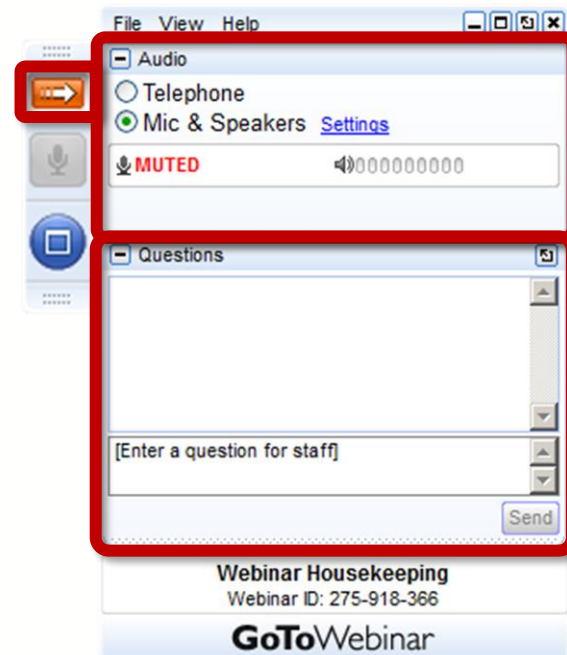


August 17th, 2023

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. New Participants	Mark Rogers
2. Operating Policy & Procedure (OPP) Highlights	Kathryn Bingman
3. CC Elections	Kathryn Bingman
4. Directory Update	Michael McCune
5. FHIR Proxy	Mike Yackanich
6. QHIN Updates	Mike Yackanich
7. Events	Mark Rogers
8. Contacts & Operational Notices	Mark Rogers
9. Q&A	Everyone



New Participants

eHealth ExchangeTM

Congratulations to our newest Participants!

- Hoag Memorial Hospital



Committed to Improving Patient Care via Data Exchange






Operating Policy & Procedure (OPP) Highlights

July 2023

eHealth ExchangeTM

eHealth Exchange Work Group: OPP Revision Overview

- The 2023 OPP Work Group review was made up of CC members: Paul Mathews, Pam Mathews, Jaime Bland, and Melissa Ayres, eHealth Exchange staff: Patrica Russell, and consultant: Joelle Buckner. This Work Group met over the course of two weeks in June 2023.
- OPPs were adjusted to improve clarity, readability and make the OPPs consistent with the current environment and operations of eHealth Exchange.
- Each 2023 OPP change has been characterized as:
 -  » All the OPP definitions were moved to a master definitions document: OPP Glossary of Terms, to ensure consistency and clarity across all definitions within the eHealth Exchange OPPs
 -  » These edits are intended to provide clarity around terms and references
 -  » These edits are suggested to reflect the current environment and operations of eHealth Exchange
- Questions or Concerns: administrator@ehealthexchange.org
- Proposed revision details are published on the bottom of <https://ehealthexchange.org/policies>

Currently in the 30-day Objection Period

- August 1-31, 2023: Provide Participants 30 days to object to any revised OPP
 - Notice of revisions and objection period sent out to all Participants July 31.
 - The red-lined OPPs, the presentation of the revisions and video reviewing the revisions can be found <https://ehealthexchange.org/policies/> and scroll down the page to “Proposed Changes to Operating Policies and Procedures for the eHealth Exchange Network” section
 - Send any questions or objections to the changes to administrator@ehealthexchange.org by end of the day August 31.
- 9/1/2023: Revised OPPs go into effect if fewer than 1/3 of Participants object



2023 Election

Coordinating Committee Seats

eHealth ExchangeTM

2023 Coordinating Committee (CC) Election

Coordinating Committee approved Nominations:

- August 15

Voting:

- August 21-September 1, Participants Vote
 - Notice will be sent out August 21 at 8 am ET.
 - Only 1 vote per Participant Organization
 - In the case of a tie, a run-off election will be conducted

Term Begins:

