TEFCA Monthly eHealth Exchange Technical Webinar
New QHIN Technical Framework (QTF) 1.1

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January 9, 2024

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Agenda

- Monthly TEFCA Technical Webinars
- ONC/HHS/RCE Announcement
- TEFCA Overview - Reference
- TEFCA Monthly Technical Webinar Series
- QTF 1.1 v 1.0 Updates for Participants
- Open Discussion / Q&A
- TEFCA Readiness Checklist Updates
- For More Information (Including Office Hours)

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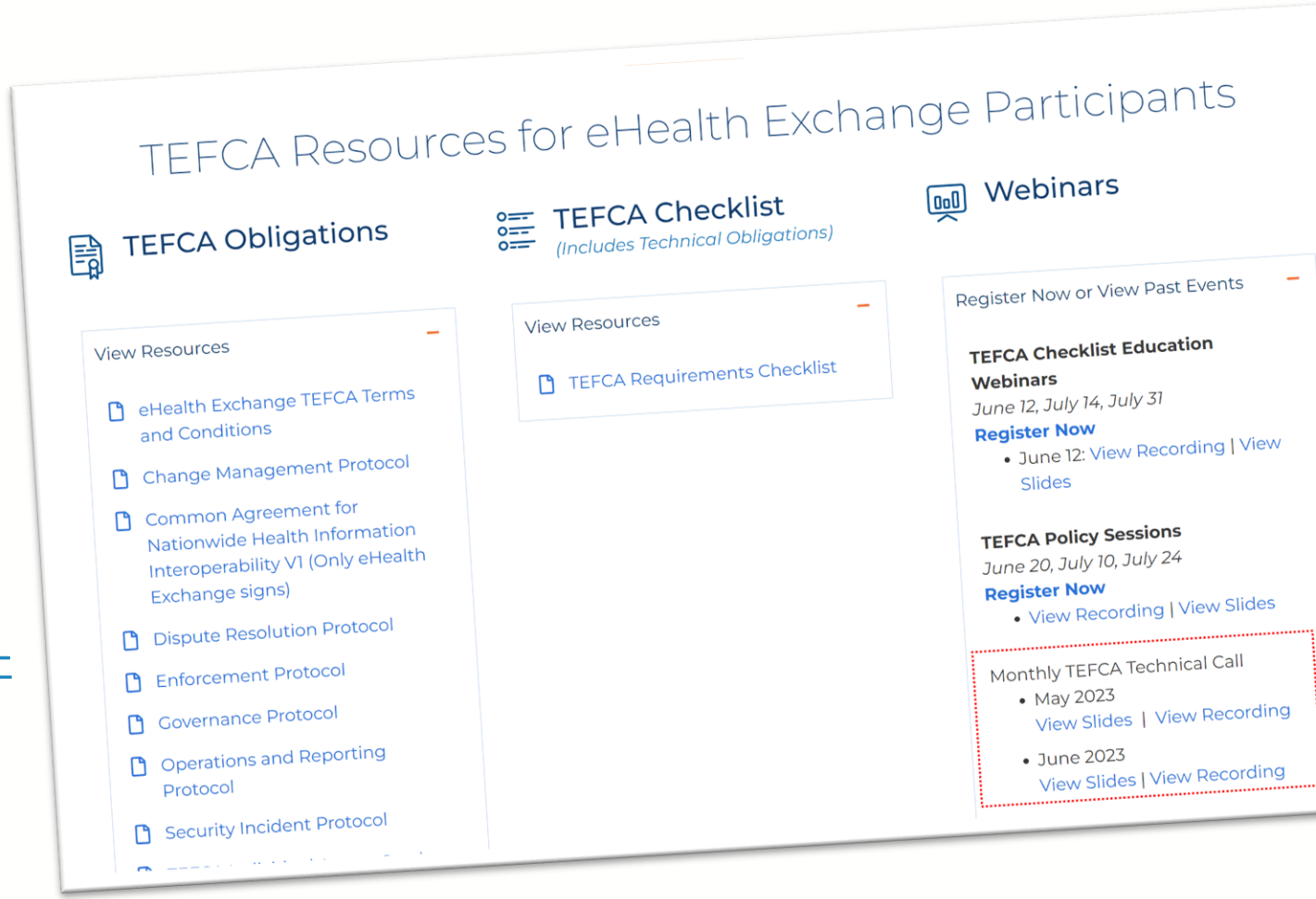
Monthly TEFCA Technical Webinars

eHealth Exchange TEFCA Monthly Webinar Series

- Today's webinar is part of a series
- Prior webinars covered:
  - TEFCA Readiness Checklist
  - Individual Access Services Providers
  - Reporting Requirements
  - Error Handling
  - And more
- Prior webinars can be found at:
  - https://ehealthexchange.org/what-we-do/tefca-and-ehealth-exchange/



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eHealth Exchange Monthly TEFCA Technical Webinar Series

- May 2023 - *TEFCA Individual Access Services Providers Requirements*
  View Slides | View Recording
- June 2023 - *TEFCA Directory, Errors, Logs, and Reporting Requirements*
  View Slides | View Recording
- July 2023 - *TEFCA Draft Monthly and Quarterly Reports Review*
  View Slides | View Recording
- August 2023 - *TEFCA Updates and Aggregated Patient Discovery Requirement*
  View Slides | View Recording
- September 2023 - *TEFCA Hub Development Updates*
  View Slides | View Recording
- October 2023 - *Validation Status for the eHealth Exchange Hub, Individual Access Services Provider (IAS) SAML Simplifications, Lesson's Learned, New potential Purpose of Use*
  View Slides | View Recording
- November 2023 - *TEFCA FHIR Support, TEFCA Hub Technical Readiness, New QHIN Technical Framework, TEFCA Directory, Lessons Learned from Initial Sub-Participants*
- ・TEFCA Reporting Requirements: RCE Updates
  View Slides | View Recording
- December 2023 - *ONC/HHS/RCE Announcement, Updated FHIR Roadmap for TEFCA Exchange, TEFCA Hub Technical Readiness*
  View Slides | View Recording

