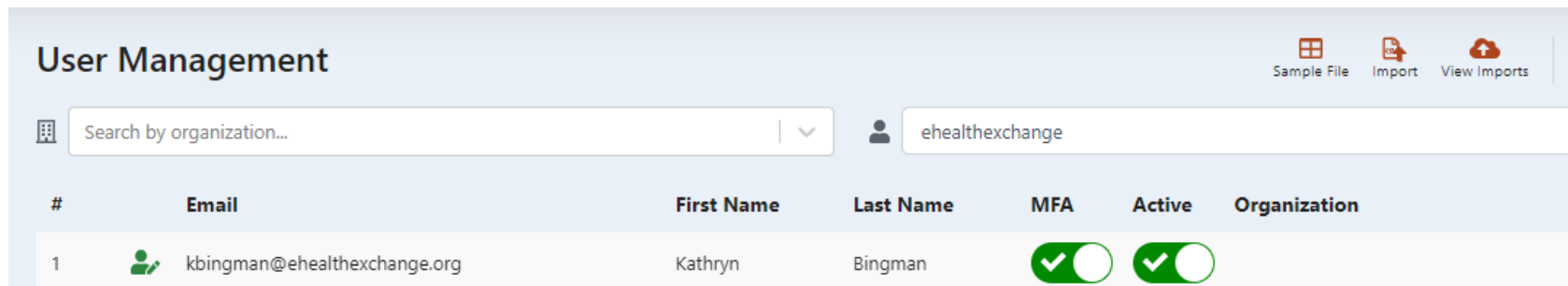
eHealth ExchangeTM

Contacts for Your Organization

We want to ensure that we are reaching the right people at your organization with our communications.

- If you have had recent or past changes and are unsure if we have an updated list: email administrator@ehealthexchange.org requesting the Contact List Template to complete and return.
- The template asks name, title, phone number, email address, and what type of emails the resource should receive.
- This will assist eHealth Exchange and each Participant in knowing that the communication we send is received appropriately.

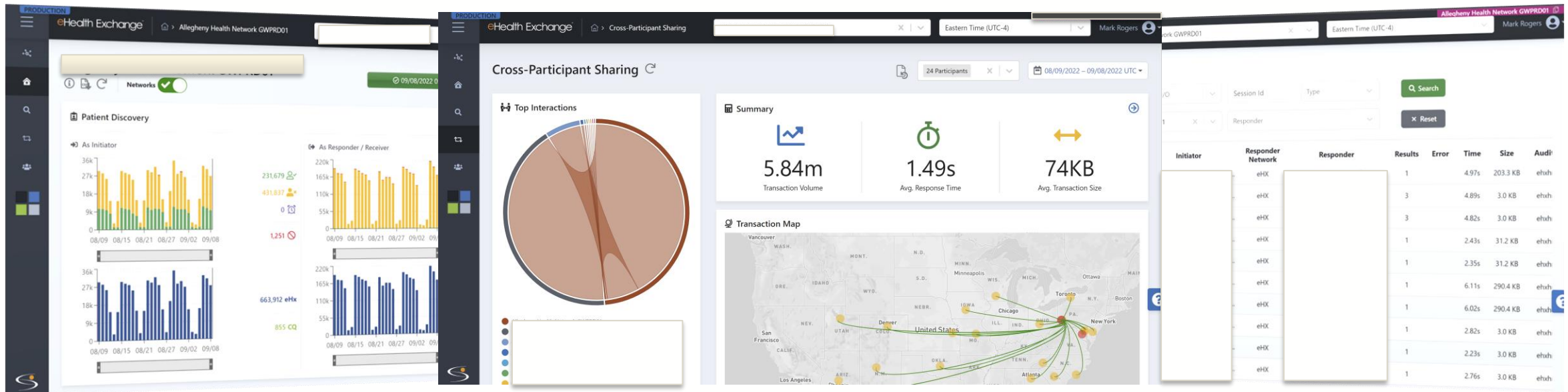
Don't forget to maintain your Hub Dashboard accounts! If nobody at your organization currently has the rights to add/remove Dashboard accounts, please reach out to us at administrator@ehealthexchange.org.



The screenshot shows the 'User Management' interface. At the top right, there are icons for 'Sample File', 'Import', and 'View Imports'. Below these is a search bar with the placeholder text 'Search by organization...' and a dropdown arrow. To the right of the search bar is a user icon and the text 'ehealthexchange'. Below the search bar is a table with the following columns: '#', 'Email', 'First Name', 'Last Name', 'MFA', 'Active', and 'Organization'. The table contains one row with the following data: '# 1', 'Email kbingman@ehealthexchange.org', 'First Name Kathryn', 'Last Name Bingman', 'MFA' (checked), and 'Active' (checked). The 'Organization' column is empty.

