

HITSP Knowledge and Vocabulary Service Collaboration

HITSP/SC111



Healthcare Information Technology Standards Panel

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Security, Privacy and Infrastructure Domain Technical Committee



DOCUMENT CHANGE HISTORY

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1.0 INTRODUCTION

1.1 SERVICE COLLABORATION OVERVIEW AND SCOPE

The Healthcare Information Technology Standards Panel (HITSP) Knowledge and Vocabulary Service Collaboration provides the ability to retrieve medical knowledge and terminology. This Service Collaboration utilizes:

- HITSP/T81 Retrieval of Medical Knowledge which enables the request and receipt of additional knowledge about a medical concept based on specific context parameters. This Transaction does not prescribe the knowledge content of the message returned but provides the specifications for the query and receipt of additional knowledge
- HITSP/T66 Retrieve Value Set which enables the request and receipt of value set with the appropriate terminology or code system and a value set with an appropriate map from one terminology to another

For more information about the underlying Capabilities, pre-conditions, post-conditions, data flows and other detailed information, please refer to the constructs that are used by this Service Collaboration.

The Service Collaboration document illustrates one internal view diagram and sequence table for each service interface. The diagrams are descriptive and the sequences are not mandatory. They may be affected by policy, chosen architecture, and implementation details. Conformance is measured against the underlying constructs.

HITSP/SC108 Access Control and HITSP/SC109 Security Audit are not shown in this Service Collaboration because the information being communicated is not Individually Identifiable Health Information (e.g., IIHI). The Knowledge and Vocabulary may still be considered a resource that may need to be protected by access control and security audit.

1.2 SERVICE COLLABORATION INVOCATION

Table 1-1 Service Collaboration Transactions and Data

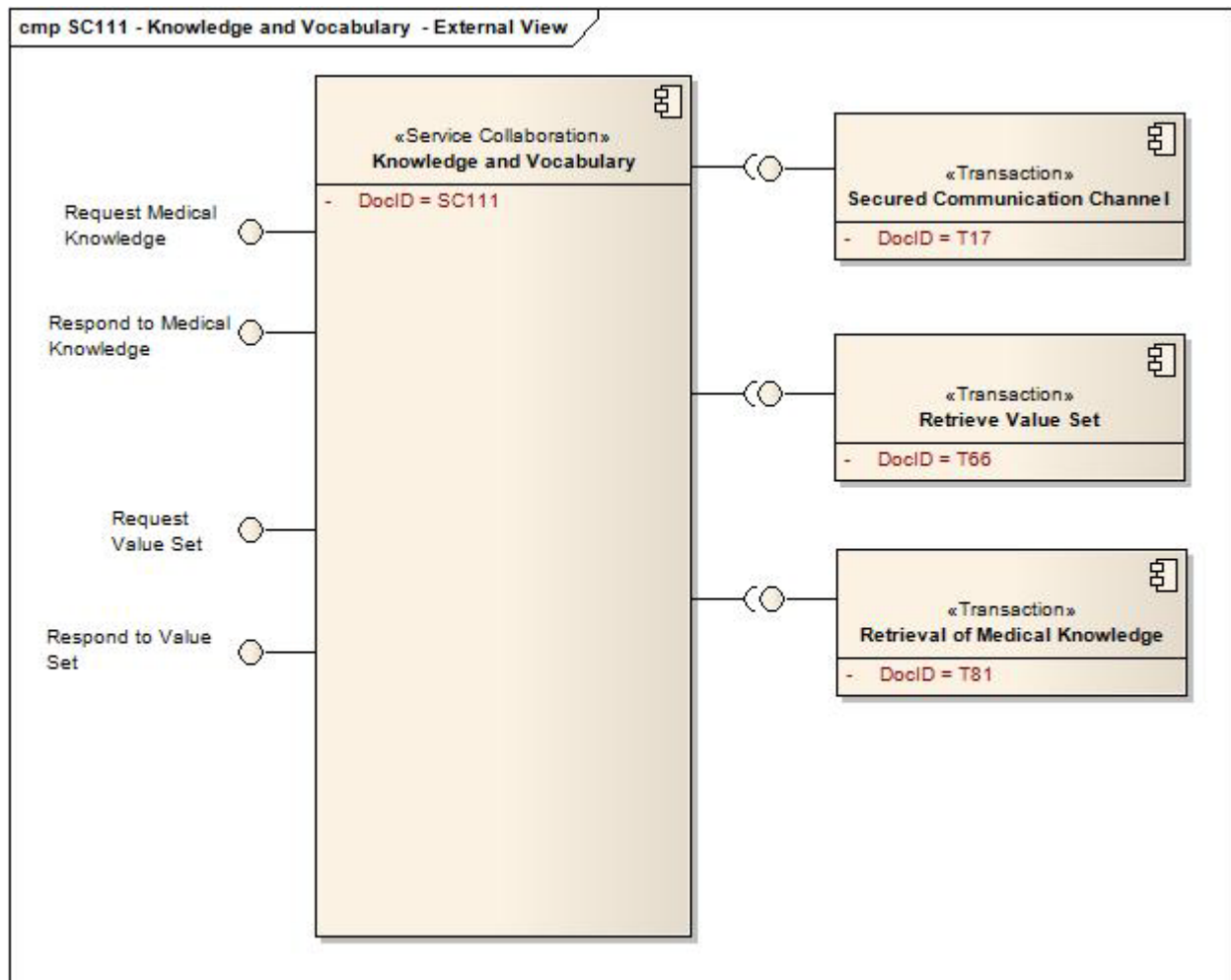
Service Collaboration	Service Collaboration Description	Interface	Optionality
HITSP/SC111 - Knowledge and Vocabulary	Provides the ability to request medical knowledge from a knowledge repository	Request Medical Knowledge	R
HITSP/SC111 - Knowledge and Vocabulary	Provides the ability for a knowledge repository to respond to a request for medical knowledge	Respond to Medical Knowledge	R
HITSP/SC111 - Knowledge and Vocabulary	Provides the ability to request a value set from a value set repository	Request Value Set	R
HITSP/SC111 - Knowledge and Vocabulary	Provides a value set repository the ability to respond to a value set request	Respond to Value Set	R

