

# Exchange Purpose (XP) Implementation SOP: Public Health

Version 1.1

April 25, 2025

Applicability: QHINs, Participants, Subparticipants

# 1 COMMON AGREEMENT REFERENCES

The requirements set forth in this Standard Operating Procedure (SOP) are for implementation, in addition to the terms and conditions found in the Framework Agreements, the Qualified Health Information Network® (QHIN™) Technical Framework (QTF), and applicable SOPs. The Trusted Exchange Framework and Common Agreement™ (TEFCA™) Cross Reference Resource identifies which SOPs provide additional detail on specific references from the Common Agreement. All documents cited in this SOP can be found on the Recognized Coordinating Entity® (RCE ®) website.

#### 2 SOP DEFINITIONS

Terms defined in this section are introduced herein and can be found in the TEFCA Glossary. Capitalized terms used in this SOP have the respective meanings assigned to such term in the TEFCA Glossary.

**Electronic Case Reporting:** is the electronic exchange of case report information between QHINs, Participants, Subparticipants, and Public Health Authorities.

**Electronic Laboratory Reporting:** is the transmission of electronic laboratory reports between QHINs, Participants, Subparticipants, and Public Health Authorities.

The following defined terms from the Common Agreement and applicable SOPs are repeated here for reference:

**Public Health**: a Request, Use, Disclosure, or Response permitted under the Health Information Portability and Accountability Act (HIPAA) Rules and other Applicable Law for public health activities and purposes involving a Public Health Authority, where such public health activities and purposes are permitted by Applicable Law, including a Use or Disclosure permitted under 45 CFR § 164.512(b) and 45 CFR § 164.514. For the avoidance of doubt, a Public Health Authority may Request, Use, and Disclose TEFCA Information (TI) hereunder for Public Health to the extent permitted by Applicable Law and the Framework Agreements.

**Public Health Authority (PHA)**: has the meaning assigned to such term at 45 CFR § 164.501.

**Delegate**: A First Tier Delegate or Downstream Delegate.

**Downstream Delegate**: a QHIN, Participant, or Subparticipant that (i) is not acting as a Principal when initiating or Responding to a transaction via TEFCA Exchange and (ii) has a direct written agreement with a First Tier Delegate or another Downstream Delegate

authorizing the respective Downstream Delegate to initiate or Respond to transactions via TEFCA Exchange for or on behalf of a Principal.

**First Tier Delegate**: a QHIN, Participant, or Subparticipant that (i) is not acting as a Principal when initiating or Responding to a transaction via TEFCA Exchange and (ii) has a direct written agreement with a Principal authorizing the First Tier Delegate to initiate or Respond to transactions via TEFCA Exchange for or on behalf of the Principal. For purposes of this definition, a "written agreement" shall be deemed to include a documented grant of authority from a government agency.

**Health Care Provider**: meets the definition of such term in either 45 CFR § 171.102 or in the HIPAA Rules at 45 CFR § 160.103.

**Node**: a technical system controlled directly or indirectly by a QHIN, Participant, or Subparticipant as listed in the RCE Directory Service.

**Principal**: a QHIN, Participant, or Subparticipant that is acting as a Covered Entity, Government Health Care Entity, Non-HIPAA Entity (NHE) Health Care Provider, a Public Health Authority, a government agency that makes a Government Benefits Determination, or an Individual Access Services Provider (as authorized by an Individual) when engaging in TEFCA Exchange.

**XP Code**: the code used to identify the XP in any given transaction, as set forth in the applicable SOP(s).

#### 3 PURPOSE

In addition to the Framework Agreements, QTF, and SOPs, this SOP identifies requirements that QHINs, Participants, and Subparticipants are required to follow when asserting the Public Health Exchange Purpose, including the use cases of Electronic Case Reporting (eCR) and Electronic Lab Reporting (eLR). Nothing in this SOP modifies the terms and conditions related to Public Health, as enumerated in the Exchange Purposes (XPs) SOP (note that the XP SOP uses the label "Authorized XPs" for both first order Exchange Purposes and more narrowly defined Exchange Purposes, which this document refers to as use cases consistent with general public health usage) Similarly, all TEFCA Exchange happens in the context of Applicable Law. Thus, exchange under this SOP must also conform to federal, State, local, tribal or other law that requires or authorizes reporting of public health information.