#	Email	First Name	Last Name	MFA	Active	Organization
1	kbingman@ehealthexchange.org	Kathryn	Bingman	✓	✓	

Your Hub Dashboard – Your web portal providing interoperability insights.



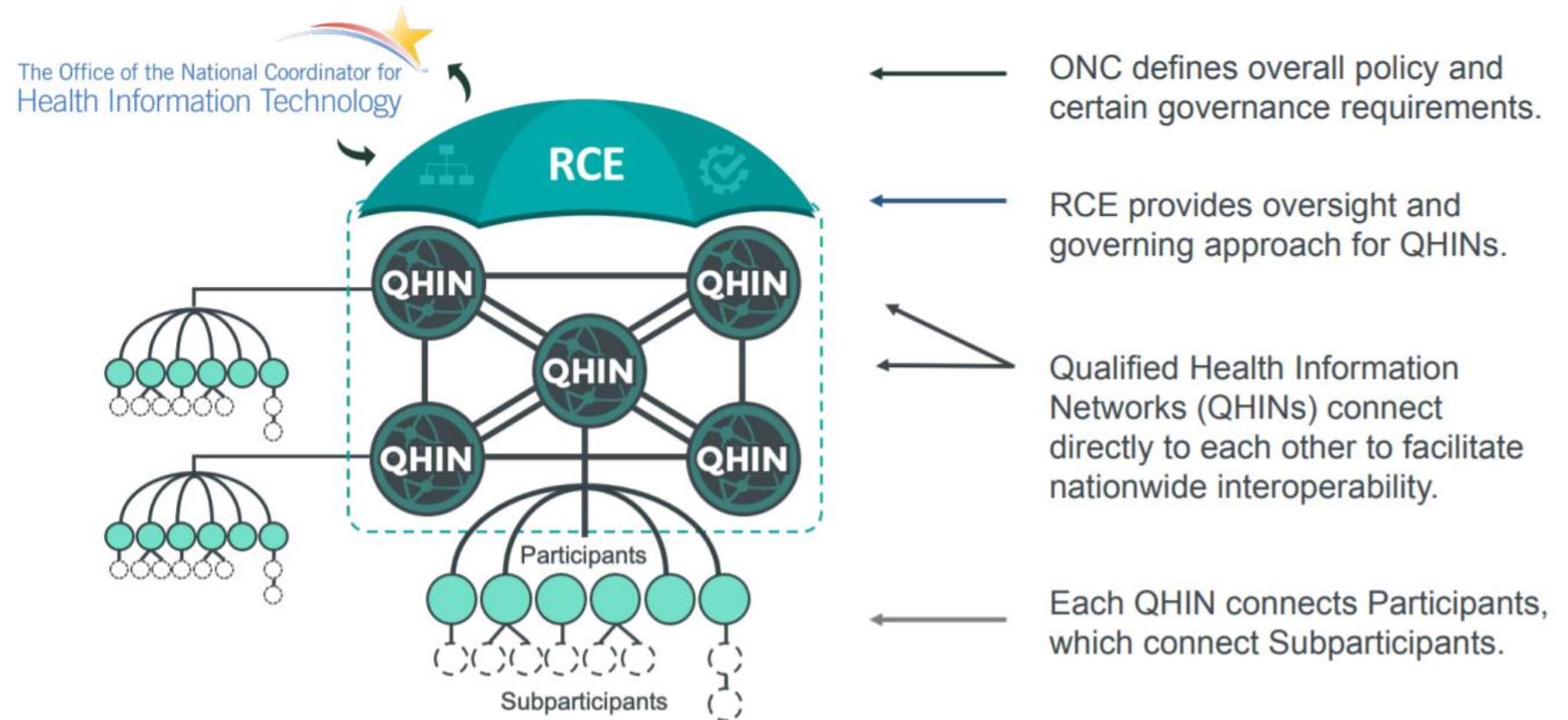
- Identify transaction volume, response times, drill-down, & download.
- Who is querying your organization?
- Where are your clinicians searching?
- How much care occurs outside your organization?



QHIN Update

eHealth ExchangeTM

How will TEFCA Work?



