The Trusted Exchange Framework and Common Agreement Draft 2

April 23, 2019

This informational resource describes select proposals in the TEFCA but is not an official statement of any policy. Please refer to the official version of the TEFCA.
21st Century Cures Act - Section 4003(b)

“[T]he National Coordinator shall convene appropriate public and private stakeholders to develop or support a trusted exchange framework for trust policies and practices and for a common agreement for exchange between health information networks. The common agreement may include—

“(I) a common method for authenticating trusted health information network participants;

“(II) a common set of rules for trusted exchange;

“(III) organizational and operational policies to enable the exchange of health information among networks, including minimum conditions for such exchange to occur; and

“(IV) a process for filing and adjudicating noncompliance with the terms of the common agreement.”

“[T]he National Coordinator shall publish on its public Internet website, and in the Federal register, the trusted exchange framework and common agreement developed or supported under paragraph B...”
Why do we need the Trusted Exchange Framework and the Common Agreement?
Many organizations have to join multiple Health Information Networks (HINs), and most HINs do not share data with each other.

Trusted exchange must be simplified in order to scale.
Current Costs

Healthcare organizations are currently burdened with creating many costly, point-to-point interfaces between organizations. The Trusted Exchange Framework and the Common Agreement would reduce the need for duplicative network connectivity interfaces, which are costly, complex to create and maintain, and an inefficient use of provider and health IT developer resources.

Proliferation of Interoperability Methods

A nationally representative survey by the American Hospital Association found\(^1\) that:

- Few hospitals used only one interoperability method.
  - 78% of hospitals use more than one electronic method to send records
  - 61% of hospitals use more than one electronic method to receive records
  - About 40% used five or more methods to send records

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Goals

**GOAL 1**  
Provide a single “on-ramp” to nationwide connectivity

**GOAL 2**  
Electronic Health Information (EHI) securely follows you when and where it is needed

**GOAL 3**  
Support nationwide scalability
What are the Trusted Exchange Framework and the Common Agreement?
The Trusted Exchange Framework is a set of common principles that are designed to facilitate trust among Health Information Networks (HINs).

**Principle 1 – Standardization:** Adhere to industry and federally recognized standards, policies, best practices, and procedures.

**Principle 2 – Transparency:** Conduct all exchange and operations openly and transparently.

**Principle 3 – Cooperation and Non-Discrimination:** Collaborate with stakeholders across the continuum of care to exchange EHI, even when a stakeholder may be a business competitor.

**Principle 4 – Privacy, Security, and Safety:** Exchange EHI securely and in a manner that promotes patient safety, ensures data integrity, and adheres to privacy policies.

**Principle 5 – Access:** Ensure that individuals and their authorized caregivers have easy access to their EHI.

**Principle 6 – Population-Level Data:** Exchange multiple records for a cohort of individuals at one time in accordance with applicable law to enable identification and trending of data to lower the cost of care and improve the health of the population.
What is the Common Agreement?

The Common Agreement will provide the governance necessary to scale a functioning system of connected HINs that will grow over time to meet the demands of patients, clinicians, and payers.

**Minimum Required Terms & Conditions (MRTCs):** ONC will develop mandatory minimum required terms and conditions that Qualified Health Information Networks (QHINs) who agree to the Common Agreement would abide by.

**Additional Required Terms & Conditions (ARTCs):** In addition to the MRTCs, the Common Agreement will include additional required terms and conditions that are necessary for the day-to-day operation of an effective data sharing agreement. The Recognized Coordinating Entity (RCE) will develop the ARTCs and ONC will have final approval.

**QHIN Technical Framework (QTF):** Signatories to the Common Agreement must abide by the QHIN Technical Framework, which specifies functional and technical requirements for exchange among QHINS. The RCE will work with ONC and stakeholders to modify and update the QTF.
The QHIN Technical Framework (QTF) describes the technical and functional requirements for EHI exchange among QHINs.

**Functions included:** Certificate Policy, Secure Channel, Mutual QHIN Server Authentication, User Authentication, Authorization & Exchange Purpose, Query, Message Delivery, Patient Identity Resolution, Record Location, Directory Service, Individual Privacy Preferences, Auditing, and Error Handling.

**Technical detail:** Focuses directly on information exchange between QHINs; for most interactions within a QHIN's network, the QHIN may determine how best to implement its responsibilities.

**Functions enable:** QHIN Broadcast Query, QHIN Targeted Query, and QHIN Message Delivery.
Major updates to Draft 2 of the TEF and MRTCs
Summary of Key Changes

**Exchange Purposes Updated**
Adopted a subset of payment and health care operations purposes, as defined in HIPAA.

**QHIN Message Delivery (Push) Added**
Included sending a patient’s electronic health information (EHI) to a specific Qualified Health Information Network (QHIN) for delivery.

