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# Standard Operating Procedure (SOP): RCE™ Directory Service (Directory) Requirements Policy

Version 1.0

DRAFT for Stakeholder Feedback

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Applicability: QHINs

## 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 Common Agreement, the Qualified Health Information Network™ (QHIN™) Technical Framework (QTF), and applicable SOPs. The Trusted Exchange Framework and Common Agreement<sup>SM</sup> (TEFCA<sup>SM</sup>) 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 without definition shall have the respective meanings assigned to such terms in the TEFCA Glossary.

**Directory Entry:** the listing of each Node controlled by a QHIN, Participant or Subparticipant, which includes the endpoint(s) for such Node(s) and any other organizational or technical information required by the QTF or applicable SOP.

## 3. PURPOSE

This SOP describes RCE Directory Service (Directory) policy requirements that QHINs must follow when maintaining Directory Entries, in addition to the specifications set forth in the Common Agreement, QTF, RCE Directory Service Implementation Guide, and applicable SOPs.

## 4. PROCEDURE

### 4.1 Requirements

1. **Directory Represents Technical Relationships Only.**
  - a) The Directory represents exchange Nodes. It might not associate multiple Nodes across a legal entity and might not show all Participants and Subparticipants through which a Framework Agreement flows.

- b) The Directory MUST represent the technical path of connectivity, including all hops made by a transaction.
- 2. All Technical Systems (Nodes) Must be Controlled By a QHIN, Participant, or Subparticipant and Listed in the Directory.**
- a) Any technical system (Node) that handles or transmits information during transport as part of TEFCA Exchange MUST be controlled by a QHIN, Participant, or Subparticipant and subject to a Framework Agreement.
  - b) All such systems MUST be published in the Directory, representative of each system's technical path of connectivity.
- 3. Directory Includes Range of Exchange Purposes (XPs) for a QHIN.**
- a) A QHIN MUST publish, at the Organization<sup>1</sup> resource level, all XPs that will be initiated from its Designated Network.
  - b) A QHIN MUST publish, at the Endpoint<sup>2</sup> resource level, all XPs that will be Responded to by the QHIN, Participant, or Subparticipant within its Designated Network.
- 4. Directory Includes Types of Transactions and XPs for Each Node.**
- a) Every Initiating Node in the Directory MUST indicate both which transactions and for which XP(s) it will initiate. The XPs published for a Node MUST be the set or a subset of the XPs of each entry above it in the hierarchy, as exemplified by Section 4.2 of this SOP.
- 5. Participants and Subparticipants May Participate in Multiple QHINs if They Have Multiple Nodes with Separate HomeCommunityIDs or FHIR Endpoints.**
- a) If multiple Nodes share a HomeCommunityID or FHIR Endpoint, they MUST be represented entirely under the same QHIN.
  - b) An organization with multiple Nodes that each have a separate HomeCommunityID or FHIR Endpoint may be a Participant or Subparticipant under multiple QHINs; however, each Responding Node MUST be entirely represented for all Exchange Modalities handled by that Responding Node under one QHIN and that Responding Node must not be duplicated across multiple QHINs where separate, additional Nodes may be listed.
- 6. A Responding Node May be Separated by Individual Transaction Type.**
- a) A Responding Node may be separated by individual transaction type (Patient Discovery, Document Query, Document Retrieval, Message Delivery, and FHIR) within each Exchange Modality so long as the Responding Node has exactly one Directory Entry per transaction type at all times. For example, a QHIN that

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<sup>1</sup> HL7® FHIR® Release 4 available at <https://hl7.org/fhir/R4/>.

<sup>2</sup> HL7® FHIR® Release 4 available at <https://hl7.org/fhir/R4/>.

maintains an Enterprise Master Patient Index (eMPI) for all its Participants and Subparticipants may be the Responding Node for Patient Discovery transactions for its entire network, while its Participants and/or Subparticipants, as appropriate, are listed individually as the Responding Nodes for Document Retrieval.

**7. QHINs, Participants, and Subparticipants cannot have more than one Responding Node that share a source database.**

**8. Each Transaction Type MUST Be Listed No More Than Once.**

- a) Within a hierarchical chain of Directory Entries, each transaction type MUST be listed no more than once (see diagram below). For example, a Participant that Responds to Document Retrieval transactions MUST Respond inclusive of all its Subparticipants for which a Response is Required; the Subparticipants below that Participant Responding Node cannot also be listed as Responding Nodes for Document Retrieval.

**9. Initiating Node Must Also Be or Have an Associated Responding Node.**

- a) If a Node is listed in the Directory as an Initiating Node, then the Node MUST (1) also be a Responding Node for at least Document Retrieval, (2) be hierarchically below a Responding Node for Document Retrieval, or (3) confirm to its QHIN that the Node does not maintain any information that is Required Information. In the event of such a confirmation, the Initiating Node must be associated with a Responding Node that does contain Required Information.
- b) For Delegates, the association required by Section 4.1(9)(a)(3) above can be satisfied provided that the Principal for whom the Delegate is providing services is a Participant or Subparticipant that has its own Initiating Node(s) and Responding Node(s) listed in the Directory.

**10. All Principals MUST be represented in the Directory and in Requests sent by Delegate.**

- a) If the Delegate's Node is listed as an Initiating Node and the Delegate is initiating Requests as authorized by one or more Principals, then all such Principals must be listed in the RCE Directory under the Delegate, as detailed in an applicable SOP and in the Delegation of Authority SOP.
- b) Each Request made by a Delegate MUST identify in the transaction the Principal that is providing the underlying authority for such request, as detailed in an applicable SOP and in the Delegation of Authority SOP.

**11. An Initiating Node MUST publish relevant required identifiers for XPs it initiates, as identified in the QTF or relevant XP Implementation SOP (e.g., NPI for Treatment).**

## 4.2 Example Diagram

1. **QHIN A is fully federated, passing all transactions to its Participants.**
  - Participant 1 maintains an eMPI/Record Locator Service (RLS) over its Subparticipants, but returns individual patient IDs per Subparticipant (Sub) and passes down subsequent requests for documents.
    - Subs Z and Y only see Document Query and Document Retrieval Requests and Respond independently, since Participant 1 only maintains their patient demographics.
  - Participant 2 maintains a complete clinical data repository and responds for all transactions for its Subs.
    - Sub X never sees and Responds directly to TEFCAs transactions
2. **QHIN B maintains an eMPI/RLS, returns a consolidated patient ID, followed by an aggregated document list. It passes down subsequent requests for documents.**
  - Participant 3 is a fully federated Passthrough Node, passing all transactions to its Subs.
    - Sub W is a fully federated Passthrough Node, passing all transactions to its Subs.
      - Sub U sees only Document Retrieval Requests and Responds independently, since QHIN B maintains its patient demographics and document list.
    - Sub V only sees Document Retrieval Requests and Responds independently, since QHIN B maintains its patient demographics and document list.
3. **Initiating Nodes: Without leveraging exceptions, only the following may be Initiating Nodes, due to Responding with documents: Sub Z, Y, Participant 2, Sub U, V.**
4. **Participant 3 is a federated gateway, passing through the transactions, and so must be in the Directory. If it were simply passing down terms, but not handling transactions, Subs W & V could be directly below QHIN B.**

