ONC TEFCA RECOGNIZED COORDINATING ENTITY

Exchange Purpose (XP) Implementation SOP: Public Health SubXP-1

Version 1.0

DRAFT for Stakeholder Feedback

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Applicability: QHINs, Participants, and Subparticipants

1. Common Agreement References

The requirements set forth in this Standard Operating Procedure (SOP) are required for implementation in addition to the terms and conditions found in the applicable Framework Agreement, the Qualified Health Information Network™ (QHIN™) Technical Framework (QTF), and applicable SOPs, including the Exchange Purposes (XPs) SOP. 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 RCE website [URL for resources page]. 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 without definition shall have the respective meanings assigned to such term in the TEFCA Glossary.

Public Health SubXP-1 includes transactions for any of the following Public Health activities via TEFCA Exchange, to the extent permitted by Applicable Law and the Common Agreement.[1]

> **Electronic Disease Reporting: (e.g., Electronic Case Reporting and Electronic Lab Reporting):** Public Health Authorities (PHAs) are generally required by Applicable Law to monitor, investigate, mitigate, and otherwise act to prevent the introduction or spread of diseases and conditions that endanger the public health in their jurisdictions. To facilitate this duty, physicians, clinical laboratories, and other healthcare organizations are often mandated by Applicable Law to report certain diseases and conditions and/or certain indicators thereof. The use of electronic case and lab reporting streamlines this mandated reporting process for healthcare providers and PHAs alike.
>
> **Electronic Case Investigation:** is a public health tool that involves a PHA gathering additional information in response to a disease or condition that has already been reported under Applicable Law. This often includes collecting information about the individual's symptoms, their clinical characteristics/history, how/where they may have contracted or acquired the disease/condition, and the overall course of their illness, including clinical interventions received. These investigations help PHAs understand and

[1] Definitions derived from those included in: https://www.crisphealth.org/wp-content/uploads/2022/01/Approved_Use-Case-Disease-Investigation-Updated_2021.pdf.

mitigate the extent to which other people or groups may be at risk. The ability to gather information for case investigation electronically vastly improves the efficacy of these investigations. This includes the ability of a PHA to query healthcare providers and others for additional information for case investigation in follow-up to a PHA's receipt of an electronic disease report.

3. PURPOSE

This SOP defines the Public Health SubXP-1, which is a subset of Public Health, as defined in the Exchange Purposes (XPs) SOP. In addition to the Common Agreement and QTF, this SOP identifies requirements that QHINs, Participants, and Subparticipants are required to follow when asserting the Public Health SubXP-1 described herein for TEFCA Exchange transactions.

This SOP does not modify the terms and conditions related to Public Health, as enumerated in the Exchange Purposes (XPs) SOP, and TEFCA Exchange can be used to support Public Health activities beyond those included in this SOP that are consistent with the definition in the Exchange Purposes (XPs) SOP.

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.[2] Use cases described under the Public Health SubXP-1, including electronic case reporting, electronic lab reporting, and case investigation, allow PHAs to identify disease trends, track and monitor outbreaks, and prevent and control future outbreaks. Additional Public Health XP Implementation SOPs are anticipated over time.

A draft Public Health Exchange Purpose (XP) Educational Guidance document is available on the RCE website.

4. PROCEDURE

4.1 Exchange Purpose Codes (XP Codes)

a) All TEFCA Exchange under Public Health SubXP-1 MUST use the appropriate XP Code matching the use case for exchange, as specified in Table 1 Public Health Sub Exchange Purpose Codes. For Public Health purposes that are not covered by this or a

[2] See the 10 Essential Public Health Services available at https://www.cdc.gov/publichealthgateway/publichealthservices/essentialhealthservices.html.

subsequent XP Implementation SOP, TEFCA Exchange MUST use the more general T-PH code, as defined in the Exchange Purposes (XPs) SOP.

Table 1 Public Health Sub Exchange Purpose Codes (XP Codes)

Use Case	XP Code
Electronic Case Reporting	T-PH-ECR
Electronic Lab Reporting	T-PH-ELR
Other Electronic Disease/Condition Reporting	T-PH-DR
Electronic Case Investigation	T-PH-CI

4.2 QHIN Technical Framework (QTF)

a) All transactions under Public Health SubXP-1 MUST follow technical requirements as specified in the QTF.

4.3 Alternate Uses

a) Information transacted for purposes under Public Health SubXP-1 MUST NOT be persisted 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.
b) Information transacted for purposes of Public Health SubXP-1 MUST NOT be used for any other purpose beyond that of required audit 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.