Access to health information is an important tool for Public Health Authorities (PHAs) and their Delegates to support core public health services including, but not limited to, assessing and monitoring population health and investigating, diagnosing, and addressing health hazards and

root causes.<sup>1</sup> Use cases described in this SOP, including Electronic Case Reporting and Electronic Laboratory Reporting, allow PHAs to identify disease trends, track and monitor outbreaks, and prevent and control future outbreaks. See the Centers for Prevention and Disease Control (CDC) website for additional information related to <u>electronic case reporting</u> (eCR) and <u>electronic laboratory reporting (eLR).<sup>2</sup></u> Given the importance of jurisdiction in public health reporting, the technical specifications referenced in this SOP include requirements to include both the Health Care Provider's location and the patient's residence.

#### 4 Introduction

The Common Agreement authorizes six (6) types of Exchange Purposes (XPs), of which Public Health is one. This permits entities that participate in TEFCA to appropriately share and request information to and from PHAs through a secure exchange network. Due to the complexities and variations in laws concerning exchange for public health purposes, the Common Agreement states that PHAs are not required to respond to any Queries from requesters, although they are encouraged to do so as appropriate under Applicable Law.

TEFCA also operates within existing law, including HIPAA and any federal, State, territorial, local and tribal (STLT) laws specific to the sharing of health information. This means that in the event of any inconsistencies, any laws or regulations applicable to PHAs will take precedence over the terms in the Framework Agreements or this SOP. PHAs and their Delegates should work with their legal counsel, Upstream Participants (if applicable) and the QHINs they participate with to determine how to ensure compliance with all Applicable Law.

The Exchange Purposes (XPs) SOP defines the six (6) authorized XPs and the XP Codes associated with each. Every transaction that occurs via TEFCA Exchange must include the XP Code that represents the reason for why the transaction is being initiated. Each of the six (6) authorized XPs may also have specific use cases that are identified with their own XP Code. For example, a use case under the Public Health XP Code would always begin with "T-PH."

The requirements set forth in this XP Implementation SOP provide implementation details for Public Health, Electronic Case Reporting (eCR), and Electronic Lab Reporting (eLR). This includes details on the expected response information and the standard way that data should be formatted for a specific purpose (e.g., the data elements, standard format and terminology, ontology, taxonomy, or code set). Required information may include certain Health Level Seven

<sup>&</sup>lt;sup>2</sup> More information on eCR and eLR available at <a href="https://www.cdc.gov/ecr/php/about/index.html">https://www.cdc.gov/ecr/php/about/index.html</a> and <a href="https://www.cdc.gov/electronic-lab-reporting/php/about/index.html">https://www.cdc.gov/electronic-lab-reporting/php/about/index.html</a>.



<sup>&</sup>lt;sup>1</sup> See the 10 Essential Public Health Services available at

https://www.cdc.gov/publichealthgateway/publichealthservices/essentialhealthservices.html.

(HL7®) Fast Healthcare Interoperability Resources (FHIR®) value sets, data files, or other document types needed to support the Public Health purpose.

Notwithstanding the eCR and eLRuse cases defined in this SOP, QHINs, Participants, and Subparticipants that meet the requirements of this SOP can use the Public Health XP Code (T-PH) to conduct TEFCA Exchange for a Public Health purpose, as defined in Section 2 of this SOP and in the Exchange Purposes SOP. Exchange under the Public Health XP Code (T-PH) may include, but is not limited to, the sharing of information between PHAs and reporting of information from a PHA to the CDC. These transactions may occur in the form of a QHIN Message Delivery, a QHIN Query, or a Facilitated FHIR Push or Query; however, only PHAs or their Delegates are permitted to conduct QHIN Queries or FHIR Queries under the Public Health XP Code. Health Care Providers may use TEFCA Exchange to Query PHAs under the Treatment Exchange Purpose (e.g., to Query an immunization registry). PHAs (and hybrid entities under HIPAA) are encouraged, but not required, to respond to gueries from TEFCA connected entities.