- October 17- First New CC Member meeting

2023 Coordinating Committee Nominations:

- Health Information Organizations (HIE, HIN)(1 seat)
 - ✓ John Kansky (Indiana HIE)
 - ✓ Dan Paoletti (Ohio Health Information Partnership)
- Health Systems/IDN (1 seat)
 - ✓ Patti Cuartas (Mount Sinai, NY)
- Other (1 seat)
 - ✓ Troy Bannister (Particle Health)
 - ✓ Arun Gopalan (DaVita)



Directory Update

Legacy Directory Retirement and
Transition to FHIR R4 Directory

eHealth ExchangeTM

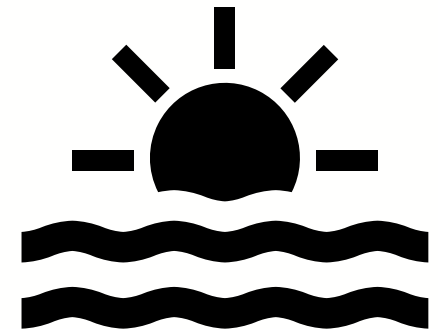
Rollout of New HAPI Directories and Retirement of Legacy Directories

Rollout of the new HAPI directories to all participants:

- The new FHIR R4 capable directories based on HAPI have been available to all participants since 4/12/2023

Legacy directory retirement

- The legacy directories were retired on July 27th. There have been no new updates to the legacy directories since July 27th. The legacy directories now contain “stale data”.
- Please inform administrator@ehealthexchange.org if you’re having issues migrating to the new FHIR R4 capable directories.



Planned transition to the new HAPI Directories

Transition Plan - the eHealth Exchange will migrate access to the new HAPI directories as follows:

- FHIR API access:
 - Participants with FHIR API keys for the legacy directories were migrated to access the new HAPI directories. Please submit a ticket to techsupport@ehealthexchange.org if you need a new API key or your API key was not migrated.
- UDDI API access:
 - Still certificate based access. Your organization must trust the CA chain of the directory server certificates.
 - If attempting to access the legacy directories, your request will be forwarded to the UDDI API under the new directories. Due to forwarding, SSL/TLS hostname verification checks will not work as the new HAPI directories have a different hostname than the legacy directories.

Forwarding requests from the legacy to new HAPI directories

As of the evening of August 10th, participants attempting to access the legacy directories will have their requests forwarded to the new HAPI directories. The forwarding rules are outlined below.

VALIDATION DIRECTORIES			
API TYPE	URL points to old directories	Points to new directories	Comments
UDDI – direct endpoints – HTTP POST	vallegacydir001.ehealthexchange.org/uddi/inquiry	directory.val.ehealthexchange.org/uddi	Forwarding works if Content-Type HTTP header set to text/xml or Content-Type is not used/set. The legacy directories accepted Content-Type set to text/plain but the new HAPI directories do not accept this header value.
UDDI – HubAware endpoints – HTTP POST	valhubawaredir001.ehealthexchange.org/uddi/inquiry	directory.val.ehealthexchange.org/uddi-hubaware	Same as above.
FHIR STU3 – direct endpoints – HTTP GET	vallegacydir001.ehealthexchange.org/fhir-stu3/1.0.3/Organization	directory.val.ehealthexchange.org/fhir-pre-stu3/Organization	
FHIR STU3 – HubAware endpoints – HTTP GET	valhubawaredir001.ehealthexchange.org/fhir-stu3/1.0.2/Organization	directory.val.ehealthexchange.org/fhir-pre-stu3/Organization/\$hub-aware	

PRODUCTION DIRECTORIES			
API TYPE	URL points to old directories	Points to new directories	Comments
UDDI – direct endpoints – HTTP POST	prodlegacydir001.ehealthexchange.org/uddi/inquiry	directory.prd.ehealthexchange.org/uddi	Forwarding works if Content-Type HTTP header set to text/xml or Content-Type is not used/set. The legacy directories accepted Content-Type set to text/plain but the new HAPI directories do not accept this header value.
UDDI – HubAware endpoints – HTTP POST	prodhubawaredir001.ehealthexchange.org/uddi/inquiry	directory.prd.ehealthexchange.org/uddi-hubaware	Same as above.
FHIR STU3 – direct endpoints – HTTP GET	prodlegacydir001.ehealthexchange.org/fhir-stu3/1.0.3/Organization	directory.prd.ehealthexchange.org/fhir-pre-stu3/Organization	
FHIR STU3 – HubAware endpoints – HTTP GET	prodhubawaredir001.ehealthexchange.org/fhir-stu3/1.0.2/Organization	directory.prd.ehealthexchange.org/fhir-pre-stu3/Organization/\$hub-aware	