- TEFCA Checklist Education Webinars
- June 12: View Recording | View Slides
- July 14: View Recording
- July 31: View Slides

- Source: https://ehealthexchange.org/what-we-do/tefca-and-ehealth-exchange/

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ONC/HHS/RCE Announcement

PRESS RELEASES, RCE, THE SEQUOIA PROJECT NEWS • DECEMBER 12, 2023

ONC and The Sequoia Project Designate First TEFCA QHINs

TEFCA Goes Live On Schedule

(Washington, DC – December 12, 2023) – The Sequoia Project, selected by the Office of the National Coordinator for Health Information Technology (ONC) as the Recognized Coordinating Entity® (RCE™) to support the implementation of the Trusted Exchange Framework and Common Agreement℠ (TEFCA℠), today, on behalf of ONC, **designated the country's first Qualified Health Information Networks™ (QHINs™)** in a Common Agreement signing event alongside HHS Secretary Xavier Beccera, HHS Deputy Secretary Andrea Palm, and National Coordinator for Health Information Technology Micky Tripathi, in Washington, DC.

The newly designated QHINs include eHealth Exchange, Epic Nexus, Health Gorilla, KONZA National Network, and MedAllies.

"The QHIN selection and onboarding process was necessarily arduous to ensure the pioneering

Meet the Designated QHINs

Below are organizations that have successfully completed the Qualified Health Information Network™ (QHIN™) onboarding process and are recognized as Designated QHINs for TEFCA exchange. There are additional Candidate QHINs still in the onboarding phase listed here.

eHealth Exchange™

VISIT WEBSITE →

Epic Nexus

VISIT WEBSITE →

HEALTH GORILLA®

VISIT WEBSITE →

KONZA NATIONAL NETWORK

VISIT WEBSITE →

MedAllies

VISIT WEBSITE →

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https://ehealthexchange.org

eHealth Exchange is now a Designated QHIN under TEFCA! Learn More →

eHealth Exchange™

What We Do | Who's in Network | Resources | Events | Contact Us

JOIN US →

The largest healthcare information network in the country **and now a Designated QHIN under TEFCA**

Active in all 50 states, eHealth Exchange is a Network of Networks connecting federal agencies and non-federal healthcare organizations so medical data can be exchanged nationwide to improve patient care and public health.

©Cop

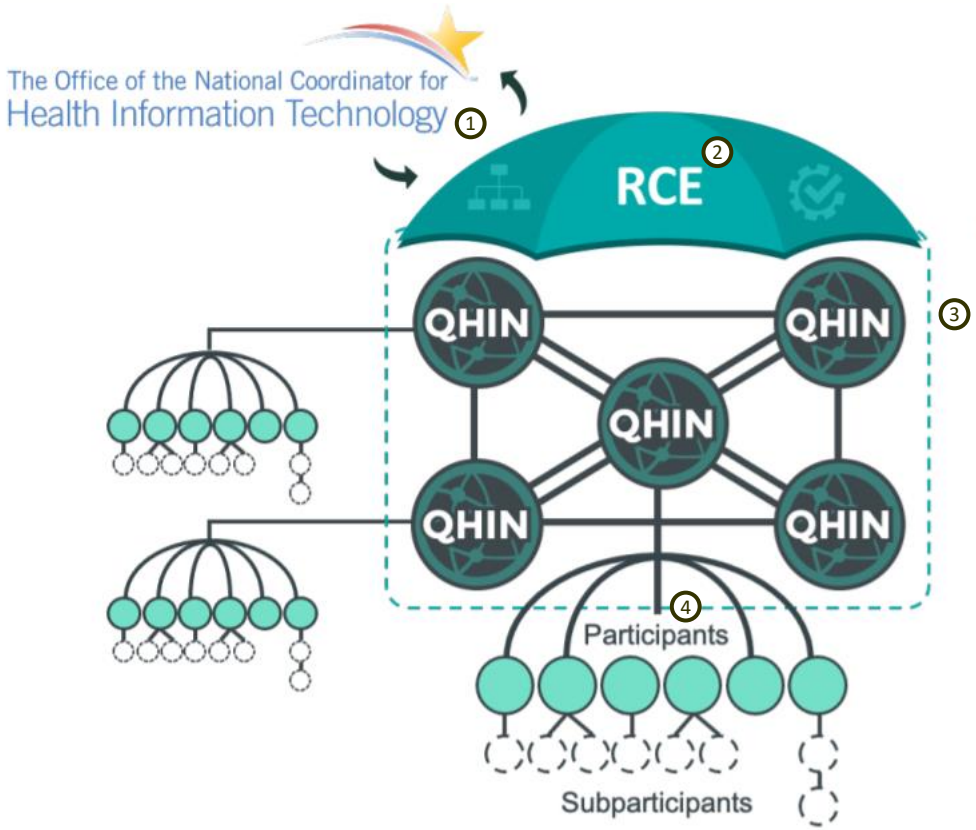
TEFCA Overview - Reference

How will TEFCA Work?

Common Agreement

- QHIN Technical Framework
- Standard Operating Procedures

- FHIR Roadmap



1. ONC defines overall policy and certain governance requirements.
2. RCE provides oversight and governing approach for QHINs.
3. Qualified Health Information Networks (QHINs) connect directly to each other to facilitate nationwide interoperability.
4. Each QHIN connects Participants, which connect Subparticipants.