While the Public Health XP Code (T-PH) is available for any allowable PH purpose, the public health community may want XP Codes created for additional public health use cases. The Recognized Coordinating Entity® (RCE<sup>TM</sup>) anticipates judiciously expanding the Public Health XP Implementation SOP over time to address additional public health priorities that require detailed implementation guidance, including, but not limited to, immunization data, vital records, prescription drug monitoring, hospital capacity, chronic disease, and other registry reporting. The RCE will work with the public health community through the TEFCA governance process to prioritize additional use cases, develop a roadmap, identify relevant standards, and create implementation guidance. Some elements of this SOP, such as the technical specifications, may only apply to QHINs. However, all QHINs, Participants, and Subparticipants that engage in Public Health transactions should understand the use cases and data flows described below.

The RCE has aligned the standards in this document with the latest versions adopted by The Office of the National Coordinator for Health Information Technology (ONC) and intends to adopt additional and later versions of standards in accordance with federal regulations. This includes, among others, the USCDI+ Public Health<sup>3</sup>.

# 5 Public Health (PH)

Permitted users for purposes of this SOP include QHINs, Participants, and Subparticipants that are authorized by Applicable Law and the Common Agreement to assert the PH Exchange Purpose, as further specified below.

<sup>&</sup>lt;sup>3</sup> https://www.healthit.gov/topic/interoperability/uscdi-plus



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## 5.1 Exchange Purpose Code (XP Code)

a. TEFCA Exchange under PH MUST use the XP Code T-PH.

# 5.2 QHIN Technical Framework (QTF)

- a. All transactions under PH MUST follow technical requirements as specified in the QTF, such as the specifications for use of QHIN Message Delivery, QHIN Query, and QHIN Facilitated FHIR.
- b. The QTF also describes the digital identities and other resources that QHINs, Participants, and Subparticipants will obtain through the QHIN, Participant, or Subparticipant with which they entered into a Framework Agreement, such as an OrganizationID, HomeCommunityID, or RCEDirectoryID.

#### 5.3 Definition

a. TEFCA Exchange under the XP Code T-PH has the following meaning: a Request, Use, Disclosure, or Response permitted under the HIPAA Rules and other Applicable Law for public health activities and purposes involving a Public Health Authority, where such public health activities and purposes are permitted by Applicable Law, including a Use or Disclosure permitted under 45 CFR § 164.512(b) and 45 CFR § 164.514. For the avoidance of doubt, a Public Health Authority may Request, Use, and Disclose TEFCA Information (TI) hereunder for Public Health to the extent permitted by Applicable Law and the Framework Agreements.

#### 5.4 Alternate Uses

a. Information transacted under the Public Health Exchange Purpose MUST NOT be persisted or Used by any Node along the transaction chain that is not the addressed recipient, unless agreed to by the data source or recipient through a specific written agreement or as needed for a required audit as specified in the QTF.

#### **5.5 TEFCA Transactions**

#### 5.5.1 QHIN Message Delivery

This SOP supports TEFCA Exchange in the form of a QHIN Message Delivery from any Initiating Node (e.g., a Node maintained by a Health Care Provider or clinical laboratory) to a PHA or its Delegate, in accordance with Applicable Law and the Common Agreement.

a. An Initiating Node MUST only send Message Deliveries to a PHA, its Delegate, or other Responding Node, that is listed in the RCE Directory Service as capable of receiving Message Deliveries.

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All Initiating Nodes MUST include the RCE Directory Service entry Organization Resource ID at the most granular level (e.g., lowest level Subparticipant or child) in addition to its HomeCommunityID within the SAML information.

```
<saml:Attribute FriendlyName="RCEDirectoryID"
Name="urn:oasis:names:tc:xspa:1.0:subject:organization-id">
<saml:AttributeValue>2.16.840.1.113883.3.1833.5</saml:AttributeValue>
</saml:Attribute>
```

#### 5.5.2 QHIN Query

Only Initiating Nodes of a PHA or its Delegate may initiate a QHIN Query using the T-PH XP Code, in accordance with Applicable Law and the Common Agreement.