Optionality Legend: "R" for Required, "O" for Optional, or "C" for Conditional



1.3 EXTERNAL VIEW (i.e., “Black Box” Diagram)

Figure 1-1 Knowledge and Vocabulary Service Collaboration External View Diagram



1.3.1 SERVICE COLLABORATION SOURCE CONSTRUCTS

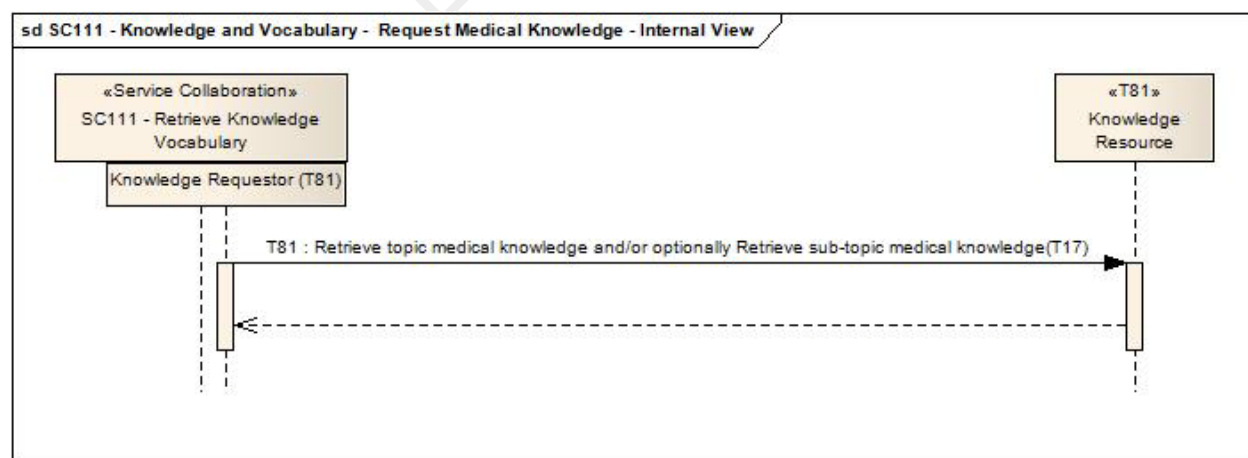
Table 1-2 List of Constructs

Construct	Description
HITSP/T17 - Secured Communication Channel	The HITSP Secured Communication Channel Transaction provides the mechanisms to ensure the authenticity, integrity, and confidentiality of transmissions, and the mutual trust between communicating parties. Its objectives include providing: mutual node authentication to assure each node of the others' identity; transmission integrity to guard against improper information modification or destruction while in transit; and transmission confidentiality to ensure that information in transit is not disclosed to unauthorized individuals, entities, or processes
HITSP/T66 - Retrieve Value Set	The HITSP Retrieve Value Set Transaction is used to transform human or computer vocabularies. For example, it can be used to convert the initial capture of a human-readable concept into a computer vocabulary captured in a document or message that will be communicated. It may also be used in the reverse, to take computer vocabulary and convert to human-readable form