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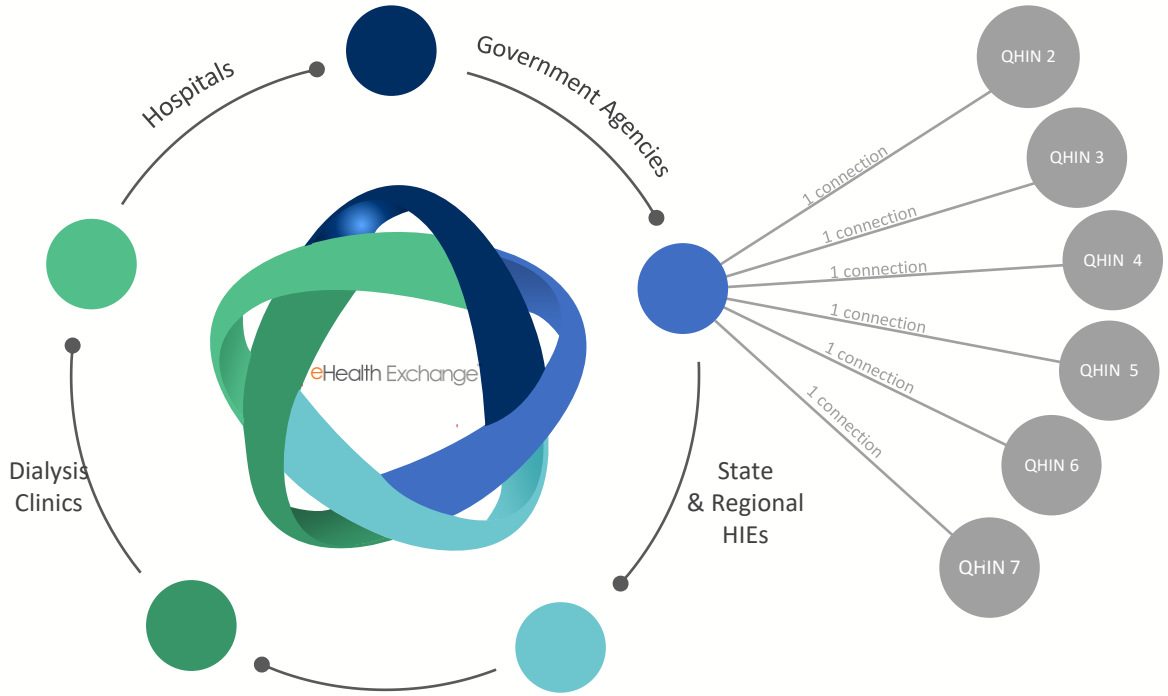
What is the Trusted Exchange Framework (TEFCA)?

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.



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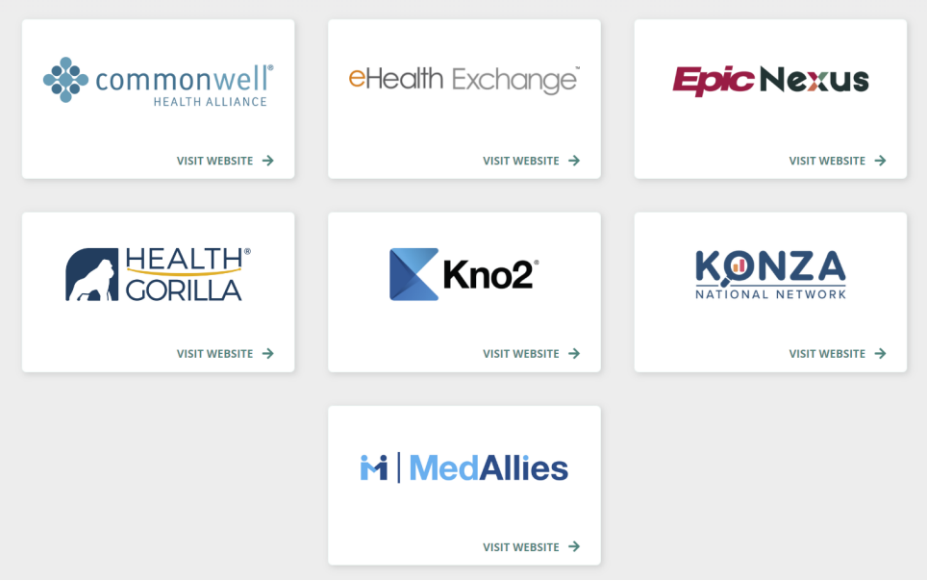
Which networks plan to exchange via TEFCA?

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



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

Source: https://rce.sequoiaproject.org/candidate-qhins/

eHealth Exchange™

Inaugural QHIN Candidate

Intent to Participate from 11 HIEs Operating in 15 States Serving up to 126 Million Patients

CRISP SHARED SERVICES

Indiana Health Information Exchange

SCHIO
Serving Communities Health Information Organization
Community Interoperability Since 1996

GEORGIA HEALTH INFORMATION NETWORK

contexture℠
Creating connections. Improving lives.

CyncHealth

Manifest MEDEX

C3 HIE

ConnectVirginia
Advancing Virginia's Health Care

Alabama One Health Record®

BIG SKY CARE CONNECT *Awaiting Board approval

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

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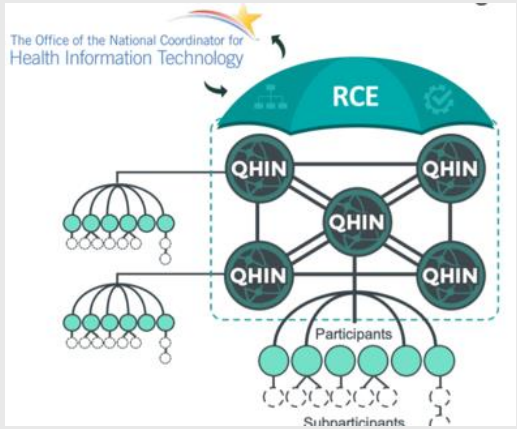
What's changing?

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.



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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
- ✓ Enforced content quality assurance
- ✓ 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

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New TEFCA QHIN Technical Framework (QTF) v1.1

Summary of QTF 1.1 Flow Down Changes

Analysis is Limited to SOAP/SAML/XML/XCA. It also excludes QHIN-only issues.