#### 5.5.2.1 QHIN Query Request

a. The Query from a PHA Initiating Node MUST include the jurisdiction the PHA represents, using the relevant federal, State, territorial, local or tribal name.

```
<saml:Attribute FriendlyName="PHAJurisdiction"
Name="urn:oasis:names:tc:SAML:2.0:attrname-format:basic">
<saml:AttributeValue>HazzardCounty</saml:AttributeValue>
</saml:Attribute>
```

- b. Queries MUST include a date range in the QHIN Query metadata.
- c. Queries MUST include the Public Health Authority OrganizationID as follows:

```
<saml:Attribute FriendlyName="RCEDirectoryID"
Name="urn:oasis:names:tc:xspa:1.0:subject:organization-id">
<saml:AttributeValue>2.16.840.1.113883.3.1833.5</saml:AttributeValue>
</saml:Attribute>
```

#### 5.5.2.2 QHIN Query Response

a. All Responding Nodes SHOULD respond to Requests for Query under Public Health, in accordance with the Framework Agreements and Applicable Law.

#### 5.5.3 Facilitated FHIR

This SOP supports TEFCA Exchange in the form of Facilitated FHIR between Nodes with FHIR Endpoints published in the RCE Directory Service, in accordance with Applicable Law and the Framework Agreements. FHIR refers to the Health Level Seven (HL7®) Fast Healthcare Interoperability Resources® (FHIR) standard.

- a. Any Initiating Node may initiate a FHIR Push to the Responding Node of a PHA or its Delegate that has a FHIR Endpoint listed in their RCE Directory Entry, using the XP Codes included in this SOP, in accordance with Applicable Law.
- b. Only Initiating Nodes of a PHA or its Delegate may initiate a FHIR Query using the XP Codes listed in this SOP, in accordance with Applicable Law.



#### 5.5.3.1 FHIR Push

- a. Initiating Nodes MUST only send FHIR Pushes to a PHA or its Delegate who have a FHIR Endpoint listed in their RCE Directory Entry.
- b. Initiating Nodes MUST include their Resource ID of the Organization entry in the RCE Directory Service within the OAuth information.

#### *5.5.3.2 FHIR Query*

- a. FHIR Queries MUST include the jurisdiction the PHA represents within the OAuth flow during the Authorization phase using the extension defined in Table 2 TEFCA Public Health Jurisdiction Extension Object. Any given jurisdiction SHOULD use the same string value for all FHIR Queries.
- b. FHIR Queries MUST include a date range in the FHIR metadata.

Table 2 TEFCA Public Health Jurisdiction Extension Object

Extension Name: "tefca_phj"				
Element	Optionality	Requirement		
Version	Required	Fixed string value: "1"		
Jurisdiction	Required	A string value representing the public health jurisdiction as assigned by the federal, State, tribal, local, or territorial government public health oversight authority		

#### 5.5.4 FHIR Query Response

- a. All Responding Nodes SHOULD respond to Requests for Public Health, in accordance with the Common Agreement and Applicable Law.
- b. If a Responding Node responds to a QHIN Query or FHIR Query the PH XP Code, then it SHOULD return, at a minimum, the USCDI v1 data classes and data elements that are maintained and requested by the Initiating Node, in accordance with Applicable Law.

# 6 Electronic Case Reporting

# **6.1 Exchange Purpose Code (XP Code)**

a. All TEFCA Exchange under PH Electronic Case Reporting MUST use the XP Code T-PH-ECR.

# 6.2 QHIN Technical Framework (QTF)

a. See requirement in Section 5.2 of this SOP.



#### 6.3 Definition

a. TEFCA Exchange under the XP Code T-PH-ECR has the following meaning: the electronic exchange of case report information between QHINs, Participants, Subparticipants, and Public Health Authorities.

#### **6.4** Alternate Uses

a. See requirements in Section 5.4 of this SOP.

#### **6.5 TEFCA Transactions**

#### 6.5.1 QHIN Message Delivery

- a. See requirements in Section 5.5.1a and 5.5.1b
- b. If an Initiating Node sends a Message Delivery for T-PH-ECR that requires a Reportability Response from the Responding Node, the Initiating Node MUST support the required Reportability Response standards, as specified in Table 3 below.
- Initiating Nodes MUST use the appropriate, corresponding content standards, as specified below for Integrating the Healthcare Enterprise (IHE) standards-based transactions.