**QHIN Technical Framework Added**
Addressed the technical requirements for exchange among QHINs through development of the QHIN Technical Framework – Draft 1.

**QHIN Definition Broadened**
Application process added that allows a broader set of HINs to apply to be a QHIN.

**Timelines Extended**
When a new version of the Common Agreement is published, entities that have signed a Framework Agreement would have 18 months to implement updates instead of 12.
Update Process for the Common Agreement

1. New requirement or use case is identified.

2. RCE updates the Common Agreement for ONC approval.

3. QHINs have 18 months to comply with updates.
What is the structure of the Common Agreement?
**Stakeholders**

**HEALTH INFORMATION NETWORKS**

**GOVERNMENT AGENCIES**
Federal, state, tribal, and local governments

**INDIVIDUALS**
Consumers, patients, caregivers, family members serving in a non-professional role and professional organizations that represent these stakeholders’ best interest

**PROVIDERS**
Professional care providers who deliver care across the continuum, not limited to but including ambulatory, inpatient, long-term and post-acute care (LTPAC), emergency medical services (EMS), behavioral health, and home and community based services

**PUBLIC HEALTH**
Public and private organizations and agencies working collectively to prevent, promote and protect the health of communities by supporting efforts around essential public health services

**PAYERS**
Private payers, employers, and public payers that pay for programs like Medicare, Medicaid, and TRICARE

**TECHNOLOGY DEVELOPERS**
People and organizations that provide health IT capabilities, including but not limited to health information exchange (HIE) technology, laboratory information systems, personal health records, pharmacy systems, mobile technology, medical device manufacturers, telecommunications and technologies to enable telehealth, and other technology that provides health IT capabilities and services
How Will the Common Agreement Work?

RCE provides oversight and governance for QHINs.

QHINs connect directly to each other to facilitate nationwide interoperability.

Each QHIN represents a variety of Participants that they connect together, serving a wide range of Participant Members and Individual Users.
Recognized Coordinating Entity (RCE)

- Develop, update, implement, and maintain the Common Agreement.
- Identify, designate, and monitor QHINs.
- Modify and update the QHIN Technical Framework.
- Virtually convene public listening sessions.
- Develop and maintain a process for adjudicating QHIN noncompliance.
- Propose strategies to sustain the Common Agreement at a national level after the initial cooperative agreement period.
ONC is releasing an open, competitive Notice of Funding Opportunity to award a single four-year cooperative agreement to a private sector organization to become the RCE.

A successful applicant would be a non-profit entity based in the United States. If awarded, the RCE may not be affiliated with a QHIN.

The Notice of Funding Opportunity is posted to Grants.gov.
A **QHIN** is an entity with the technical capabilities to connect health information networks on a nationwide scale.

**Participant**
A natural person or entity that has entered into a Participant-QHIN Agreement to participate in a QHIN.

**Participant Member**
A natural person or entity that has entered into a Participant Member Agreement to use the services of a Participant to send and/or receive EHI.

**Individual User**
An Individual who exercises their right to Individual Access Services using the services of a QHIN, a Participant, or a Participant Member.
In this example, the QHIN supports a broad range of different health IT developer Participants. The users of the health IT developers’ products are Participant Members. Individual Users connect directly to the QHIN, Participants, and Participant Members.
QHIN Example: Various Participants

In this example, the QHIN directly supports federal agencies, state agencies, health systems, and HIEs as Participants. The members of the federal/state agencies, health systems, and HIEs are Participant Members and Individual Users.
**Framework Agreement Flow-Down**

**Common Agreement**
The parties to the Common Agreement will be the RCE and one or more QHINs. The Common Agreement will include flow down clauses for the QHIN’s agreements with its Participants and the Participant’s agreements with its Participant Members.

**Participant-QHIN Agreement**
An agreement between a Participant and a QHIN.

**Participant Member Agreement**
An agreement between a Participant and a Participant Member.
How do you become a QHIN?
A HIN applying to be a QHIN must:

- Operate an existing network with participants exchanging data in a live clinical environment
- Meet applicable federal/state law
- Submit a plan to meet all QHIN requirements
Step 1: RCE solicits, collects, and evaluates QHIN Applications from HINs who wish to receive QHIN Designation. In order to apply for QHIN Designation, a HIN must meet certain prerequisites:

i. The HIN already operates a network that provides the ability to locate and transmit EHI between multiple persons and/or entities electronically, on demand or pursuant to one or more automated processes.

ii. Such persons and/or entities are already exchanging EHI in a live clinical environment using the network.

iii. The HIN has provided reasonable evidence that exchange of EHI using its network is occurring in accordance with Applicable Law and the privacy, security and patient safety requirements in the MRTCs.

iv. The HIN has provided a reasonable plan in writing of how it will achieve within the required period all of the applicable requirements of the Common Agreement and the QHIN Technical Framework.