HAPI directory updates after legacy directory retirement

- **Requests for directory changes:**
 - Requests for new directory entries or updates to existing directory entries should be submitted to techsupport@ehealthexchange.org
 - The eHealth Exchange will stop using “INI files” as a template to provide information for directory changes. When you submit a ticket to techsupport@ehealthexchange.org, please ask for a new template before submitting changes. Stay tuned for further updates.
- **Future state:**
 - A new **self-service directory portal** will be rolled out for participant access so that your organization may make changes to directory entries. More updates about the self-service directory portal will be coming later this year.

New FHIR R4 directories have been available since Wednesday 4/12/2023!

- Email techsupport@sequoiaproject.org to get access to the new FHIR R4 directories based on HAPI:
 - For existing FHIR API users, your API key should have been migrated to the HAPI directories. For organizations that have not accessed the directory FHIR API in the past, ask for a new FHIR API key to access the HAPI directories.
- Provide feedback on the new HAPI directories:
 - Email techsupport@ehealthexchange.org for technical issues or concerns
 - For urgent attention, copy administrator@ehealthexchange.org

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, for now

- 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
- The UDDI API **will be retired on 12/15/2023** so please make plans to transition to FHIR API access!

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 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.
- 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.

Adding Location Entries in Directory

- Directory now permits addition of subparticipants (or ‘locations’) to more completely depict organizational hierarchies, like Carequality’s Directory.
- Subparticipants can represent hospitals/clinics or downstream clients as appropriate.
- Team is planning to populate our Directory using Carequality and other public directories as a base
- Expect to receive a spreadsheet by EOW with your organization’s locations – **please provide any feedback by September 7th**. After that day, your locations will be added to the FHIR Directory.
 - If Epic is your technology provider, make corrections in Hyperspace’s My Phone Book activity.
 - If Epic is not your technology provider but you are live on Carequality via another implementer, work with your implementer to update your Carequality directory entries.
 - If you are not live on Carequality and are not an Epic client, please respond with an updated spreadsheet.

FHIR R4 Directory Transition Questions & Answers



FHIR Proxy

eHealth ExchangeTM

FHIR Proxy Use Case



- Hub as Trusted Third Party/Intermediary
- Hub handles backend authorization with target (typically OAuth 2.0)
- Requestor only needs *one* connection to Hub to access *many* target responder FHIR resource repositories
- Routing MUST be provided on request
- Purpose of Use MUST be provided on request
- Initial support includes FHIR search and read only
- Optional URL rewriting is available

FHIR Proxy Actor Requirements

Initiator

1. Public ip address(es) must be added to FHIR Proxy inbound allow-list
2. Establish mTLS connection (v1.2+) to FHIR Proxy (using eHx certificate)
3. Include target for routing within the request* (X-DESTINATION HTTP Header)
4. Include Purpose of Use within the request (X-POU HTTP Header)

<https://terminology.hl7.org/3.1.0/ValueSet-v3-PurposeOfUse.html>

*List of FHIR targets will be provided once you are engaged for testing

Target

1. Public ip address must be added to the FHIR Proxy outbound allow-list
 2. FHIR Proxy configured for target's security model (e.g. OAuth 2.0 API Key, others)
 3. Target deploys and authorizes eHealth Exchange FHIR application (e.g., OpenEpic backend application)*
 4. mTLS connection (v1.2+) recommended, but not required if using OAuth with private-key signed JWT
 5. Purpose of Use will be included in request
- * eHealth Exchange can provide detailed procedures for Epic-based targets.