Table 3 QHIN Message Delivery Use Case Document Standards

Use Case	Document Standard		
<b>Electronic Case</b>	Prior to January 1, 2026		
Reporting	Health Care Providers:		
(T-PH-ECR)	HL7 CDA® R2 Implementation Guide: Public Health Case Report Release 2: the		
	Electronic Initial Case Report (eICR) Release 1, STU Release 1.1 - US Realm Public		
	Health Authorities and Delegates:		
	HL7 CDA® R2 Implementation Guide: Reportability Response, Release 1, STU		
	Release 1.0 - US Realm		
	As of January 1, 2026		
	Health Care Providers:		
	HL7 CDA® R2 Implementation Guide: Public Health Case Report - the Electronic		
	Initial Case Report (eICR) Release 2, STU Release 3.1 - US Realm		
	Public Health Authorities and Delegates:		
	HL7 CDA® R2 Implementation Guide: Reportability Response, Release 1, STU		
	Release 1.1 - US Realm		

#### 6.5.2 QHIN Query

a. Not applicable.



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#### 6.5.3 Facilitated FHIR

#### 6.5.3.1 FHIR Push

- a. See requirements in 5.5.3.1a and 5.5.3.1b.
- b. If an Initiating Node sends a FHIR Push for a use case that requires or includes Reportability Response, the Initiating Node MUST support the required Reportability Response standards, as specified in Table 4 below.
- c. For the XP Code in Section T-PH-ECR, Initiating Nodes MUST, at least, use the appropriate, corresponding content standards, as specified in Table 4 below for FHIR-based exchange.

Table 4 FHIR Use Case FHIR Implementation Guide

Use Case	FHIR Implementation Guide	
Electronic Case Reporting (T-PH-ECR)	HL7 FHIR® Implementation Guide: Electronic Case Reporting (eCR) - US Realm 2.1.1 - STU 2	

#### 6.5.3.2 FHIR Query

a. Not applicable.

# 7 Electronic Laboratory Reporting

# 7.1 Exchange Purpose Code (XP Code)

a. All TEFCA Exchange under PH Electronic Laboratory Reporting MUST use the XP Code T-PH-ELR.

# 7.2 QHIN Technical Framework (QTF)

a. See requirement in Section 5.2 of this SOP.

#### 7.3 Definition

TEFCA Exchange under the XP Code T-PH-ELR has the following meaning: the transmission of electronic laboratory reports between QHINs, Participants, and/or Subparticipants, and Public Health Authorities.

#### 7.4 Alternate Uses

a. See requirements in Section 5.4 of this SOP.



#### 7.5 TEFCA Transactions

#### 7.5.1 QHIN Message Delivery

- a. See requirements in Section 5.5.1a and 5.5.1b.
- b. Initiating Nodes MUST use the appropriate, corresponding content standards, as specified in Table 5 below for Integrating the Healthcare Enterprise (IHE) standards-based transactions.

Table 5 QHIN Message Delivery Use Case Document Standards for ELR

Use Case	Document Standard	
Electronic Lab Reporting (T-PH-ELR)	HL7 Version 2.5.1 Implementation Guide: Electronic Laboratory	
	Reporting to Public Health, Release 1 (US Realm)	

#### 7.5.2 QHIN Query

a. Not applicable.

#### 7.5.3 Facilitated FHIR

#### 7.5.3.1 FHIR Push

- a. See requirements in 5.5.3.1a and 5.5.3.1b.
- b. For the XP Code in Section T-PH-ELR, Initiating Nodes SHOULD, at least, use the appropriate, corresponding content standards, as specified in Table 6 below for FHIR-based exchange.

#### Table 6 FHIR Use Case FHIR Implementation Guide

Use Case	FHIR Implementation Guide	
Electronic Lab Reporting	US Core Laboratory Result Observation Profile	

#### 7.5.3.2 FHIR Query

a. Not applicable.



# **8** Version History

Version	Revision Date	Section #(s) of Update
Version 1.0	August 6, 2024	All Sections
Version 1.1	XX, 2025	All Sections – Language aligned with Exchange Purposes (XPs) SOP Version 4.0