Step 2: After receipt of a completed QHIN Application, the RCE approves or rejects each QHIN Application in writing and within a stated period.
Step 3: If approved, the HIN and RCE must both execute the Common Agreement and the HIN receives Provisional QHIN status.

Step 4: The RCE assigns the Provisional QHIN to a Cohort which has an applicable deadline by which the Provisional QHIN must become a Designated QHIN or be terminated from the Cohort.

A Cohort is a group of one or more Provisional QHINs that are attempting to be Designated by the RCE as QHINs. They have been assigned the same deadline for completing all required actions to be Designated a QHIN.

Step 5: The Provisional QHIN asserts, and the RCE confirms that all applicable requirements of the Common Agreement and QHIN Technical Framework have been met.

Step 6: RCE provides written notice to the Provisional QHIN that it has been Designated a QHIN. The RCE also provides notice to ONC.
What Privacy and Security Requirements are included in the Common Agreement?
Trusted Exchange Breakdown

- Others Terms & Conditions
- Framework Agreements
- Common Agreement (MRTCs + ARTCs)
- Applicable Law (HIPAA + State Law)
QHINs must abide by the HIPAA Privacy and Security Rule as if it applies to EHI. They must also evaluate their security programs on an annual basis in accordance with NIST Special Publication 800-171. To the extent that the QHIN’s risk analysis identifies any risks, vulnerabilities, or gaps in the QHIN’s compliance with the HIPAA Rules or other Applicable Law, the QHIN shall assess and implement appropriate security measures consistent with industry standards and best practices that it determines would be reasonable and appropriate to ensure the confidentiality, integrity and availability of the EHI that it creates, receives, maintains or transmits, and provide documentation of such evaluation.
Minimum Privacy and Security Requirements - Participants and Participant Members

Participants and Participant Members, regardless of whether or not they are a Covered Entity or Business Associate, must take reasonable steps to promote the confidentiality, integrity, and availability of EHI. Participants, and Participant Members must review and modify such safeguards regularly to continue protecting EHI in a changing environment of security threats.

The reasonable steps include:

• Maintaining reasonable and appropriate administrative, technical, and physical safeguards for protecting EHI;
• Protecting against reasonably anticipated impermissible Uses and Disclosures of EHI;
• Identifying and protecting against reasonably anticipated threats to the security or integrity of EHI; and
• Monitoring workforce compliance.
Participants
each participant shall require proof of identity for participant members at a minimum of IAL2 prior to issuance of credentials.

QHIN
Each QHIN shall require proof of identity for participants at a minimum of IAL2 prior to issuance of credentials.

Individual User
QHINS, participants, and participant members shall require proof of identity for individual users at a minimum of IAL2 prior to issuance of credentials.

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<th>IAL 2 REQUIREMENT</th>
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| **Evidence**      | • One (1) piece of SUPERIOR or equivalent evidence; OR  
                     • Two (2) pieces of STRONG evidence; OR  
                     • One (1) piece of STRONG evidence plus two (2) pieces of FAIR evidence. |
| **Validation**    | • Each piece of evidence must be validated with a process able to achieve the same strength as the evidence presented. |
| **Verification**  | • Verified by a process that is able to achieve a strength of STRONG. |

*Full IAL2 requirements can be found at [www.nist.gov](http://www.nist.gov).*
Digital authentication is the process of establishing confidence in a remote user identity communicating electronically to an information system. NIST draft SP 800-63B refers to the level of assurance in authentication as the Authenticator Assurance Level (AAL). Federation Assurance Level (FAL) refers to the strength of an assertion in a federated environment, used to communicate authentication and attribute information (if applicable) to a relying party (RP).

**QHIN**
Each QHIN shall require Participants be authenticated at a minimum of AAL2 and provide support for at least FAL2 prior to the issuance of credential.

**Participants**
Each Participant shall require Participant Members be authenticated at a minimum of AAL2 and provide support for at least FAL2 prior to the issuance of credential.

**Individual User**
QHINS, Participants, and Participant Members shall require Individual Users be authenticated at a minimum of AAL2 prior to issuance of credentials.
The MRTCs prohibit QHINs from Using or Disclosing EHI outside the United States, except to the extent that an Individual User requires his or her EHI to be Used or Disclosed outside of the United States. ONC seeks public comment on how the Common Agreement should handle potential requirements for EHI that needs to be sent, stored, maintained, or used outside the United States.