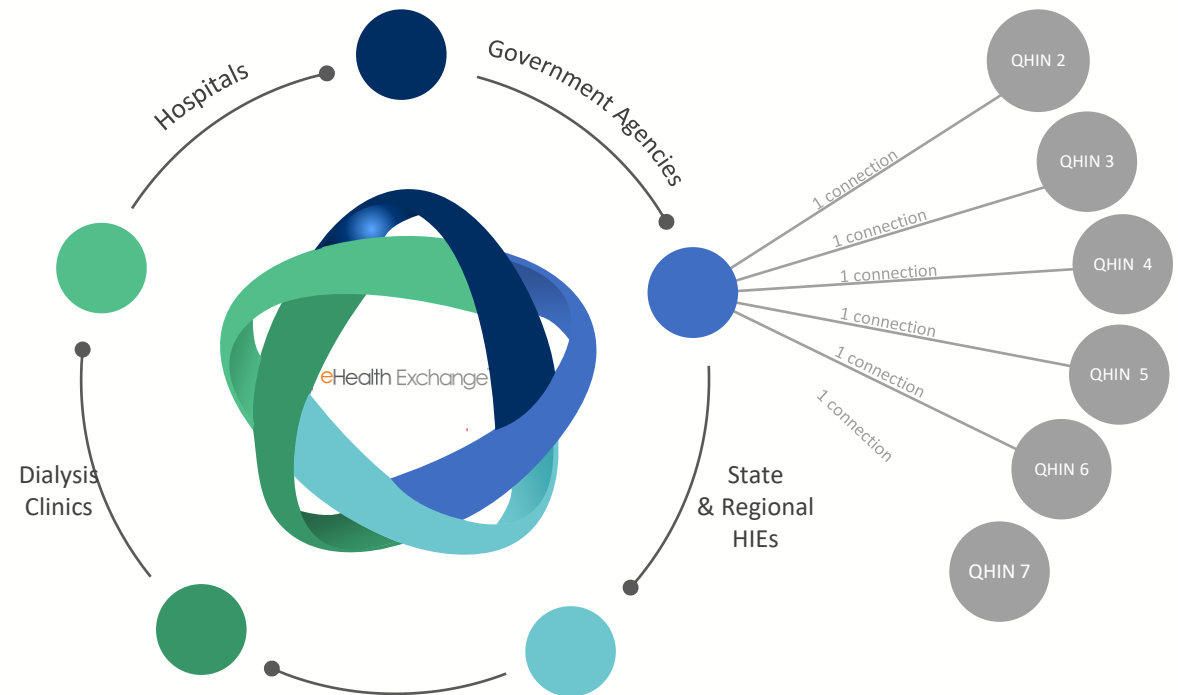
What is the Trusted Exchange Framework (TEFCA)?

It's a federally endorsed governance framework for **cross-network** exchange of healthcare records.

Similar to Carequality, it's a framework, and not a network:

- Technical & policy agreements
- Governing structure
- Federated architecture

Enables healthcare organizations connected to a TEFCA Qualified Health Information Network (QHIN) to exchange patient data with other healthcare organizations connected to other QHINs.



Which networks exchange via TEFCA?

The HHS announced that the [eHealth Exchange](#) is one of six applicants that have had their applications to become a Qualified Health Information Network (QHIN) approved

eHealth Exchange™



Epic



It's not yet clear which healthcare organizations will agree to exchange via TEFCA. Will yours?

What's changing?

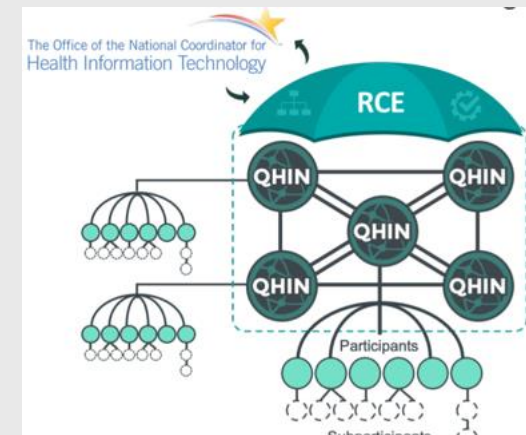
Prior to eHealth Exchange Connecting with TEFCA

Your organization can exchange with the eHealth Exchange's 320+ health systems, federal agencies, providers and provider collaboratives.



Once eHealth Exchange Goes Live on TEFCA

Option for your organization to **also** exchange with healthcare organizations participating in TEFCA QHINs.



eHealth Exchange go-live on TEFCA?

- eHealth Exchange and other QHINs must first complete TEFCA testing
- Multiple QHINs must be ready to go-live simultaneously.