4.4 QHIN Message Delivery

This SOP supports TEFCA Exchange in the form of a QHIN Message Delivery from any Initiating Node 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 or its Delegate, or other Responding Node, that is listed in the RCE Directory Service as capable of receiving Message Deliveries.
b) All Initiating Nodes MUST include its OrganizationID 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>https://directory.prod.rce.sequoiaproject.org/Organization/f40f2693-6b8e-4691-ae1d-47c63c88c486</saml:AttributeValue>
</saml:Attribute>

c) If an Initiating Node sends a Message Delivery for a use case that requires or includes Reportability Response, the Initiating Node MUST support the required Reportability Response standards, as specified in Table 2 below.
d) For each of the specified SubXP Codes in Section 4.1 of this SOP, Initiating Nodes MUST use the appropriate, corresponding content standards, as specified below for Integrating the Healthcare Enterprise (IHE) standards-based transactions.

Table 2 QHIN Message Delivery Use Case Document Standards

Use Case	Document Standard
Electronic Case Reporting	**Health Care Providers:** HL7 CDA® R2 Implementation Guide: Public Health Case Report - the Electronic Initial Case Report (eICR) Release 2, STU Release 3.1 **Public Health Authorities and Delegates:** HL7 CDA® R2 Implementation Guide: Reportability Response, Release 1, STU Release 1.1 - US Realm
Electronic Lab Reporting	HL7 Version 2.5.1 Implementation Guide: Electronic Laboratory Reporting to Public Health, Release 1 (US Realm)
Other Electronic Disease/Condition Reporting	As required by PHA policy

4.5 QHIN Query

Only Initiating Nodes of a PHA or its Delegate may initiate a QHIN Query for the purposes listed under Section 4.1 of this SOP, in accordance with Applicable Law and the Common Agreement.

4.5.1 Query Request

a) The Query MUST include the jurisdiction the PHA represents.

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

b) Queries SHOULD include a date range for a period of no more than 5 years in the QHIN Query metadata. If omitted, a period of 5 years SHOULD be assumed.
c) Queries MUST include the Public Health Authority Organization.ID as follows:

<saml:Attribute FriendlyName="RCEDirectoryID"
Name="urn:oasis:names:tc:xspa:1.0:subject:organization-id">
<saml:AttributeValue>https://directory.prod.rce.sequoiaproject.org/Organization/f40f2693-6b8e-4691-ae1d-47c63c88c486</saml:AttributeValue>
</saml:Attribute>

4.5.2 QHIN Query Response

a) All Responding Nodes SHOULD respond to Requests for Case Investigation, in accordance with the Common Agreement and Applicable Law.
b) If a Responding Node responds to a Request for Case Investigation, then it MUST return all Required Information as requested by the Initiating Node, in accordance with Applicable Law.

4.6 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 Common Agreement. FHIR refers to the Health Level Seven (HL7®) Fast Healthcare Interoperability Resources® (FHIR) standard.

FHIR Push. Any Initiating Node may push to any other Responding Node for the purposes listed under Section 4.1 of this SOP, in accordance with Applicable Law.

FHIR Query. Only Initiating Nodes of a PHA or its Delegate may Request Required Information for the purposes listed under Section 4.1 of this SOP, in accordance with Applicable Law.

4.6.1 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.
c) 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 3 below.

d) For each of the specified SubXP Codes in Section 4.1 of this SOP, Initiating Nodes MUST, at least, use the appropriate, corresponding content standards, as specified below for FHIR-based exchange.

Table 3 FHIR Use Case FHIR Implementation Guide

Use Case	Document Standard or FHIR Implementation Guide
Electronic Case Reporting	HL7 FHIR® Implementation Guide: Electronic Case Reporting (eCR) - US Realm 2.1.1 - STU 2
Electronic Lab Reporting	US Core Laboratory Result Observation Profile
Other Electronic Disease/Condition Reporting	US Core Observation Clinical Result Profile

4.6.2 FHIR Request

a) FHIR Requests MUST include the jurisdiction the PHA represents within the OAuth flow using the extension defined in Table 4 TEFCA Public Health Jurisdiction Extension Object.
b) FHIR Requests SHOULD include a date range for a period of no more than 5 years in the FHIR metadata. If omitted, a period of 5 years SHOULD be assumed.

Table 4 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

4.6.3 FHIR Query Response

a) All Responding Nodes SHOULD respond to Requests for Case Investigation, in accordance with the Common Agreement and Applicable Law.
b) If a Responding Node responds to a Request for Case Investigation, then it MUST return all Required Information as requested by the Initiating Node, in accordance with Applicable Law.