- Clarify RCE intent regarding XCA text removal
- MUST use TLS 1.2 or above at the QHIN to eHealth Exchange Participants (QTF-006)
- Participants MUST use TLS BCP-195 (QTF-007)
- Clarify some TLS requirements as applying to eHealth Exchange Participants
- Clarify why only Patient Discovery is listed in QTF-024
- New QTF-074 and QTF-075 requirements regarding exceptions and delivery (and routing expectations)
- Mandatory but undefined Service Level Agreements (SLAs)
- Clarify why the SLA only mentions Patient Discovery messages QTF-078
- Updates to Concise C-CDA 2.0
- New US Core Data for Interoperability (USCDI) expectations
- Project US@ abbreviation new rules
- New PurposeOfUse values
- Checklist updates are in process: a) cross referencing to any prior QTF number, and b) the new number, new considerations for that item, and c) updated change control, d) freeze column headers

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Summary of Updates

- The *Qualified Health Information Network (QHIN) Technical Framework (QTF) Version 1.1* was released on December 12th.

- Removes some references to IHE XCA and adds references to FHIR
- USCDI is 'neither a "floor" nor a "ceiling"'
- Two base standard changes
  - ASTM for Audit Logging
  - Concise Consolidated CDA 2.0
  - SHA3-256 Cryptographic Hashing – QHIN only issue: Moving back to SHA2-256

- The following is a summary of this RCE document

Source: https://rce.sequoiaproject.org/wp-content/uploads/2023/12/QTF-V1.1-Final-508.pdf

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Removed Change Management Log

QHIN Technical Framework Version History

Version #	Description	Date
Draft 1	Released for stakeholder input	April 19, 2019
Draft 2	Released for stakeholder input	July 27, 2021
Version 1.0	Published	January 18, 2022

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Removed XCA Reference

- Removed a reference to XCA
- Seems non-normative
- Requesting RCE clarification as to intent

- Page 4 (old) 3 (new)

New

The technical and functional requirements described in the QTF reflect many [illegible] technologies and standards used for network-based health information exchange t[illegible] For example, organizations supporting health information exchange nationally (e.g., CommonWell Health Alliance, eHealth Exchange, Carequality) generally use Integrating the Healthcare The healthcare industry has started using new exchange methods, such as Representational State Transfer (REST) application programming interfaces (APIs) and standards like Health Level Seven (HL7®)

Old

The technical and functional requirements described in the QTF reflect many of the technologi standards used for network-based health information exchange today. For example, organi supporting health information exchange nationally (e.g., CommonWell Health Alliance, eHealth Exchange, Carequality) generally use Integrating the Healthcare Enterprise (IHE) profiles such as Cross-Community Patient Discovery (XCPD)[1] and Cross-Community Access (XCA)[2] to enable clinical document exchange between disparate communities. In addition, the QTF acknowledges that patient matching algorithms vary today; there will be work with QHINs to develop matching recommendations and/or requirements in the future.

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TEFCA FHIR Roadmap Integration

- Changes requiring more RCE dialog
- Page 5 (old) 4 (new)
- Signaling integration of the TEFCA FHIR Roadmap into the next QTF

New

Fast Healthcare Interoperability Resources (FHIR®)[1]. As discussed in the FHIR Roadmap for TEFCA Exchange[2] (the Roadmap), FHIR Documents or Resources can be exchanged under QTF V1.1 but this will require out-of-band coordination between QHINs. In the next release of the Common Agreement and the QTF, Network Facilitated FHIR Exchange will be implemented as discussed in the Roadmap.

Old

Although the healthcare industry has started to explore new exchange methods, such as Representational State Transfer (REST) application program interfaces (APIs) and standards like Health Level Seven (HL7®) Fast Healthcare Interoperability Resources (FHIR®)[3], there is still work to be done in operationalizing these approaches at the scale of QHIN-to-QHIN exchange. As the QTF seeks to facilitate the immediate availability of QHIN services, this version enables organizations seeking to become QHINs to leverage existing, deployed technical infrastructure (i.e., services based on IHE profiles) to support QHIN-to-QHIN exchange. The use of HL7® FHIR® in a QHIN exchange context will be specified in a future version of the QTF, as outlined in the FHIR Roadmap. As discussed in the FHIR Roadmap for TEFCA Exchange[4], FHIR Documents or Resources can be exchanged under QTF V1.0 but this will require out-of-band coordination between QHINs.

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New

USCDI New Text

- Changes requiring more RCE dialog
- Page 5 (old) 4 (new)
- USCDI seems to be optional, but when used under TEFCA, certain requirements become mandatory

The scope of data for TEFCA exchange is TEFCA Information as defined by the Common Agreement and maintained by QHINs, Participants or Subparticipants. The United States Core Data for Interoperability (USCDI) is a named data standard in the QTF but it is neither a "floor" nor a "ceiling" for data exchange in TEFCA. TEFCA Information maintained by QHINs, Participants and sub participants could be more or less than the data in the version of USCDI specified in the QTF. There is no minimum requirement for QHINs, Participants or Subparticipants to maintain all the data elements in the version of USCDI specified in the QTF. However, the USCDI provides conformance requirements when exchanged in TEFCA. When TEFCA exchange occurs for the data in the USCDI version specified in the QTF, then the data need to conform to the requirements specified in the USCDI. This could be done by the Participants or Subparticipants or by the Responding QHIN depending on the internal configuration and policies of each QHIN.

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TLS Changes

Specified standards for a QHIN Query are included in *Table 1*.