Unless you ask administrator@ehealthexchange.org by the required date to NOT connect your organization to TEFCA, your Hub connection will connect your organization to TEFCA.

QHIN Required Responses

QHIN Participants and Sub-Participants must:

1. Respond to Treatment queries (effective immediately)
2. Respond to Individuals' requests (effective March 16, 2023, based on the IAS SOP publication on September 16, 2022)
3. Respond to Government Benefits Determination queries (effective date tbd)
4. Respond to Healthcare Operations (HCO) queries (effective date tbd)
5. Respond to Payment queries (effective date tbd)
6. Respond to Public Health queries (effective date tbd)
7. Adhere to the TEFCA FHIR Roadmap (under development)

eHealth Exchange TEFCA Terms & Conditions

- Incorporate the ONC required flow-downs
- These Terms and Conditions to help eHealth Exchange Participants understand what the flow downs mean for them and their Subparticipants
- The Terms and Conditions provide Participants with a way to approach complying with the required flow-downs
- Every Participant that **does not opt-out** of TEFCA will be **required** to comply with these Terms and Conditions without any edits just like the DURSA

eHealth Exchange TEFCA Protocols

- We want our Participants that do not opt-out of TEFCA to be able to comply with the requirements without having to spend a lot of time and money trying to unpack the Common Agreement and SOPs
- The purpose of these Protocols is to provide additional details about the required flow-downs and guidance on what Participants need to do to comply with the flow-downs
- Initial Required Protocols:
 1. eHealth Exchange TEFCA Governance Protocol
 2. eHealth Exchange TEFCA Change Management Protocol
 3. eHealth Exchange TEFCA Security Incident Protocol
 4. eHealth Exchange TEFCA Enforcement Protocol
 5. eHealth Exchange TEFCA Dispute Resolution Protocol

Major Technical Differences eHealth Exchange QHIN Participants Must Support

1. Adopt USDCI v1 data classes and elements
2. Adhere to the Concise Consolidated CDA 1.1 Specification
3. Adhere to Postal Address Standards
4. Adopt IHE ITI Technical Framework Revisions 17.0 (versus Revision 8.0)
5. Accept aggregated XCPD responses
6. Various requirements such Purpose Of Use values, different consent attribute structure, sub-participant directory entries and detailed reporting, onboarding log submissions, specific test patients, and quarterly reporting.

How is the eHealth Exchange different?

eHealth Exchange

- ✓ National non-profit focused on the Public Good
- ✓ Single technical connection instead of hundreds
- ✓ Vendor agnostic
- ✓ 24x7x365 monitoring
- ✓ Mandatory content testing
- ✓ Analytics dashboard
- ✓ Broad federal agency connectivity
- ✓ Trust (no patient tracking, no selling data)

Other Networks

- ⚠ Single technical connection instead of hundreds
- ⚠ Vendor agnostic
- ⚠ 24x7x365 monitoring
- 🛑 Mandatory content testing
- ⚠ Analytics portal dashboard
- 🛑 Broad federal agency connectivity

✓ Yes

⚠ Sometimes

🛑 No

Participant Opt-out Process Summary

1. The Coordinating Committee will direct eHealth Exchange staff to notify Participants they have the right to opt-out of TEFCA exchange via the eHealth Exchange QHIN. This notification will include:
 1. The Common Agreement
 2. eHealth Exchange TEFCA Terms & Conditions
 3. eHealth Exchange TEFCA protocols
 4. Dates for TEFCA education sessions
 5. A deadline of at least 60 days (tbd by the Coordinating Committee) to **opt-out** of TEFCA exchange via the eHealth Exchange QHIN or be deemed to be participating in the eHealth Exchange QHIN and bound by eHealth Exchange's TEFCA terms.
2. eHealth Exchange staff will apprise the Coordinating Committee of any Participant concerns or comments submitted.

Just as when eHealth Exchange joined Carequality, eHealth Exchange will make best efforts to ensure Participants who do not opt-out truly intend to exchange via eHealth Exchange's QHIN.

