

Expand Value Set

Notice

The official version of the OHIE workflows can be found in the [OpenHIE Architecture Specification](#).

Overview

Description: This transaction allows a PoS, or any OHIE component, to access terminological information in the terminology service and retrieve the set of all Concepts in the Value Set. Rather than testing each code contained in an incoming patient data message for Value Set membership, this operation enables a component to "cache" the Value Set members and test individual membership locally, avoiding extensive network overhead. Due to the likely updating of Value Set definitions, on the other hand, components should periodically refresh their local copy of the expansion.

Both external systems and systems inside the HIE may perform this transaction directly with the TS. The sequence diagram below shows the steps that occur for a system using this transaction.

1. Expansion: Retrieve the set of Concept Codes that are members of the HIV Value Set.

Sponsor: [Jack Bowie](#)

Status: This operation has been extensively tested in FHIR Connectathons.

Referenced Standards and APIs

- The FHIR ValueSet *expand* operation: <http://build.fhir.org/valueset-operation-expand.html>. HL7 FHIR Specifications v3.0 or higher support *expand*. The response is Value Set Resource that contains a collection of all the Concepts in the Value Set. If Concept attributes are to be returned with the collection, the attributes can be specified in the *expand* request.
- This workflow implements the IHE IT Infrastructure Technical Framework Supplement - Sharing Valuesets, Codes, and Maps (SVCM) Transaction: Expand Value Set ITI-Y3.
- To verify individual Code membership in a Value Set, see the [Verify Code Membership](#) workflow.

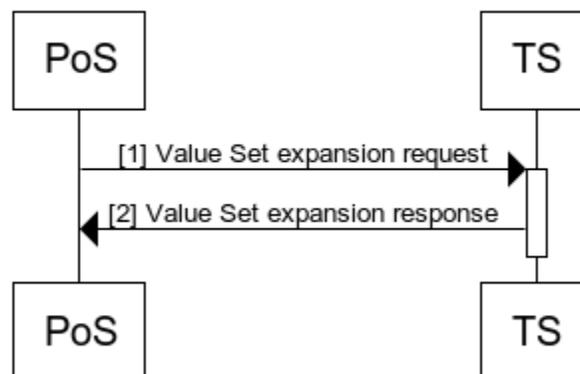
Assumptions and Prerequisites

- The required ValueSets and associated CodeSystems have been preloaded into the Terminology Service.

Actors

- PoS - The point-of-service system or other HIE component that is requesting the expansion.
- TS - Stores the curated, official version of the Value Set for the health system.

Expand Value Set



www.websequencediagrams.com

Technical details

| Ref | Interaction | Endpoint | Data | Transaction Specification |
|-----|-----------------------------|----------|---|--|
| 1 | ValueSet expansion request | TS | The expand request is triggered by a PoS or other HIE component. Input: The target ValueSet. | FHIR ValueSet Resource, \$expand operation |
| 2 | ValueSet expansion response | PoS | The response is sent back to the requesting system. Output: a ValueSet Resource containing the list of Concept members.. | FHIR ValueSet Resource, \$expand operation |