Table 1. Specified Standards for QHIN Query

New

Query Functions	Specified Standard(s) / Profile(S)
Secure Channel	• IETF TLS 1.2 w/ BCP-195[9] or • IETF TLS 1.3 w/ BCP-195
Mutual Authentication	• IETF TLS w/ BCP-195
User Authentication	• IHE XUA
Authorization & Exchange Purpose	• IHE XUA
Query for Patients	• IHE XCPD
Document Query and Retrieve	• IHE XCA
Auditing	• IHE ATNA (Content only)

Table 1: Specified Standards for QHIN Query

Query Functions	Specified Standard(s) / Profile(S)
Secure Channel	• IETF TLS 1.2 w/ BCP-195[11] or • IETF TLS 1.3
Mutual Authentication	• IETF TLS
User Authentication	• IHE XUA
Authorization & Exchange Purpose	• IHE XUA
Query for Patients	• IHE XCPD
Document Query and Retrieve	• IHE XCA
Auditing	• IHE ATNA

Old

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TLS Difference

New

Table 3. Specified Standard for Secure Channel	
Function	**Specified Standard / Profile**
Secure Channel	• IETF TLS 1.2 w/ BCP-195 or • IETF TLS 1.3 w/ BCP-195

QTF-006 When interacting with another QHIN or Participant, a QHIN MUST establish a secure channel using TLS protocol version 1.2 or above.

QTF-007 Use of the TLS protocol MUST be consistent with IETF BCP 195.

Old

Table 3: Specified Standard for Secure Channel

Function	Specified Standard / Profile
Secure Channel	• IETF TLS 1.2 w/ BCP-195 or • IETF TLS 1.3

QTF-006 When interacting with another QHIN or Participant, a QHIN MUST establish a secure channel using TLS protocol version 1.2 or above.

QTF-007 Use of the TLS 1.2 protocol MUST be consistent with IETF BCP 195.

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TLS Difference

New

Table 4. Specified Standard for Mutual Authentication	
Function	**Specified Standard / Profile**
Mutual Authentication	• IETF TLS 1.2 w/ BCP-195 or • IETF TLS 1.3 w/ BCP-195 • OAuth 2.0

Old

Table 4: Specified Standard for Mutual Authentication

Function	Specified Standard / Profile
Mutual Authentication	• IETF TLS 1.2 w/ BCP-195 or • IETF TLS 1.3 • OAuth 2.0

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IETF BCP 195 Context

- IETF BCP 195:
  - *Recommendations for Secure Use of Transport Layer Security (TLS) and Datagram Transport Layer Security (DTLS)*
  - https://www.rfc-editor.org/info/bcp195
- IETF RFC 8996:
  - *Deprecating TLS 1.0 and TLS 1.1*
  - https://datatracker.ietf.org/doc/html/rfc8996
- IETF RFC 9325:
  - *Recommendations for Secure Use of Transport Layer Security (TLS) and Datagram Transport Layer Security (DTLS)*
  - https://datatracker.ietf.org/doc/html/rfc9325
- IETF RFC 5288:
  - *AES Galois Counter Mode (GCM) Cipher Suites for TLS*
  - https://datatracker.ietf.org/doc/html/rfc5288
- IETF RFC 6066:
  - *Transport Layer Security (TLS) Extensions: Extension Definitions*
  - https://datatracker.ietf.org/doc/html/rfc6066

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IETF BCP 195 Context

- BCP 195 constrains RFC 8996 and RFC 9325
- RFC 8996 deprecates TLS versions 1.0 and 1.1, marking them as Historic due to their lack of support for current cryptographic standards. This shift aims to reduce attack surfaces, prevent misconfigurations, and streamline maintenance.
- RFC 9325 provides updated recommendations for secure use of TLS, considering the advancements and availability of TLS 1.3. It replaces earlier guidance in RFC 7525 and addresses recent attacks, offering contemporary practices for service security using TLS.
- BCP 195 also obsoletes the best practices for TLS usage in RFC 7525.
- Updates RFC 5288 and RFC 6066 based on recent attacks.
- Addresses recent vulnerabilities
- Attempts to reduce attack surfaces and help implementors deploy secure configurations
- “AES-CBC [RFC3602] and RC4 [RFC7465] encryption algorithms, which together have been the most widely deployed ciphers, have been attacked in the context of TLS.“
- “[BCP 195] calls for the deployment of algorithms that are widely implemented but not yet widely deployed.“
- BCP 195 is expected to be updated; provides a current “floor” not a “ceiling”

- Source: https://www.rfc-editor.org/info/bcp195

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IETF BCP 195 Key Updates

- SHOULD NOT use TLS 1.0 and 1.1
- MUST support TLS 1.2 and MUST prefer 1.2 v 1.0 and 1.1
- Makes use of TLS 1.3 a best practice
- SHOULD use Strict TLS (instead of Dynamic TLS)
- SHOULD support HSTS (see SSL Stripping attacks)
- SHOULD disable TLS compression (see the CRIME attack)
- TLS Session Resumption REQUIRES authentication, equivalent cypher strength, ticket key rotation) and SHOULD limit ticket key validity
- TLS Renegotiation, if used, MUST use the regegotiation_info extension
- MUST support SNI
- Other general guidelines (MUST >112 bits of security, SHOULD > 128 bits, NULL cipher suites, etc.)

- Source: https://www.rfc-editor.org/bcp/bcp195.txt

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Reordered QTF Numbering

- QTF-010 onward is renumbered.
- An updated checklist is in process; ETA a few days from now.
- Some are likely QHIN-only requirements; we are seeking clarifications.
- Question: Would a cross reference between the old and the new QTF numbers help you?

New

QTF-010 Servers MUST support both TLS 1.2 and TLS 1.3 connections until TLS 1.2 is deprecated by this framework.

QTF-011 When interacting with another QHIN, QHINs MUST mutually authenticate using TLS protocol version 1.2 or higher.

QTF-012 Authentication between QHINs and Participants MUST use TLS 1.2 or higher or OAuth 2.0.

QTF-013 Use of the TLS protocol MUST be consistent with IETF BCP 195.

QTF-014 Use of TLS 1.3 SHOULD be prioritized prior to January 2024 and MUST be prioritized by January 2024.

QTF-015 Servers MUST support both TLS 1.2 and TLS 1.3 connections until TLS 1.2 is deprecated by this framework.