HITSP/T81 - Retrieval of Medical Knowledge	The HITSP Retrieval of Medical Knowledge Transaction enables the request and receipt of additional knowledge about a medical concept based on specific context parameters. This transaction does not prescribe the knowledge content of the message returned but provides the specifications for the query for and receipt of additional knowledge. It uses the Health Level 7 (HL7) Context-Aware Information Retrieval (Infobutton) Specification: URL Implementation Guide as the base standard for implementation

1.4 INTERNAL VIEW DIAGRAM WITH SEQUENCING (i.e., “White Box” Diagram)

1.4.1 INTERFACE: REQUEST MEDICAL KNOWLEDGE

Figure 1-2 Request Medical Knowledge Internal View Diagram



1.4.1.1 SEQUENCE DETAILS: REQUEST MEDICAL KNOWLEDGE

Table 1-3 Request Medical Knowledge – Pre-conditions

Pre-condition	Uses SC, T, TP or C	Interface	Purpose
None			



Table 1-4 Request Medical Knowledge – Sequence of Constructs

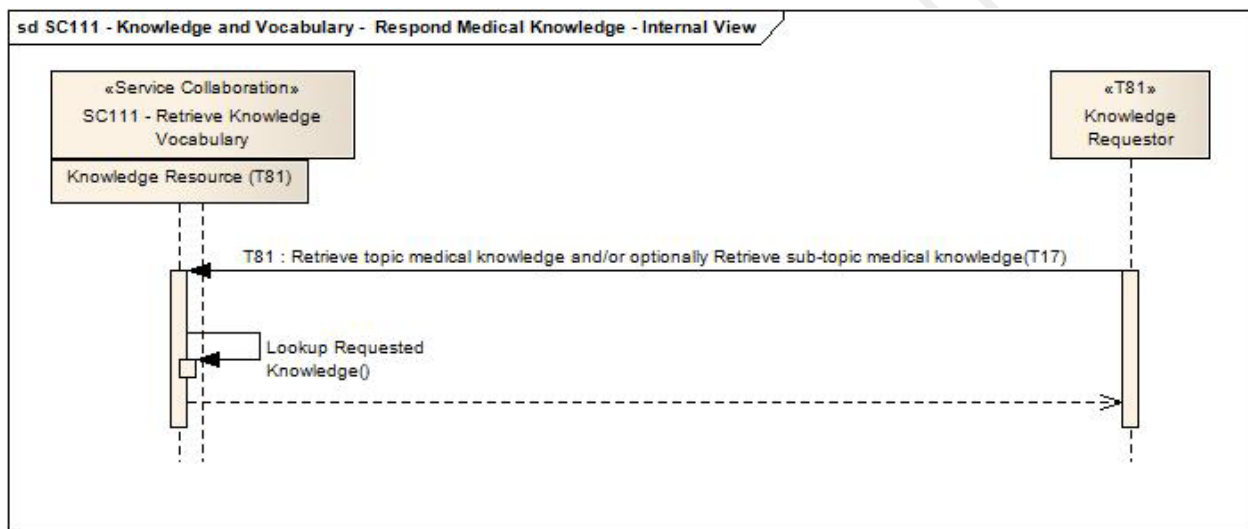
Step Number	Uses SC, T, TP or C	Interface	Purpose
1	HITSP/T17 - Secured Communication Channel	Secure Node	A secure communications channel may be open in order to protect the authenticity and integrity of the information being transmitted
2	HITSP/T81 - Retrieval of Medical Knowledge	Knowledge Requestor	To request knowledge from the knowledge resource