Public Announcements



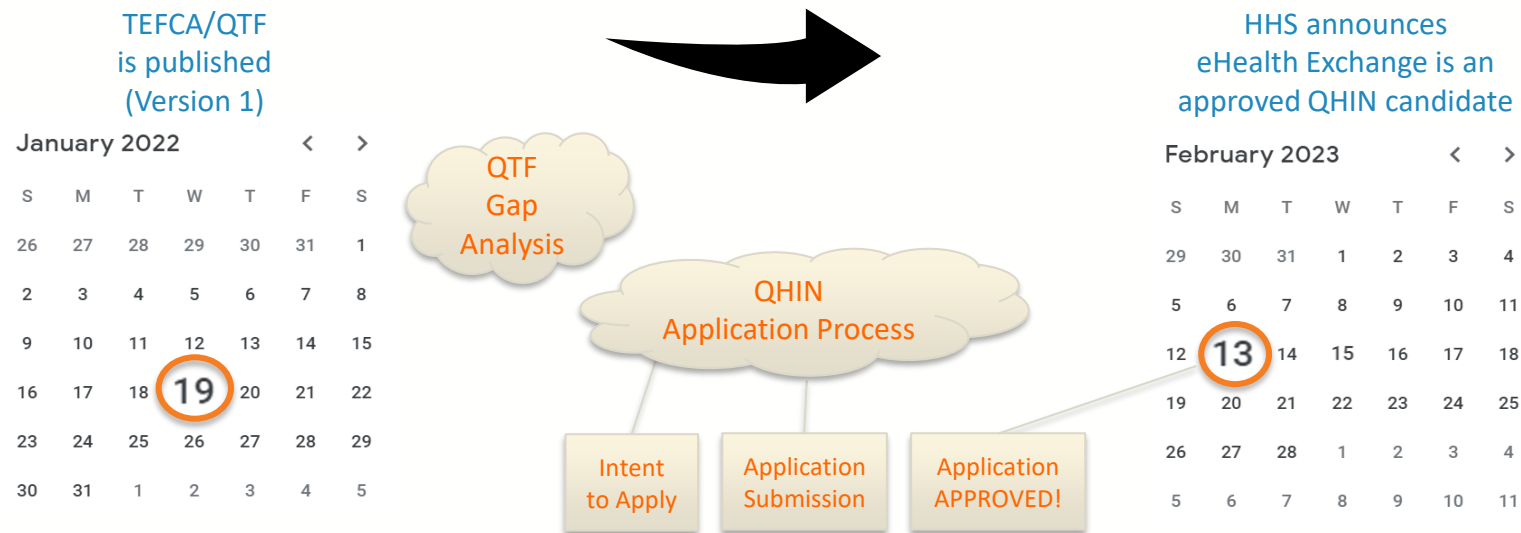
Intent to participate from 12 State HIEs

TEFCA Update

What is TEFCA?

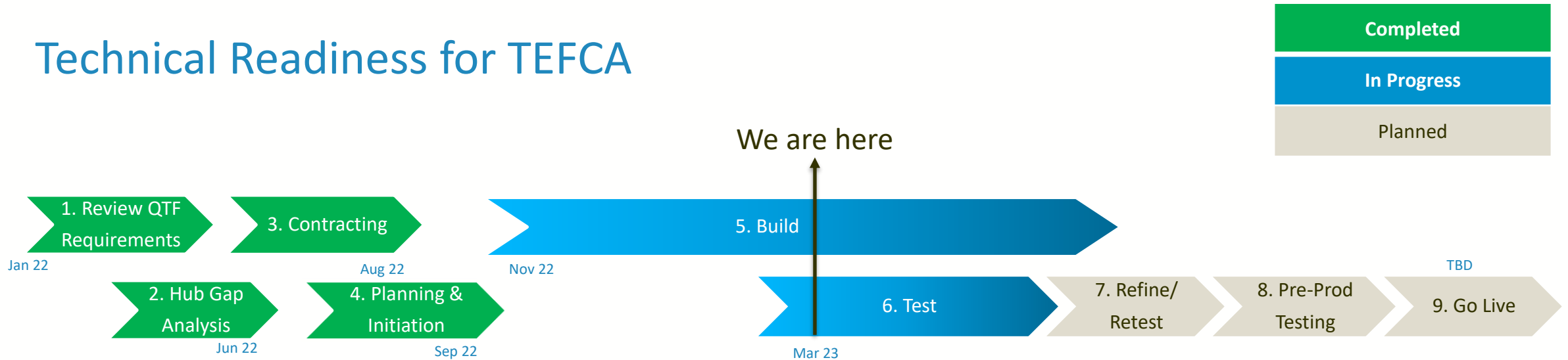
TEFCA outlines a common set of principles, terms, and conditions to support the development of a Common Agreement that would help establish a floor for universal interoperability and a federally endorsed on-ramp for nationwide exchange of electronic health information (EHI) across disparate health information networks (HINs).