<https://fhir001val.ehealthexchange.org/ehx/1.0/r4/fhirproxy>

FHIR Proxy – *Quick Start* Guide

FHIR Proxy BaseURLs

<https://fhir001val.ehealthexchange.org/ehx/1.0/r4/fhirproxy>
<https://fhir001prod.ehealthexchange.org/ehx/1.0/r4/fhirproxy>

Initiator Checklist

1. Email techsupport@ehealthexchange.org to notify of interest in engaging for FHIR Proxy testing in the role of a FHIR initiator
 - a) if possible, include public ip address(es) from which your FHIR requests will originate
 - b) eHx will then
 - i. contact you and provide list of existing eHx Participants who have engaged with us as a target FHIR responder
 - ii. add your public ip addresses to the FHIR Proxy inbound allow list (if provided)
2. Prepare your FHIR client to initiate requests as follows:
 - a) send to the FHIR Proxy BaseURL
 - b) include your eHx client certificate to establish mutual TLS connection to the FHIR Proxy (if applicable)
 - c) set X-DESTINATION HTTP Header value to one of the current FHIR responders
 - d) set X-POU HTTP Header value to a valid purpose of use (<https://terminology.hl7.org/3.1.0/ValueSet-v3-PurposeOfUse.html>)

FHIR Proxy – *Quick Start* Guide

Target Checklist

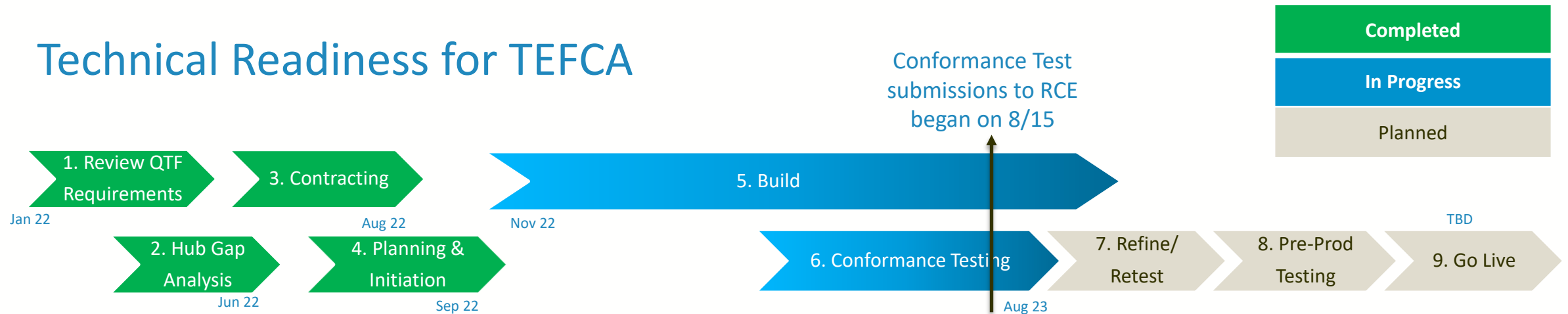
1. Email techsupport@ehealthexchange.org to notify of interest in engaging for FHIR Proxy testing in the role of a FHIR target
 - a) if possible, include public ip address(es) of your FHIR Server(s)
 - b) eHx will then
 - i. add your public ip addresses to the FHIR Proxy outbound allow list (if provided)
 - ii. contact you to review the implementer-specific onboarding process and eHx FHIR application deployment steps
2. Deploy the eHealth Exchange backend FHIR application
 1. eHx can provide detailed procedures for Epic-based targets. Others are TBD
 2. After deployment, eHx will proceed with required security model configuration within the FHIR Proxy that is needed to connect to the target OAuth Server and FHIR Resource Repository



QHIN Update

eHealth ExchangeTM

Technical Readiness for TEFCA



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.	<p>In Progress: Continued RCE ITP connectivity testing and configuration</p> <p>Latest Highlights:</p> <ul style="list-style-type: none"> RCE modified ATNA logging requirements, ONC approved, and eHx was informed on 7/28 that the sample we submitted on 7/11 is acceptable. eHx ITP instance requires updates to support XCDR and TEFCA POU. Working with Sequoia Testing team to implement required changes. <p>Next Goal: Begin <i>formal</i> RCE conformance testing, and continue informal testing with other candidate QHINs</p>