Old

QTF-010 When interacting with another QHIN, QHINs MUST mutually authenticate using TLS protocol version 1.2 or higher.

QTF-011 Authentication between QHINs and Participants MUST use TLS 1.2 or higher or OAuth 2.0.

QTF-012 Use of the TLS 1.2 protocol MUST be consistent with IETF BCP 195.

QTF-013 Use of TLS 1.3 SHOULD be prioritized prior to January 2024 and MUST be prioritized by January 2024.

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New Cryptographic Hashing Algorithm

Updated

- Likely breaking change

QTF-016 Use of SHA-1 is deprecated within TEFCA; All use of SHA in SAML metadata MUST use SHA3-256

The RCE has announced that this change is being revised, probably to use SHA2-256.

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New PurposeOfUse Value Set

- Likely breaking change
- Note the reference to future updates via an SOP

New

Table 7. Exchange Purpose Accepted Codes

Exchange Purpose	Code
Treatment	T-TRTMNT
Payment	T-PYMNT
Health Care Operations	T-HCO
Public Health	T-PH
Individual Access Services	T-IAS
Government Benefits Determination	T-GOVDTRM

QTF-026 The PurposeOfUse in the SAML assertion MUST be one of the following codes corresponding to the Exchange Purpose, as defined in the Common Agreement or codes assigned in an associated SOP:

Open ended

Old

Table 7: Exchange Purpose Accepted Codes

Exchange Purpose	Code
Treatment	TREATMENT
Payment	PAYMENT
Health Care Operations	OPERATIONS
Public Health	PUBLICHEALTH
Individual Access Services	REQUEST
Government Benefits Determination	COVERAGE

QTF-023 The PurposeOfUse in the SAML assertion MUST be one of the following codes corresponding to the Exchange Purpose, as defined in the Common Agreement:

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Adding Patient Discovery Text

- Added text “Patient Discovery”.
- We are seeking clarity as to the intent.

New

QTF-024 When initiating a Patient Discovery, QHIN Query or QHIN Message Delivery, a QHIN MUST transmit a SAML assertion using IHE XUA, including the Exchange Purpose as identified by the staff or users at the QHIN, Participant, or Subparticipant requesting the use of Connectivity Services.

Old

QTF-021 When initiating a QHIN Query or QHIN Message Delivery, a QHIN MUST transmit a SAML assertion using IHE XUA, including the Exchange Purpose as identified by the staff or users at the QHIN, Participant, or Subparticipant requesting the use of Connectivity Services.

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Project US@ Changes

- New requirement
- Constrains Project US@ to not abbreviate non-street geographical details.

New

QTF-041 Data for address fields used in Patient Discovery Queries SHALL be converted, if needed to conform to Project US@ Technical Specifications[19], by the Initiating QHIN prior to being transmitted to any Responding QHINs. However, if the field does not contain a street address but contains other geographical details, it is recommended that whatever information that the patient provided not be abbreviated.

Old

QTF-038 Data for address fields used in Patient Discovery Queries SHALL be converted, if needed to conform to Project US@ Technical Specifications[21], by the Initiating QHIN prior to being transmitted to any Responding QHINs.

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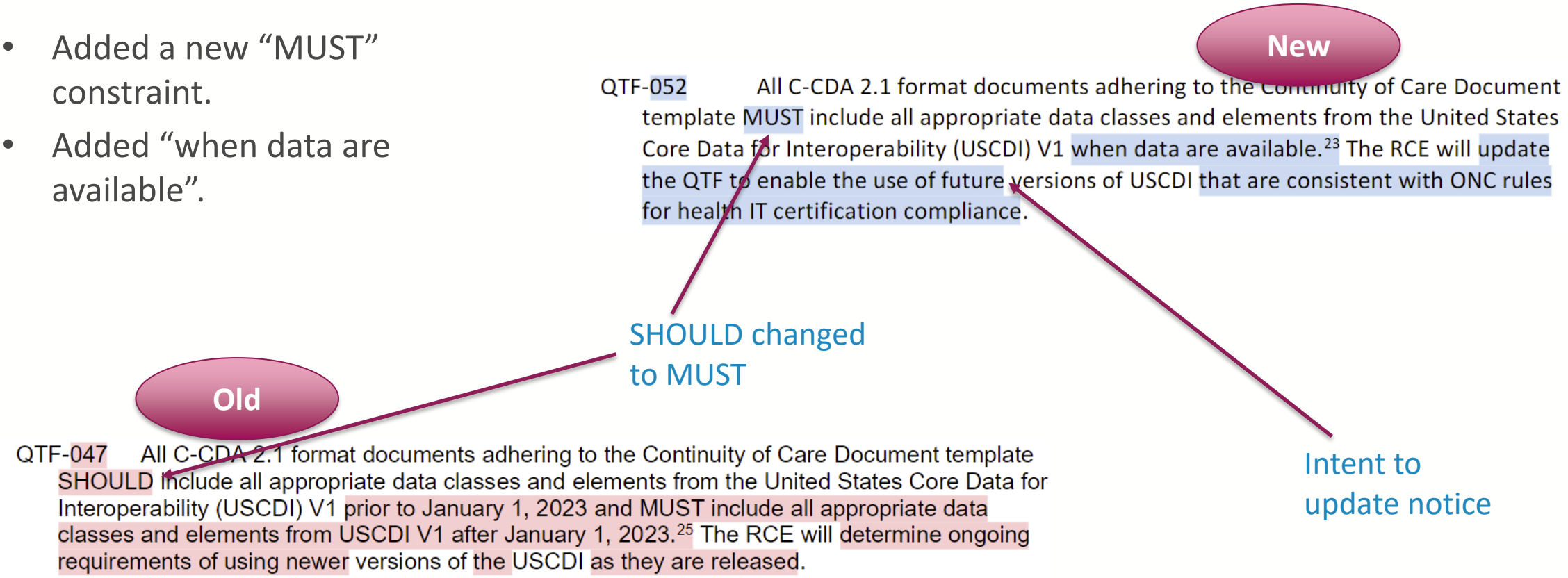
New C-CDA USCDI Mandate

- Added a new “MUST” constraint.
- Added “when data are available”.