TEF Trusted Exchange Framework
CA Common Agreement
QHIN Qualified Health Information Network
QTF QHIN Technical Framework



BeMyQHIN.org

Technical Readiness for TEFCA



Phase	Accomplishments
1. Thru 4.	QTF review and gap analysis completed. Vendor contracting completed. Project planning and initiation.
5.	New QHIN environments deployed (DEV and TEST). Code migration from Hub to QHIN Hub completed (using shared libraries). Customizations in progress (required to mitigate gaps and flow-down requirements that participants might not be able to accommodate).
6.	Access to the RCE ITP (Integrated Testing Platform) is pending deployment of certificates and creation of initial eHealth Exchange entry in the RCE Directory. 3/1: Received API Key to access RCE Directory. In process of creating eHx Organization entry. 3/7: Received PKI certificates for RCE-TEST (non prod). In process of deploying certificates to non-prod QHIN Hub.

QHIN Updates – Hub-Related



- Sep 2022: Sprint planning begun
- Oct 2022: Subscribed to Sequoia ITP (early access to testing tools)
- Dec 2022: QHIN environment DEV and TEST environment built
- Feb 2023: Conformance testing against Sequoia ITP begun
- Mar 2023: RCE Directory access and REC-TEST PKI certificates provisioned by RCE to eHealth Exchange

QHIN Sprint Goals				
Sprint 1 Goals	Sprint 2 Goals	Sprint 3 Goals	Sprint 4 Goals	Sprint 5 Goals
1.Environment Buildout 2.Geospatial Query	1.Environment Buildout 3.Geospatial Query 4.Broadcast (no target)	1.Environment Buildout 5.Geospatial Query 6.PoU Validation by Source 7.Find Targets via RCE Dir	1.Environment Buildout 8.Message Auditing 9.Message Logging	1.Environment Buildout 11.Error Handling 12.Test Harness PoU Support 14.RCE Testing
Sprint 6 Goals	Sprint 7 Goals	Sprint 8 Goals	Sprint 9 Goals	Sprint 10 Goals
13.Performance Reports 10.ITI-41/80 Xforms	15.Project US@ Xforms 16.Msg Xforms by Source	17.Dynamic Populate RLS	18.Use Deterministic RLS 19.QHIN on Hub Dashboard	20.QHIN on Hub Dashboard

Format of above is: <User Story #>.<Description>

How might I obtain additional information?

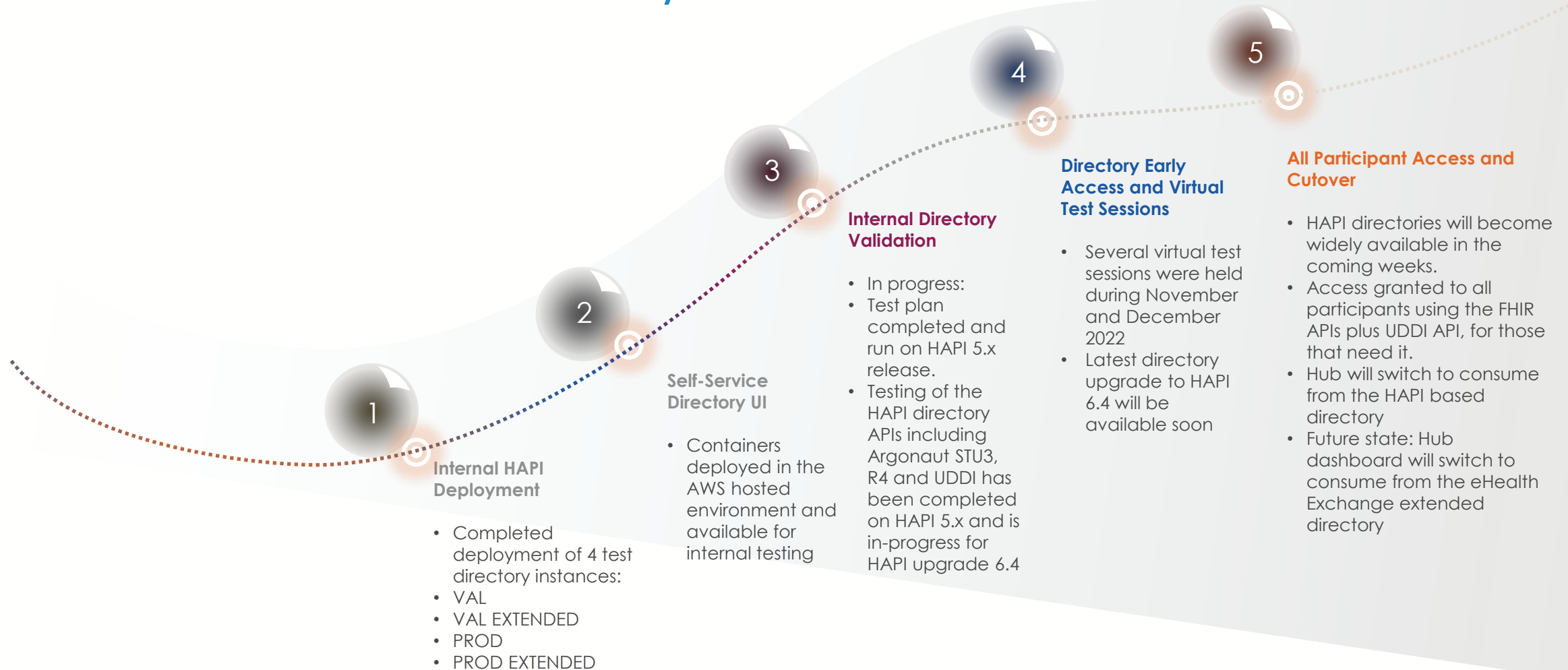
How	When	Where
1. Visit eHealth Exchange Web Site	Any time	https://ehealthexchange.org/what-we-do/tefca-and-ehealth-exchange
2. Monthly Participant Web Meetings	Typically, the 3rd Thursday of Each Month at 1 pm ET	https://ehealthexchange.org/events
3. Monthly TEFCA Policy Compliance Meetings	Dates coming 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