Conformance Test Status

- Milestone: On 7/20 we had **successful informal Candidate QHIN testing** with eHealth Exchange as QHIN Responder and Health Gorilla as QHIN Initiator. Additional informal testing continues, including additional successful tests with Health Gorilla and KONZA
- Milestone: On 8/15 eHealth Exchange began submitting formal conformance test results to the QHIN Onboarding team
 - Passed¹ all required Security tests
 - Passed^{1,2} all required Responding Gateway query-based transport tests
 - In process of performing Initiating Gateway transport tests
- In process of testing ITI-41 to ITI-80 bi-directional transformations (a flow-down mitigation)
- Leveraging an internal instance of the Interoperability Testing Platform (ITP) tooling to simulate an eHealth Exchange QHIN Participant

¹ Pending RCE approval

² Message Delivery tests are in process



TEFCA QHINS (August 2023): 4 Active Letters of Intent, 2 in Completeness Review. 7 Apps accepted. 6 Testing.

- Key Points:**
- Cluttered market
 - Still no new value-props in 2023 (2024 roadmap: P&O, FHIR, Public Health)



ORACLE Cerner **commonwell[®] HEALTH ALLIANCE** **MEDITECH**
athenahealth **eClinicalWorks** **Allscripts[®]** **veradigm.**
Vendor-centric participation. Centralized MPI.

Epic	MyChart Central (IAS)? Payer Platform (P&O)?	surescripts 4.17.23	Small EHR vendors?
HEALTH CORILLA	\$70M VC PR, CLEAR for IAS	US QHIN	PCDH (Civitas). MI, MO, GA
Kno2	LTPAC (MatrixCare) EMS	Netsmart 8.22.22	EHRs, not HIEs Many FQHCs
MedAllies	Small EHR vendors?	nextgen healthcare 8.15.22	EHRs, not HIEs Many FQHCs
KONZA NATIONAL NETWORK	KS and Medical Societies in 9 states.	teleray 9.9.22	Image exchange?
KHIN CT HealthLink HEALTH PARADIGM One Health NEW JERSEY HEALTHSYNC SACVALLEY MEDSHARE GENESIS LINK		<i>Applications not yet approved, and some may have become inactive.</i>	



Not?

InterSystems[®]
Creative data technology

CHANGE HEALTHCARE

inovalon[®]
carequality

- CEQ can not be a QHIN, but an implementer(s) can.
- What happens to CEQ long term with TEFCA?

Intent to Participate from 11 HIEs Operating in 16 States Serving up to 126 Million Patients



AK, AL, AZ, CA, CO, CT, GA, IA, IN, MD, MT, NE, TX, WV, VA & DC

How might I obtain additional information?

How	When	Where
1. eHealth Exchange Web Site	Any time	https://ehealthexchange.org/what-we-do/tefca-and-ehealth-exchange
2. Monthly Participant Webinars	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	administrator@ehealthexchange.org
6. TEFCA Office Hours (Q&A)	8/30, 9/11, 9/27, 10/25, 11/29, 12/11, 1/8, 1/24	Request invite via email from administrator@ehealthexchange.org



Events - 2023

eHealth ExchangeTM

Upcoming Conferences



CIVITAS

Networks for Health

August 20-23, 2023
Gaylord - National Harbor, MD
[Link for registration](#)



August 27-30, 2023
Coeur d'Alene – Idaho
[Link for registration](#)

We hope to see you there!

Annual Meeting – Mark Your Calendar!

REGISTRATION OPEN
FREE FOR NETWORK PARTICIPANTS

eHealth Exchange

Annual Meeting

NOV
14

2023

SAN DIEGO | CALIFORNIA



ROOM BLOCK

50%

SOLD OUT

BOOK YOUR
ROOM TODAY!