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Fixed a Logical Inconsistency

New

QTF-065 All QHIN XCDR Responding Gateways MUST be grouped with an IHE XDR Document Recipient.

Clarification

Old

QTF-060 All QHIN Responding Gateways MUST be grouped with an IHE XCDR Document Recipient.

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New Mandated Transmission and Exception Behavior

New

QTF-074 A Responding QHIN MUST transfer the content of the XCDR transaction to the appropriate Participant for management or transfer to their Subparticipant.

QTF-075 A Responding QHIN that is unable to deliver the content of a Message Delivery must return the XDSUnavailableCommunity error.

eHealth Exchange TEFCA Participants should be aware that we route only to QHINs for Message Delivery.

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New Service Level Agreement Mandatory Requirement

New

QTF-078 A QHIN MUST fulfill SLA requirements for all Patient Discovery queries.

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New Project US@ Language

New

QTF-097 Data for address fields used for patient discovery query SHOULD conform to Project US@ Technical Standards. However, if the field does not contain a street address but contains other geographical details, it is recommended that whatever information that the patient provided not be abbreviated.

Old

QTF-089 Data for address fields used for patient discovery query SHOULD conform to Project US@ Technical Standards.

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Changed USCDI Language

New

QTF-100 All C-CDA 2.1 format documents adhering to the Continuity of Care Document template MUST include all appropriate data classes and elements from USCDI V1[27] when data are available. The RCE will update the QTF to enable the use of future versions of USCDI that are consistent with ONC rules for health IT certification compliance.

Old

QTF-092 All C-CDA 2.1 format documents adhering to the Continuity of Care Document template SHOULD include all appropriate data classes and elements from the United States Core Data for Interoperability (USCDI) V1 prior to January 1, 2023 and MUST include all appropriate data classes and elements from USCDI V1 after January 1, 2023.[29] The RCE will determine ongoing requirements of using newer versions of the USCDI as they are released.

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Updated Version of Concise Consolidated CDA

Subtle update from 1.1 to 2.0 only mentioned in a footnote

New

QTF-098 A Responding Actor SHOULD provide C-CDA 2.1 documents that follow recommendations as presented in Concise Consolidated CDA: Deploying Encounter Summary CDA Documents with Clinical Notes[26], when the information held by that Responding Actor is organized around a clinical encounter construct.

[26] *Concise Consolidated CDA: Deploying Encounter Summary CDA Documents with Clinical Notes* -- available at https://carequality.org/wp-content/uploads/2022/04/Improve-C-CDA-Joint-Content-WG-v2.0-20220316-DISTRO.pdf

Old

QTF-090 A Responding Actor SHOULD provide C-CDA 2.1 documents that follow recommendations as presented in Concise Consolidated CDA: Deploying Encounter Summary CDA Documents with Clinical Notes[28], when the information held by that Responding Actor is organized around a clinical encounter construct.

[28] *Concise Consolidated CDA: Deploying Encounter Summary CDA Documents with Clinical Notes* -- available at https://s3.amazonaws.com/ceq-project/wp-content/uploads/2019/04/11013830/20190201_Improve_C-CDA_Joint_Content_WG_IHE_v1.1_Final.pdf

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Removed Onboarding Section

Removed

Onboarding and Ongoing Test Requirements

Onboarding requires a test of each of the workflows and security protocols. These tests will ensure that the QHIN is able to operate appropriately as both an initiator and responder for all QHIN exchange modalities.

By declaring its intent to play the Initiating QHIN or Responding QHIN role in testing each exchange modality and beginning the testing process, a QHIN asserts that the system(s) used for the declared roles are fully compliant, to the best of its knowledge, with the technical specifications outlined in the Requirements for Functions and Technology to Support Exchange section of this QTF.

QHINs are encouraged to take advantage of testing resources such as tools provided by NIST, testing platforms maintained by private organizations, and/or IHE Connectathon events.

Test data requirements and availability are outlined in Onboarding & Designation SOP[33].

Tests may also be conducted by the RCE test instance and/or a QHIN to ensure all workflows are functioning optimally. After completing Onboarding, a QHIN should initiate a test to verify a successful connection and transaction with a specific QHIN. Tests may be initiated by the RCE test instance at any time.

QTF-118 For the Onboarding process, all tests MUST be successfully conducted against the RCE test instance and successfully completed prior to testing with other QHINs.

QTF-119 After each test is completed, as part of Onboarding, QHINs MUST submit the relevant extract of the ATNA log entries as specified by the Onboarding & Designation SOP.

QTF-120 Where necessary for authentication and exchange, the Exchange Purpose for test requests MUST be set to each of the Exchange Purpose values as specified in QTF-023. Separate test requests MUST be sent for each Exchange Purpose.

QTF-121 Once Onboarding is complete, a QHIN MUST execute a test of the *Nominal Flow* defined for each QHIN-to-QHIN transaction in Production on a quarterly (three-month) basis with all QHINs not transacted with in the preceding three months. If one or more tests fail, the results

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New Option for Test Transaction PurposeOfUse Values

New

QTF-127 When initiating a transaction per QTF-126 in Production, a QHIN may claim any Exchange Purpose within the transactions used for the connectivity test, including Treatment, as long as: (i) the patient record used in the transaction is a dummy record deliberately constructed so that it is reasonably expected not to match legitimate patient records; and (ii) the QHIN is acting in good faith to perform a test as required by the QTF and is not knowingly attempting to access data for a real patient.