FHIR R4 Directory Rollout Plans

eHealth ExchangeTM

Transition to FHIR R4 Directory – Milestones



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>

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.prn.ehealthexchange.org/fhir/Organization/\\$hub-aware](https://directory.prn.ehealthexchange.org/fhir/Organization/$hub-aware)
 - For a single FHIR R4 entry with Hub endpoints:
[https://directory.prn.ehealthexchange.org/fhir/Organization/2.16.840.1.113883/\\$hub-aware](https://directory.prn.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.prn.ehealthexchange.org/uddi>
 - Hub endpoints with the UDDI API:
 - <https://directory.prn.ehealthexchange.org/uddi-hubaware>

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](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](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>

Directory Endpoint Options

PRODUCTION DIRECTORY

FHIR R4 API

- Direct endpoints: https://directory.prn.ehealthexchange.org/fhir/Organization?_apiKey=<INSERT_API_KEY>&_format=json
- Hub endpoints: [https://directory.prn.ehealthexchange.org/fhir/Organization/\\$hub-aware?_apiKey=<INSERT_API_KEY>&_format=json](https://directory.prn.ehealthexchange.org/fhir/Organization/$hub-aware?_apiKey=<INSERT_API_KEY>&_format=json)

Argonaut STU3 API

- Direct endpoints: https://directory.prn.ehealthexchange.org/fhir-pre-stu3/Organization?_apiKey=<INSERT_API_KEY>&_format=xml
- Hub endpoints: [https://directory.prn.ehealthexchange.org/fhir-pre-stu3/Organization/\\$hub-aware?_apiKey=<INSERT_API_KEY>&_format=xml](https://directory.prn.ehealthexchange.org/fhir-pre-stu3/Organization/$hub-aware?_apiKey=<INSERT_API_KEY>&_format=xml)

UDDI API

- Direct endpoints: <https://directory.prn.ehealthexchange.org/uddi>
- Hub endpoints: <https://directory.prn.ehealthexchange.org/uddi-hubaware>

Final Testing of the New HAPI Directories

For those who attended the virtual test sessions in November and December 2022:

- Little has changed since the prior test directories using HAPI version 5.3
- HAPI has been upgraded to use version 6.4. Improvements have been made so that future upgrades are modular and require little rewrite of custom code.
- Directory content has been improved so that Hub endpoints can be consistently generated using the endpoint name, specification version and transaction code value.

HAPI test directories using HAPI version 6.4

- Will be available in the coming week, for those wishing to test prior to general availability of the HAPI based directories.

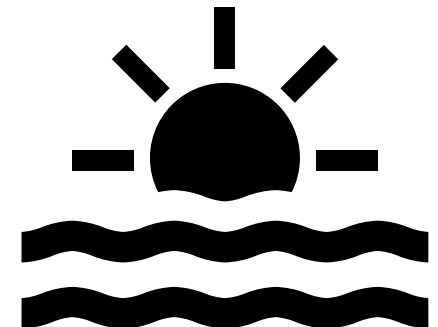
Rollout of New HAPI Directories and Retirement of Legacy Directories

Rollout of the new HAPI directories to all participants:

- **Goal:** Rollout the HAPI directories for general availability by early April 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 attempt 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.