Table 1-5 Request Medical Knowledge – Post-Conditions

Post-condition	Uses SC, T, TP or C	Interface	Purpose
None			

1.4.2 INTERFACE: RESPOND TO MEDICAL KNOWLEDGE

Figure 1-3 Respond to Medical Knowledge Internal View



1.4.2.1 SEQUENCE DETAILS: RESPOND TO MEDICAL KNOWLEDGE

Table 1-6 Respond to Medical Knowledge – Pre-conditions

Pre-condition	Uses SC, T, TP or C	Interface	Purpose
None			

Table 1-7 Respond to Medical Knowledge – Sequence of Constructs

Step Number	Uses SC, T, TP or C	Interface	Purpose
1	HITSP/T17 - Secured Communication Channel	Secure Node	A secure communications channel may be open in order to protect the authenticity and integrity of the information being transmitted
2	HITSP/T81 - Retrieval of Medical Knowledge	Knowledge Resource	To receive the request for knowledge
3	None	None	Look up the requested knowledge
4	HITSP/T81 - Retrieval of Medical Knowledge	Knowledge Resource	To return the requested knowledge

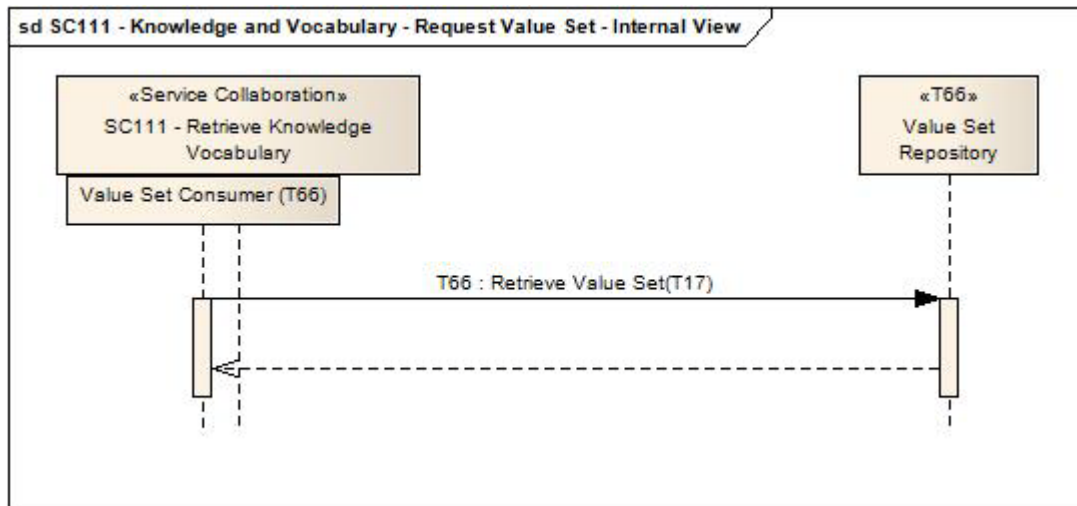


Table 1-8 Respond to Medical Knowledge – Post-conditions

Post-Condition	Uses SC, T, TP or C	Interface	Purpose
None			

1.4.3 INTERFACE: REQUEST VALUE SET

Figure 1-4 Request Value Set Internal View



1.4.3.1 SEQUENCE DETAILS: REQUEST VALUE SET

Table 1-9 Request Value Set – Pre-conditions

Pre-condition	Uses SC, T, TP or C	Interface	Purpose
None			

Table 1-10 Request Value Set – Sequence of Constructs

Step Number	Uses SC, T, TP or C	Interface	Purpose
1	HITSP/T17 - Secured Communication Channel	Secure Node	A secure communications channel may be open in order to protect the authenticity and integrity of the information being transmitted
2	HITSP/T66 – Retrieve Value Set	Value Set Consumer	To request value set from a value set repository