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Next Steps

- RCE has launched working groups
  - Update the QTF
  - Further develop the use of FHIR
  - QHIN-Facilitated
  - QHIN-to-QHIN
  - End-to-End FHIR

Source: https://rce.sequoiaproject.org/wp-content/uploads/2023/12/FHIR-Roadmap-for-TEFCA-Exchange.pdf

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TEFCA QHIN Technical Readiness Roadmap

Technical Readiness for TEFCA

Completed
In Progress
Planned

1. Review QTF Requirements — Jan 22
2. Hub Gap Analysis — Jun 22
3. Contracting — Aug 22
4. Planning & Initiation — Sep 22
5. Build — Nov 22
6. Conformance Testing
7. Refine/ Retest
8. Pre-Prod Testing
9. Designation
10. Go Live

Phase	Accomplishments
1. Thru 8.	All Phases up to and including non-prod partner testing with other Candidate QHINs completed. Attestation of completion of all requirements for designation submitted to the RCE.
9.	**The eHealth Exchange was promoted to Designated QHIN status at the December 12th TEFCA QHIN Designation event !!!**
10.	eHealth Exchange has decided to have a January 2024 go-live. Target date is ***National Show & Tell Day*** [1]. Jay's related message to ONC and RCE: "Since there are only 8 business days between the QHIN Designation event and Federal holiday closures, if designated on 12/12/2023, eHealth Exchange plans to install TEFCA production certificates and have our system begin consuming RCE directory entries in December, but we wouldn't populate the RCE directory with a designated QHIN entry, which can trigger TEFCA PHI exchange, until January when other designated QHINs, our participants, vendors, the RCE, and ONC are fully staffed and regenerated to address potential Production issues."

[1] January 8th - https://www.daysoftheyear.com/days/show-tell-at-work-day/

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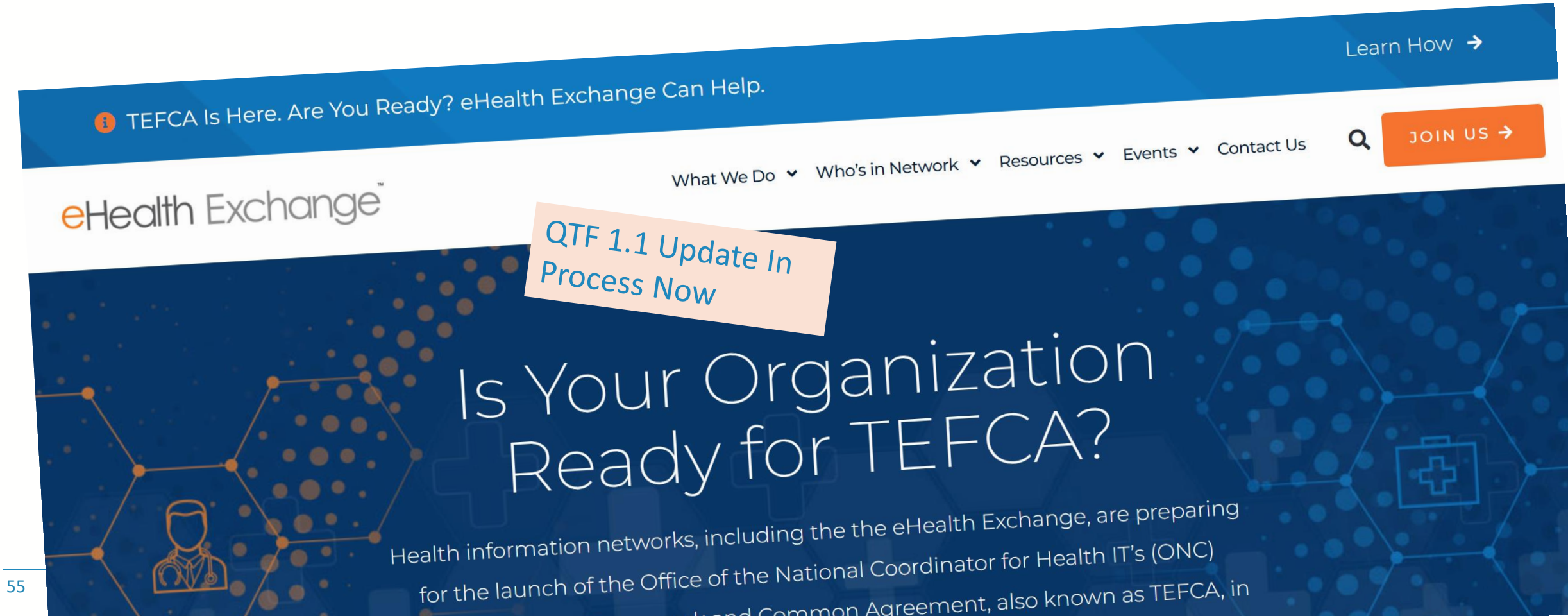
TEFCA Readiness Checklist Updates

For More TEFCA eHealth Exchange Information

- **https://ehealthexchange.org/what-we-do/tefca-and-ehealth-exchange/**



Q&A/Open Discussion

For More Information

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 Technical Call	More dates coming soon!	https://ehealthexchange.org/events
4. Email	Any time if you have a specific question	administrator@ehealthexchange.org
5. TEFCA Office Hours (Q&A)	1/24	administrator@ehealthexchange.org

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Major Technical Differences eHealth Exchange QHIN Participants Must Support

1. Adopt USDCI v1 data classes and elements
2. Adhere to the Concise Consolidated CDA 2 Specification
3. Adhere to Project US@ patient addressing
4. Adopt IHE ITI Technical Framework Revisions 17.0 (versus Revision 8.0)
5. Accept aggregated XCPD responses
6. New PurposeOfUse values
7. Various requirements such different consent attribute structure, sub-participant directory entries and detailed reporting, onboarding log submissions, specific test patients, and quarterly reporting.

Next Steps

1. Review the published policy documents (not discussed today)
2. Review the TEFCA Readiness Checklist
3. Let the eHealth Exchange staff know of your organization's intentions (if you haven't already)

email: administrator@ehealthexchange.org

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