HITSP Patient Identification Management Service Collaboration

HITSP/SC110

Submitted to:
Healthcare Information Technology Standards Panel

Submitted by:
Security, Privacy and Infrastructure Tiger Team
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<th>Date Published</th>
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1.0 INTRODUCTION

1.1 SERVICE COLLABORATION OVERVIEW AND SCOPE

The Patient Identification Management Service Collaboration provides the ability to lookup and/or cross-reference patient identities. This Service Collaboration utilizes the following constructs or applicable:

- HITSP/TP22 Patient ID Cross-Referencing Transaction Package to deal with identifying and cross-referencing different attributes for the same patient
- HITSP/T23 Patient Demographics Query Transaction to provide a 'list of patients and their demographics' query and 'patient(s) and their demographics identified' response message pair (QBP^Q22, RSP^K22) for use wherever such needs exist
- HITSP/T24 Pseudonymize to provide access to use specific pseudonyms for patients
- Necessary Security and Privacy constructs to assure appropriate access control and enforcement of privacy policies

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.

1.2 SERVICE COLLABORATION INVOCATION

Table 1-1 Service Collaboration Transactions and Data

<table>
<thead>
<tr>
<th>Service Collaboration</th>
<th>Service Collaboration Description</th>
<th>Interface</th>
<th>Interface Optionality¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>HITSP/SC110 - Patient Identification Management</td>
<td>Provides the ability to request identity lookup and/or cross-reference</td>
<td>Request Patient Identification</td>
<td>R</td>
</tr>
</tbody>
</table>

1.3 EXTERNAL VIEW (i.e., “black box” diagram)

There is one example diagram included 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.

¹ Optionality = “R” for Required, “R2” for Required if Known or “O” for Optional, or “C” for Conditional. Conditional footnotes are further described below.
Figure 1-1 Patient Identity Management External View Diagram

cmp SC110 - Patient Identification Management - External View

«Service Collaboration»
Patient Identification Management
- DocID = SC110

Request Access Control Decision

Send Security Audit Event

Request Patient Identity

«Service Collaboration»
Access Control
- DocID = SC109

«Service Collaboration»
Security Audit
- DocID = SC109

«Transaction»
Secured Communication Channel
- DocID = T17

«Transaction»
Pseudonymize
- DocID = T24

«Transaction Package»
Patient ID Cross Referencing
- DocID = TP22

«Transaction»
Patient Demographics
- DocID = T23
1.3.1 SERVICE COLLABORATION SOURCE CONSTRUCTS

Table 1-2 List of Constructs

<table>
<thead>
<tr>
<th>Construct</th>
<th>Required/Optional</th>
</tr>
</thead>
<tbody>
<tr>
<td>HITSP/T17 - Secured Communication Channel</td>
<td>R</td>
</tr>
<tr>
<td>HITSP/TP22 - Patient ID Cross-Referencing</td>
<td>O [C1]</td>
</tr>
<tr>
<td>HITSP/T23 - Patient Demographics Query</td>
<td>O [C1]</td>
</tr>
<tr>
<td>HITSP/T24 - Pseudonymize</td>
<td>O [C1]</td>
</tr>
<tr>
<td>HITSP/SC108 - Access Control</td>
<td>R</td>
</tr>
<tr>
<td>HITSP/SC109 - Security Audit</td>
<td>R</td>
</tr>
</tbody>
</table>

[C1]: Implementation choice must be made to select at least one of the following HITSP constructs: HITSP/TP22 Patient ID Cross Referencing, HITSP/T23 Patient Demographics Query, or HITSP/T24 Pseudonymize.

1.4 INTERNAL VIEW DIAGRAM WITH SEQUENCING (i.e., “white box” diagram)

1.4.1 INTERFACE: REQUEST PATIENT MANAGEMENT IDENTIFICATION

Figure 1-2 Request Patient Management Identification Internal View

2 Optionality = “R” for Required, “R2” for Required if Known or “O” for Optional, or “C” for Conditional
### 1.4.1.1 SEQUENCE DETAILS

#### Table 1-3 Request Patient Identification – Pre-conditions

<table>
<thead>
<tr>
<th>Pre-conditions</th>
<th>Uses SC, T, TP or C</th>
<th>Interface</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Identities among which cross-referencing may be performed, have been</td>
<td>HITSP/TP22 - Patient</td>
<td>PIX Consumer</td>
<td>Patient identities have been cross-referenced</td>
</tr>
<tr>
<td>communicated to the PIX Manager Interface</td>
<td>ID Cross-Referencing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Table 1-4 Request Patient Identification – Sequence of Constructs

<table>
<thead>
<tr>
<th>Step Number</th>
<th>Uses SC, T, TP or C</th>
<th>Interface</th>
<th>Transaction</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HITSP/SC108 - Access Control</td>
<td>Request Access Control</td>
<td>Decision</td>
<td>To assure that the user has authorization to request patient identification</td>
</tr>
<tr>
<td>2</td>
<td>HITSP/TP22 - Patient Identity Cross-Reference</td>
<td>Patient Identifier Cross-Reference Consumer</td>
<td>PIX Query [ITI-9]</td>
<td>If cross-referencing is desired this step is used to cross-reference the provided patient identifier into the requested patient identity domain</td>
</tr>
<tr>
<td>3</td>
<td>HITSP/T23 - Patient Demographics Query</td>
<td>Patient Demographics Consumer</td>
<td>Patient Demographics Query [ITI-21]</td>
<td>If demographics are needed or if demographics are provided this step is used to lookup the patient by/with demographics</td>
</tr>
<tr>
<td>4</td>
<td>HITSP/T24 - Pseudonymize</td>
<td>Patient Identifier Cross-Reference Consumer</td>
<td>PIX Query [ITI-9]</td>
<td>If cross-referencing to/from a pseudonym identity domain this step is used to cross-reference the provided patient identifier into/out of the requested pseudonym identity domain</td>
</tr>
<tr>
<td>5</td>
<td>HITSP/SC109 - Security Audit</td>
<td>Send Security Audit Event</td>
<td></td>
<td>Record the success/failure of the patient identification</td>
</tr>
</tbody>
</table>

#### Table 1-5 Request Patient Identification – Post-conditions

<table>
<thead>
<tr>
<th>Post-conditions</th>
<th>Uses SC, T, TP or C</th>
<th>Actor</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td></td>
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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.