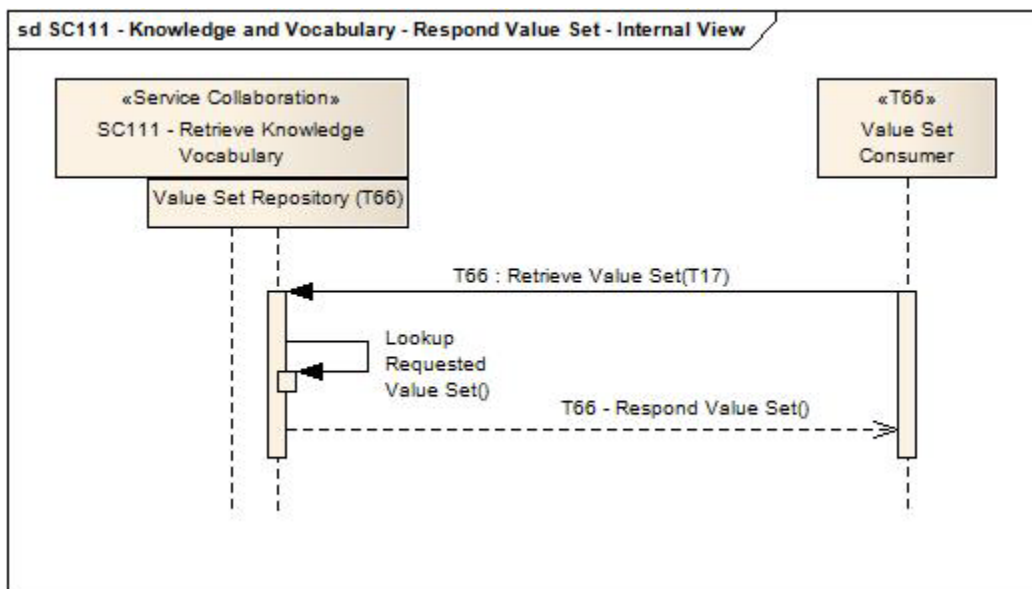
Table 1-11 Request Value Set – Post-conditions

Post-Condition	Uses SC, T, TP or C	Interface	Purpose
None			



1.4.4 INTERFACE: RESPOND TO VALUE SET

Figure 1-5 Respond to Value Set Internal View



1.4.4.1 SEQUENCE DETAILS: RESPOND TO VALUE SET

Table 1-12 Respond to Value Set – Pre-conditions

Pre-condition	Uses SC, T, TP or C	Interface	Purpose
None			

Table 1-13 Respond to Value Set – Sequence of Constructs

Step Number	Uses SC, T, TP or C	Interface	Purpose
1	HITSP/T17 - Secured Communication Channel	Secure Node	A secure communications channel may be open in order to protect the authenticity and integrity of the information being transmitted
2	HITSP/T66 - Retrieve Value Set	Value Set Repository	To receive the request for value set
3	None	None	Look up the requested value set
4	HITSP/T66 - Retrieve Value Set	Value Set Repository	To return the value set

Table 1-14 Respond to Value Set – Post-conditions

Post-Condition	Uses SC, T, TP or C	Interface	Purpose
None			



2.0 DOCUMENT UPDATES

The following sections provide the history of all changes made to this document.

2.1 JUNE 30, 2009

No changes. This is the first published version of the document.

2.2 JULY 8, 2009

Upon approval by the HITSP Panel on July 8, 2009, this document is now Released for Implementation.

2.3 JANUARY 18, 2010

Editorial changes:

- “Respond Medical Knowledge” changed to “Respond to Medical Knowledge”
- “Respond Value Set” changed to “Respond to Value Set”
- Figure 1-2 – Should corrected to refer to “Retrieve topic medical knowledge” and optionally “Retrieve sub-topic medical knowledge”
- Figure 1-4 and Figure 1-5: Diagrams updated for readability
- Figure 1-4 and Figure 1-5: Corrected from “T66: Request Value Set” to “T66: Retrieve Value Set” transaction, not “
- Clarification text added to indicate that for all pre-Conditions, the secure communications channel should be selected and implemented if local risk analysis deems it necessary
- Section 1.1 indicates that HITSP/SC108/109 may be included as needed. For simplicity, they have therefore not been included in the diagrams
- Moved Pre-condition for HITSP/T17 into sequence to be consistent with other SC
- Updated document to HITSP Service Collaboration template version 1.0

2.4 JANUARY 25, 2010

Upon approval by the HITSP Panel on January 25, 2010, this document is now Released for Implementation.