FHIR R4 Directory Questions & Answers



FDA Pilot Update

eHealth ExchangeTM

BEST Exchange Pilot

CBER OBPV Mission

Ensure post-market biologic-product safety and effectiveness

Regulated Products

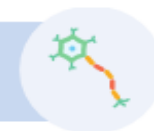
Vaccines (preventative and therapeutic)



Blood (components and derived)



Human Tissues and Cellular Products



Gene Therapies



Xenotransplantation Products



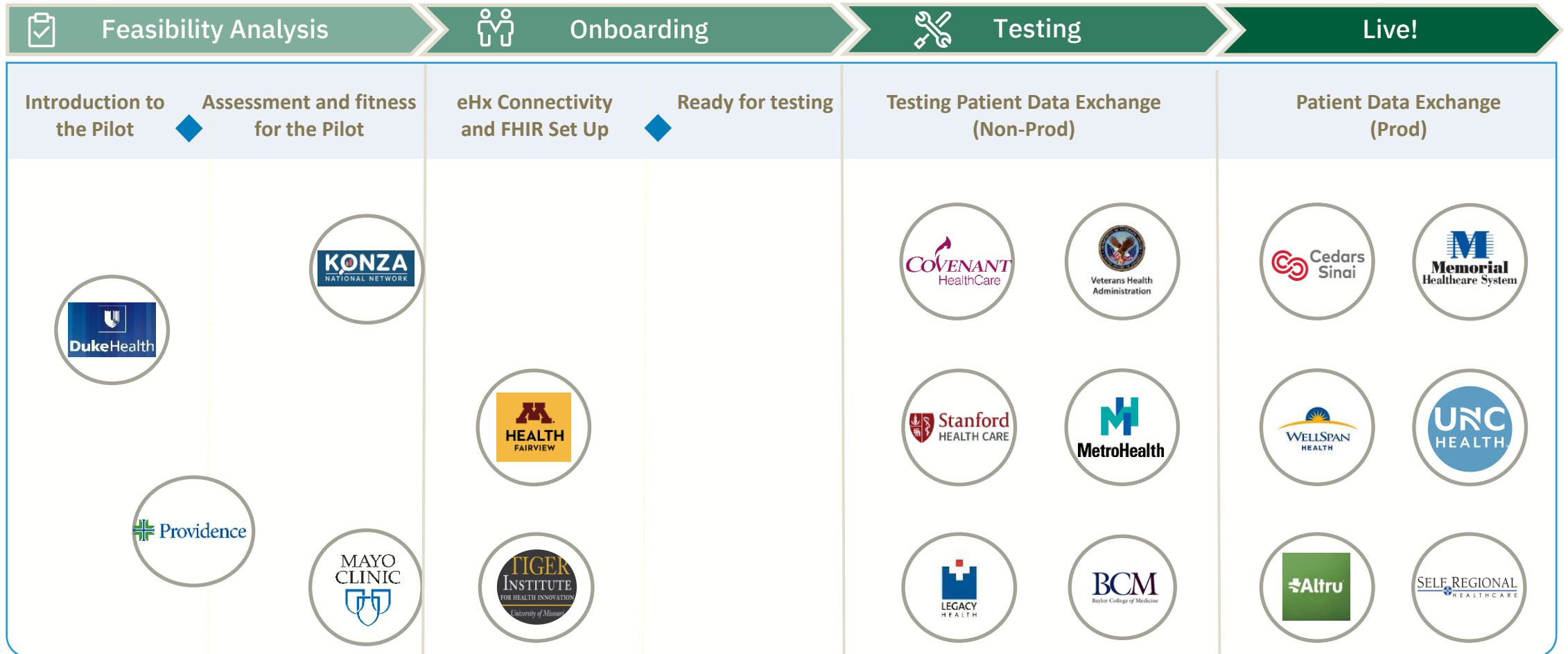
FDA BEST Initiative Objective

The objective of the Biologics Effectiveness and SafeTy (BEST) Initiative is to ensure post-authorization biologic-product **safety and effectiveness** through leveraging eHealth Exchange national connectivity.

Exchange Pilot Objective

To enable more robust monitoring of post-authorization adverse events while **minimizing the burden** on providers through an exchange-based FHIR infrastructure.

Pilot Participants and Acknowledgements



Thank you for participating in the Pilot to support the efforts to automate the reporting process and ongoing public health vaccine safety efforts!



Please Engage!

We'd love to hear from you.

eHealth ExchangeTM

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

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

Follow **@eHealthExchange**