**Tuesday,
November 14, 2023**
eHealth Exchange
Annual Meeting

Town & Country Resort
500 Hotel Circle North
San Diego, CA 92108

<https://ehealthexchange.org/2023-annual-meeting/>



Contacts

Changing and New Contacts

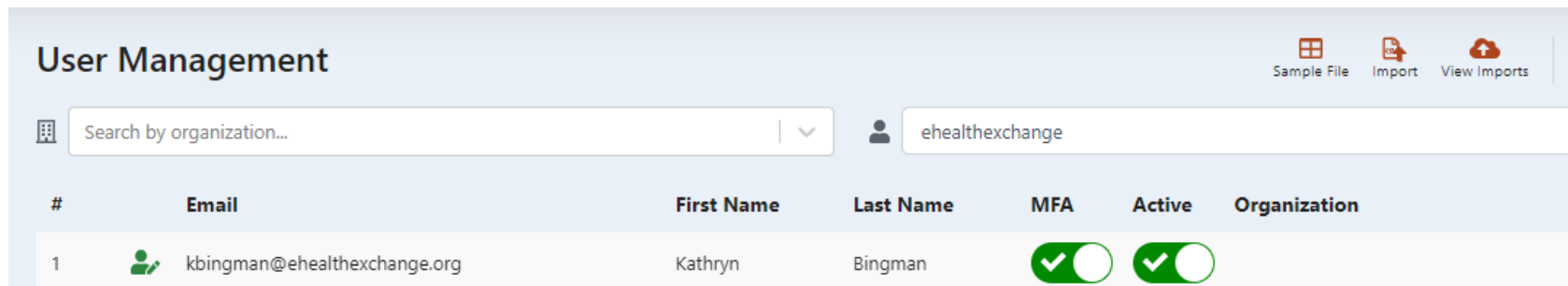
eHealth ExchangeTM


Contacts for Your Organization

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

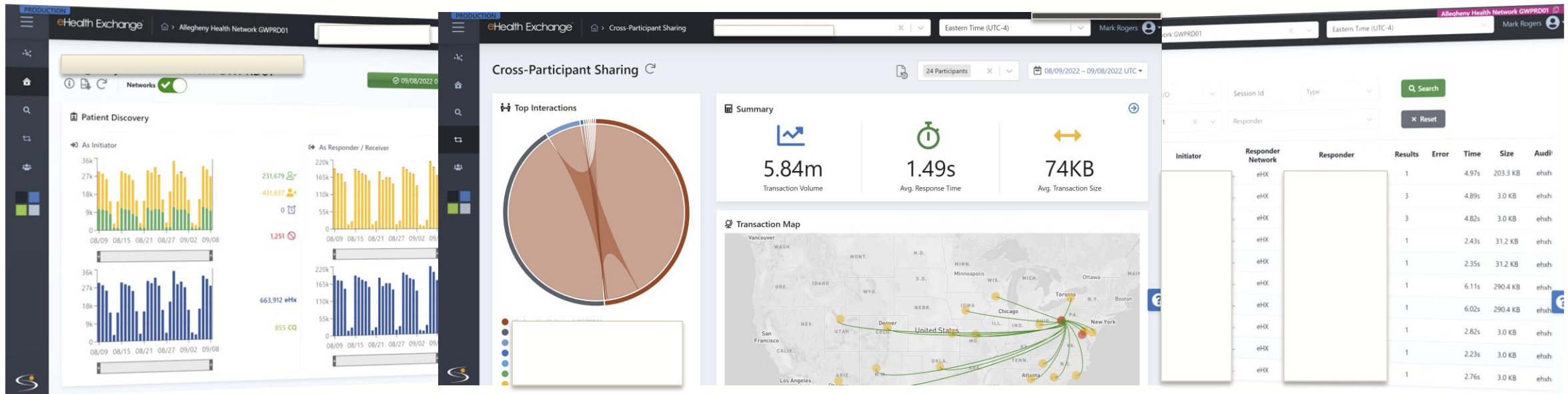
- If you have had recent or past changes and are unsure if we have an updated list: email administrator@ehealthexchange.org requesting the Contact List Template to complete and return.
- The template asks name, title, phone number, email address, and what type of emails the resource should receive.
- 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.



#	Email	First Name	Last Name	MFA	Active	Organization
1	 kbingman@ehealthexchange.org	Kathryn	Bingman	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

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?



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

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