Breach Notification Regulations

QHINS, Participants, and Participant Members shall comply with Breach notification requirements pursuant to 45 CFR 164.400-414 of the HIPAA Rules regardless of whether or not they are a covered entity or business associate. Each QHIN further shall notify, in writing, the RCE and other QHINs to the extent that they or one of their Participants or Participant Members are affected by the Breach. Such notice shall be provided without unreasonable delay in accordance with Applicable Law. This does not modify or replace any obligation that an entity may have under the FTC Rule with respect to a breach of security.

No EHI Used or Disclosed Outside the United States

The MRTCs prohibit QHINs from Using or Disclosing EHI outside the United States, except to the extent that an Individual User requires his or her EHI to be Used or Disclosed outside of the United States. ONC seeks public comment on how the Common Agreement should handle potential requirements for EHI that needs to be sent, stored, maintained, or used outside the United States.
QHINs, Participants, and Participant Members must publish and make publically available a written notice describing their privacy practices regarding the access, exchange, Use, and Disclosure of EHI. This notice should mirror ONC’s Model Privacy Notice and include information explaining how an Individual can exercise their Meaningful Choice and who they may contact for more information about the entity’s privacy practices.

Written Privacy Summary

QHINs, Participants, and Participant Members must provide Individuals with the opportunity to exercise Meaningful Choice, free of charge, by requesting that their EHI not be used or disclosed via the Common Agreement, except as permitted by Applicable Law. Participants and Participant Members are responsible for communicating this meaningful choice up to the QHIN who must then communicate the choice to all other QHINs within five (5) business days. This choice must be respected on a prospective basis.
ONC is considering the inclusion of a new requirement regarding security labeling that states the following:

- Any EHI containing codes from one of the SAMHSA Consent2Share sensitivity value sets for mental health, HIV, or substance use in Value Set Authority Center (VSAC) shall be labeled.
- Any EHI for patients considered minors shall be electronically labeled.
- The data holder responding to a request for EHI is obligated to appropriately apply security labels to the EHI.
- At a minimum: EHI shall be electronically labeled using the confidentiality code set as referenced in the HL7 Version 3 Implementation Guide: Data Segmentation for Privacy (DS4P), Release 1 (DS4P IG), Part 1: CDA R2 and Privacy Metadata.
- Labeling shall occur at the highest (document or security header) level.
What can the Common Agreement be used for?
Exchange Purposes

- Quality Assessment & Improvement*
- Business Planning and Development*
- Utilization Review*
- Public Health*
- Individual Access Services
- Treatment*

*Only applies to HIPAA covered entities and business associates
Exchange Modalities

**QHIN Broadcast Query**
A QHIN’s electronic request for a patient’s EHI from all QHINs.

**QHIN Targeted Query**
A QHIN’s electronic request for a patient’s EHI from specific QHINs.

**QHIN Message Delivery (Push)**
The electronic action of a QHIN to deliver a patient’s EHI to one or more specific QHINs.
Exchange Purpose Example

1. Primary Care Provider (PCP) (Participant Member) refers patient to Dermatologist, and sends care summary to QHIN A for Treatment.

2. QHIN A initiates QHIN Message Delivery to send care summary to the appropriate QHIN B.

3. QHIN B sends care summary to the appropriate Participant.

4. Participant delivers care summary to the Dermatologist (Participant Member).

*Only applies to HIPAA covered entities and business associates*
Exchange Purpose Example

1. Patient (Individual User) uses a smart phone app (Participant Member) to make a medical records request via the Participant to the QHIN for Individual Access Services

2. QHIN A initiates QHIN Broadcast Query to all connected QHINs

3. QHINs B, C, D execute their query methodology to request medical records from all appropriate Participants and their Participant Members

4. Participant Members and Participants respond with medical records

5. QHINs B, C, D send medical records to QHIN A

6. QHIN A sends medical records to Participant, who sends to smart phone app (Participant Member), who sends to Patient (Individual User)
Next Steps
Timeline

- **Apr 2019**: RCE Notice of Funding Opportunity released
- **Jun 2019**: Public comment closes on TEF and MRTCs Draft 2 and QTF Draft 1
- **Aug/Sept 2019**: RCE Awarded
- **2020**: Common Agreement Draft 1 released for public comment (includes MRTCs, ARTCs and QTF)
- **Common Agreement Version 1 released for production**
Key Dates and URLs

• **Key Dates:**
  
  » TEFCA Public Comment closes **June 17, 2019**
  
  » RCE NOFO Applications due **June 17, 2019**
  
  » RCE NOFO Information Session- **April 30, 2019; 2PM ET**

• **URLS:**
  
  » [www.healthit.gov/TEFCA](http://www.healthit.gov/TEFCA)
  
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